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### = THE WEST VIRGINIA =

# MEDICAL JOURNAL

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JULY, 1916

No.

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"Nothing has such power to broaden the mind as the ability to investigate systematically and truly all that comes under thy observation in life."

Marcus Aurelius Antonius.

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Diabetes is a disorder of metaholism. Few lahoratories are provided with the special means required for metabolism studies; almost none exists equipped for making clinical observations of metaholism, which are of utmost importance in this disease.

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We will be glad to send further information concerning the Battle Creek Method in Diabetes to any physician who will mail to us the attached coupon.

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State	***************************************	***********************

# The West Virginia Medical Journal

Published Monthly
by
The W. Va. State Medical Assn.



Under the Direction
of the
Committee on Publication

JAS. R. BLOSS, EDITOR, Huntington, W. Va. C. R. ENSLOW, ASSISTANT EDITORS, J. E. RADER, Huntington, W. Va.

HARRY W. KEATLEY, Business Mgr.

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TRANSACTIONS OF THE HOUSE OF DELEGATES.

Forty-Ninth Annual Meeting of West Virginia State Medical Association, Wheeling, May 15 to 18, 1916.

The House of Delegates was called to order by President A. P. Butt in the McClure Auditorium at 9:21 p. m., May 15. Credentials were called for and received.

Dr. L. D. Wilson, Wheeling, then presented the report of Committee on Arrangements, outlining the entertainment provided by the Ohio County Medical Society.

Dr. Anderson, Marytown, then made the report of the Committee on Scientific Work, offering a program of many and varied subjects treated by able members of the Association and distinguished guests.

The Committee on Publication not being ready to report, this was passed over.

No report of the Committee on Public Policy and Legislation was rendered, the chairman not being present.

Secretary Anderson then presented his report, as follows:

REPORT OF SECRETARY.

The year 1915 has passed into history, and in the passing another chapter of the achievements of West Virginia State Medical Association has been written for weal or for wee.

Post-mortems are not only highly commended by all medical and surgical authorities as conducive to the intellectual growth of the one performing the same, but also are supposed to contribute to the sum total of all medical and surgical knowledge. Hence, in order that the intellect of your secretary may be improved and that a little more light may be thrown on the histology and pathology or the fortunes and misfortunes of the Association, bear with me while I review some facts relative to our career as an organization during the year 1915.

At our 1915 annual meeting in Huntington I reported a paid-up membership for the year 1914 of 854; while now I take great pleasure in announcing that 902 certificates have been issued to members for the year 1915, making an increase of 48 or a growth of 5.6 per cent. On further analysis, we find that during the year 1915 we acquired 120 new members, 9 transfers and 6 re-instatements; while we lost 25 by removal, 33 were

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dropped for non-payment of dues and the Grim Reaper claimed seven of our faithful comrades as they strove to alleviate the sufferings of others. names of these fallen heroes are:

Dr. L. L. Edgell, Keyser, G. H. H. and M. Society, died January 17, 1915.

Dr. C. A. Johnson, Bluefield, Mercer Society, died February 18, 1915.

Dr. W. H. Sampson, Beckley, Raleigh Society, died February 21, 1915.

Dr. J. A. Rayburn, Ravenswood, L. K. & O. V. Society, died June 30, 1915.

Dr. J. K. Cole, Aurora, Preston Society, died August 1, 1915.

Dr. S. C. Rusmusell, Buckhannon, Up-

shur Society, died October 18, 1915. Dr. W. C. Q. Wilson, Mannington, Marion Society, died November 13, 1915.

If any of the members or delegates know of any others, kindly advise the

I cannot refrain from mentioning another indication of vitality and growth, which does credit to the interest and zeal of the secretaries of the component societies. At this time last year there had been turned over for the year 1915 only 711 membership dues, while this year your secretary has been able to issue 732 membership certificates for 1916, an increase of 21—a gain in promptness of almost 3%.

25......131 names, \$387.00 January During 1915 the following component societies gained in membership over their 1914 records: Braxton, Brooke, Grant, Hampshire-Hardy-Mineral, Greenbrier, Valley, Hancock, Harrison, Kanawha, Lewis, Little Kanawha and Ohio Valley, Logan, Marshall, Mingo, McDowell, Raleigh, Summers, Tyler, and Upshur. Thus 17 societies gained in membership during 1915 as opposed to 10 in 1914. The component societies remaining the same arc: Fayette, Marion, and Taylor. The remaining societies lost anywhere from one to six members.

According to districts the membership of 1915 stands—

1010 00000	
First District	166
Second District	164
Third District	130
Fourth District	127
Fifth District	141
Sixth District	174

Comparison of gain and loss in districts cannot be made, for 1915 is the first year the state has been divided into six districts.

During the year 1915, twelve monthly report blanks, and at the close of the year one 1915 data report blank, were sent out to the secretary of each component society. Monthly report blanks have been received from the following B.-R.-T., Braxton, Cabell, societies: Fayette, McDowell, Preston, Raleigh, Ritchie and Taylor.

I am glad to say that this year I have received reports from some of the societies from whom none were received in 1915.

Let me urge the secretaries of the component societies to send in these reports, for this is the best and sometimes the only way your State Secretary is able to keep informed as to deaths, removals, re-instatements, and newly-elected officers.

Reports for 1915 data were returned by B.-R.-T., Cabell, Eastern Pan Handle, Fayette, G.-H.-H.-M., Harrison, Lewis, Logan, Marion, Mercer, McDowell, Raleigh, and Upshur societies.

These yearly data reports are most essential for your State Secretary's report, so that he may not mis-represent you before the Association.

Usually, near the close of each month your Secretary makes a triplicate report of the names of the members who have paid dues and the amount each paid during said month, and sends one copy of this report to your Treasurer, another to the editor of the State Journal, and a third to the Secretary of the A. M. A. With the copy to the Treasurer a check is sent for the amount named in the report.

The following is a summary, details of which can be obtained from the Secretary at any time from a copy of each retained by him:

1915.

January	25—131	names\$387.00
March	5-108	names 315.00
March	31—138	names 403.00
April	28—280	names 825.00
May	10 52	names 140.00

31 45	names	137.00
30 18	names	52.00
10-26	names	75.00
		20.00
6 33	names	97.00
	30— 18 10— 26 7— 7	31— 45 names 30— 18 names 10— 26 names 7— 7 names 6— 33 names

#### 1916

January	27-115	names	\$327.00
February	29228	names	
March	31-232	names	679.00
May	9208	names	609.00

Since May 9 belated dues to the amount of \$58.00 have been received which are still in the hands of the Sec-

retary

From these facts we see the State Association is still growing, but when we consider that the membership of the Association embraces only a little over onehalf of the practicing physicians and surgeons within the bounds of the state we feel that there is still much room for growth. The power to increase in numbers rests more with the local component societies than with the state organization. 'Tis true the great burden rests upon the shoulders of the secretaries of these societies, but the individual members should only consider their work half done when they have elected a good, live secretary—they should look to the fact that their dues are paid each year before April 1, and that an application blank for membership be placed in the hands of each of their neighbors not affiliated with the local society. Further. they should endeavor to attend each stated meeting-plan to do so and not let anything but absolute necessity prevent their so doing.

Harrison County Society has taken a big step in the way of centering interests around their organization by establishing post-graduate courses given by men of prominence and ability and imported, for a week or ten days at a time, for the purpose of delivering lectures.

Furthermore, as a state organization do we take ourselves seriously enough and make our association felt as a potent factor in the affairs of our commonwealth in general?

The subject of health, insurance bills

is sweeping over our country. Bills of this nature have been introduced into the legislative bodies of New York, New Jersey and Massachusetts. This subject is of such vital importance to the physicians of the country that the A. M. A. have appointed a special committee to look into the matter and try, if possible to have some say in the draughting of such bills. May it not be well for us to familiarize ourselves with this matter and have our Public Policy and Legislative Committee investigate it thoroughly and report to us their findings, so that when the time comes for us to face the issue in our state we may act intelligently and as a unit?

Another subject now claiming the attention of the profession in the United States is the effort to establish a uniform license law throughout the United States and its possessions. Should we not as an organization put our shoulder to the wheel and assist the profession in attain-

ing this goal.

Still another subject, which is being discussed by the laity commends itself to our attention. viz: the physical examination of teachers in our public schools. Is it just and proper that our commonwealth compel her children to attend school without giving them the assurance that the teacher with whom they come in contact so intimately is free from tubercular or other communicable maladies. May we not call upon our Public Policy and Legislative Committee to endeavor to further the passage of such a law.

One thing which your present Secretary has missed very much is the publication of a condensed summary of the proceedings of the West Virginia State Medical Association in annual 'Tis true they are published each vear in our State Journal and a bound volume of the journal is sent to the Seerctary every six months. However, it is quite a task to filter out the essential proceedings of the association from these bound volumes, because of necessity there is much other than the proceedings of the association published in these volumes. Your Secretary has recently received a request from Charles Perry Fisher, librarian of the College of Physicians of Philadelphia, for volumes of

the transactions of the West Virginia State Medical Association. He states that he has the volumes for 1868, 1892, 1894, 1895, 1903, 1904 and 1906, and would like to possess for his institution any or all others with which he may be able to provide him. He volunteers to give us in exchange annual volumes of the transactions of the College of Physicians of Philadelphia. Would it not be a good idea for us to have our transactions published annually and thus be able to make such exchanges. This would bring our association before the public at large and would give others an idea of the good work being done by our association.

The Committee on Scientific work, the report of which is delegated to your Secretary, has prepared what they consider a most elegant program for your consideration at the present session. We have obtained not only many excellent papers from members of the association, but also have been able to secure papers from a number of distinguished guests, which cannot help but prove most instructive.

It was not our intention to crowd out papers by members of our association by placing on our program so many distinguished guests, but not receiving early replies to our appeals for papers from members of the association we naturally turned for aid to distinguished members of our profession outside of our own state.

Unfortunately, a few papers were offered by members of our association at such a late date that it was impossible to incorporate them in the program. This we regret very much, but we do not hold ourselves entirely responsible for the same, because both in written requests to the secretaries of the component societies and through publication in the State Journal we urged the reporting of those willing to furnish papers before April 1.

Expressing my appreciation of the carnest and zealous work of the councillors and the secretaries of the component societies in assisting me in my arduous task as Secretary, I submit the above report.

Drs. Hupp, Oates and Wheeler were

then appointed as the Committee on Secretary's Report.

Treasurer Nicholas then read his report, as follows, which was referred as per by-laws to the Council:

Charleston, W. Va., May 13, 1916. Hugh G. Nicholson, Treasurer, In Account with The W Va. Medical Assn.

in Account with The W va. Medical Assn	•
In Account with The W Va. Medical Assn  1915—By Check:  May 15,—Dr. A. P. Butt, salary  June 2—Medical Defense Fund  June 30—Dr. S. L. Jepson, Editor  July 3—Standard Ptg. & Pub. Co  July 3—Standard Ptg. & Pub. Co  July 19—Medical Defense Fund  Nov. 23—Lohmeyr, G. Patterson Co., Bond  Dec. 2—A. R. Craig, Amer. Med. Assn  Dec. 2—J. H. Anderson, stationery  Dec. 24—Medical Defense Fund  1916:  Jan. 15—W. Va. Med. Journal  Jan. 17—W. Va. Pub. Co  Feb. 44—Med. Defense Fund  Feb. 44—Med. Defense Fund	\$75.00 79.00 25.00 300.00 69.55 16.00 50.00 25.23 22.75 50.00 300.00 25.48 15.22 50.00 78.00
	00.00
	300.00
Jan. 17-Dr. S. L. Jepson, editor	500.00
Jan. 17-W. Va. Med. Journal	174.00
Jan. 17-Henri P. Linsz, expenses	25.48
Jan. 17-W. H. Hoskins Co., stationery	15.22
Jan. 25-A. P. Butt, salary to Journal	
Jan. 17-W. Va. Pub. Co	
Feb. 14—Med. Defense Fund	
March 13-Med. Defense Fund.	212.00
March 13—H. N. Simpson, Editors Assn April 8—Medical Defense Fund	50.00
April 8—Medical Defense Fund	215.00
April 11-W. Va. Med. Journal.	275.00
April 11—J. H. Anderson, printing	50.26
May 8—H. G. Nicholson, salary	50.00 300.00
May 8—J. H. Anderson, postage, etc	15.36
May 8—Johnson Publishing Co.	43.25
May 8—Meyer Military Shoes	35.80
Mey 11—Med. Defense Fund.	193.00
May 13-Cash Bal, in Bank	1355.84
_	

\$4716.84

1915—To Cash:	
May 10-Bal. in bank	\$1071.49
May 11-From J. H. Anderson, Secy	140.00
June 2-From J. H. Anderson, Secy	. 137.00
July 14-From J. H. Anderson, Secy	52.00
Sept. 10-From J. H. Anderson, Secy	
Aug. 12-From J. H. Anderson, Secy	76.00
Dec. 24-From J. H. Anderson, Secy	97.00
1916:	
Jan. 17-From. W. Va. Med. Journal	
Jan. 19-From. W. Va. Med. Journal	
Feb. 1-From J. H. Anderson, Secy	327.00
March 12-From J. H. Anderson, Secy	668.00
April 1-From J. H. Anderson, Secy	679.00
May 11-From J. H. Anderson, Secy	609.00

\$4716.84

H. R. JOHNSON.
W. H. St. CLAIR.
J. E. RADER, Chairman.

Committee.

#### MEDICAL DEFENSE FUND.

\$1650.30

H. R. JOHNSON. W. H. St. CLAIR. J. E. RADER, Chairman. Committee

The report of council not being ready was passed over.

Under new business President Butt brought up the subject of the publication of medical books and the patenting of surgical instruments by the A. M. A.

The following motion was made by Dr. Bloss and seconded by Dr. Daniels:

"That the West Virginia Delegates to A. M. A. be instructed to bring the plausibility of the publication of medical books and the patenting of instruments by the A. M. A. to the attention of the House of Delegates of the A. M. A."

Remarks being called for.

Dr. Peters feared such a procedure would be a mistake.

Dr. Henry thought it would be unwise as it would mitigate against us in dealing with patent medicine venders.

Drs. Butt and Bloss spoke in favor of the motion on the grounds that it would tend to reduce the cost of books to the profession and would in the case of instruments, insure their being made of proper material, citing as an example, the "Murphy Button," which, when made of inferior material proved dangerous to the life of the patient.

Motion was carried.

Editor Bloss was then called upon for some remarks with reference to the Journal.

He said, in part, that owing to the rise in the cost of paper and other materials the cost of producing the Journal had materially increased. He tried to offset this by an increase in advertising rates of 50%. His aim was to produce it "regardless of cost" a Journal that would supply the needs of all the members of the association, but especially of those not having access to other medical journals. He urged the sending in of "State and Component Society News" and the patronizing of Journal advertisers as he guaranteed that all were ethical and worthy.

The subject of the confliction of the meetings of the House of Delegates with the coming out of this program was then brought up and discussed. Dr. Hupp protested vigorously against such confliction. Dr. Butt maintained that such a confliction was to be deplored, but he felt the transactions of the House of Delegates the more important of the two. Dr. Jeffers offered as a solution the re-

duction in size of the House of Delegates, declaring it too large and unweildy.

House of Delegates then adjourned un-

til 8:30 a. m., May 16.

So few being present at 8:30 a.m. May 16, the House of Delegates adjourned until 8:30 a.m., May 18.

Thursday, May 18, at 8:30 a.m., President Butt called the House of Delegates to order and declared the election of officers for 1917 to be the order of business.

Nominations being called for President, the names of Dr. J. E. Rader, Huntington, and Dr. W. S. Link, Parkersburg, were presented. The ballot being cast and counted, Dr. Rader was declared cleeted. By motion of Dr. Henry his election was declared unanimous.

Dr. W. S. Young, Sistersville, was then nominated for first vice-President. Nominations were closed and the Secretary instructed to cast the unanimous ballot of the Association for him.

Dr. E. H. Thompson, Bluefield, was nominated second vice-President and in like manner unanimously elected.

Dr. J. Howard Anderson, Marytown, was nominated to succeed himself as Secretary. Nominations were closed and President Butt instructed to east for him the unanimous vote of the association.

Dr. H. G. Nicholson was likewise nominated to succeed himself. Nominations were closed and the Secretary instructed to east unanimous ballot for Dr. Nicholson as Treasurer.

The term of office of one Councilor from each of the six districts expiring, the House of Delegates proceeded to elect the same to serve for the years of 1917 and 1918.

In First District, Dr. J. W. McDonald, Fairmont, was elected to succeed himself.

In Second District, Dr. C. H. Maxwell, Morgantown, was elected to succeed Dr. H. W. Daniels, Elkins, retiring.

In Third District, Dr. M. T. Morrison, Sutton, was elected to succeed himself.

In Fourth District, Dr. R. H. Pepper, Huntington. was elected to succeed Dr. J. E. Rader, Huntington, retiring.

In Fifth District, Dr. W. H. St. Clair, Bluefield, was elected to succeed himself. In Sixth District, Dr. P. A. Haley, Charleston, was elected to succeed himself.

President Butt then announced that as West Virginia had been allotted a second delegate to A. M. A., it was necessary to elect a companion for Dr. Frank Le Moyne Hupp, who was elected at Huntington in 1915.

Dr. C. R. Ogden, Clarksburg, and Dr. W. S. Link, Parkersburg, were nominated. Dr. Ogden was declared elected.

Dr. B. B. Wheeler, McKendree was then elected alternate.

Place of meeting for 1917 was then made the order of business.

Invitations were then extended the association to meet at Fairmont and at Morgantown. After remarks by a number of delegates Fairmont was chosen and the Month, of the 1917 meeting, designated as October.

Dr. W. W. Golden, chairman of the Lind Relief Fund then made an appeal for funds.

The House of Delegates then adjourned to give place to the scientific program.

At 4:15 p. m., May 18, President Butt again called the House of Delegates to order.

The Committee upon President's Address was then called upon for its report.

Dr. Hupp, ehairman, then read and submitted the following:

### COMMITTEE ON PRESIDENT BUTT'S ADDRESS.

The committee desires to express with grateful appreciation the thanks of this entire society to our president for his very comprehensive and helpful address. The many suggestions he has made if followed will place this society on a high plane and in a class with the best of the country.

To take up seriatium the recommendations as set forth in this splendid address would mean the re-reading of this document; your committee would earnestly suggest that each and every member read thoughtfully in the quiet of his own sanctum these words of wisdom. There are several suggestions however, your committee would like to emphasize.

First: As John B. Murphy once said, "There is a common, insidious and deadly parasite cating at the root of public medical confidence, and that is the practice of medical fee division, commission paying and the sale and purchase of patients." That this society should see to it that no man of our profession barters to the highest bidder in commission and fee splitting. He who gives is morally as guilty as he who requests or receives, and no sophistries should be accepted in justification of this atrocious practice.

This committee agrees with President Butt and would like to go on record as advocating that the money changers of the profession should be driven out of the temple of Acseulapius as they were

from the temple of old.

The traffickers in human lives and infirmities must be stripped of their pseudoethical shield so that they may be known and recognized by the public. As Murphy said of the A. M. A. at the Los Angeles meeting. "A membership in this organization should be a certificate of manhood, of scientific attainment of moral stamina and of loyalty to the principles of the Golden Rule, the basis of ethics of the medical profession."

With Dr. Butt your committee entertains the hope that someday our legislative body place on the statute books acts penalizing violations of professional trusts by doctors in and out of this state

organization.

With regard to state compensation act, that we recommend with the President that the limit of \$150.00 be increased or doubled in such cases of serious injury, demanding protracted care and painstuking and skillful attention on the part of the attending physician. In so doing a higher appreciation will be entertained for services rendered and a more adequate compensation established.

Certainly every member of this association will hold up the hands of the President in his plea for the insane, and recommend with him, tender and expeditions attention immediately on the es-

tablishment of the diagnosis.

Regarding compulsory health insurance, we feel that we should abide by the ruling of the parent society, the A. M. A. in a vital problem presenting so many

phases.

The creating of a state officer salaried by the society to reside in Charleston, the ambassador of our state institution, who will be in touch with all matters of state medicine, is a wise and timely suggestion.

The Committee upon Secretaries Report, was then called upon and through their chairman rendered the following:

### REPORT OF THE COMMITTEE ON THE SECRETARY'S REPORT.

We heartily congratulate the Secretary on the splendid report he has given us at this meeting indicating as it does a marked increase in membership, due we are sure to his untiring energy. The data furnished regarding the component societies is interesting. Certainly these component societies that are at a standstill in membership should be stimulated to activity by the counsel and serious thought for better and higher ideals.

Again we note with interest, but with no little disappointment that our membership consists of only one-half of the practicing physicians of the state.

The greatest glory of the county society is not in never falling, but in rising every time it falls getting busy and multiplying its membership.

We wish to place emphasis on the recommendation of Dr. Anderson when he enjoins our members to familiarize themselves with the health insurance bills which have been enacted in New York, New Jersey and Massachusetts, so that we may be intelligently prepared when this agitation comes our way. His suggestion that the teachers of our public schools present a certificate of health along with their application for duty is but another manifestation of wisc counsel.

A thought worthy of thoughtful reflection comes with the urging of the society to have bound into one volume the valuable papers and discussions of our meetings for distribution among the medical libraries of the country and members; along with this idea would come the employment of a medical sten-

ographer which would bring to our journal much rich material for its pages.

Like the President's address, your committee recommends this report to each member for serious reflection.

Signed: Frank LeMoyne Hupp. T. K. Oates. B. B. Wheeler.

By motion of Dr. Hupp and seconded by Drs. Kessler and Cannaday the salary of the Secretary was fixed at \$500.00

for the year 1917.

The Committee on Revision of the Constitution and by-laws, composed of Drs. L. D. Wilson, chairman; R. L. Reed, and G. C. Rodgers were then called upon for their report.

#### MAJORITY REPORT.

Drs. Wilson and Reed submitted the following as a draught of proposed new constitution and by-laws:

This copy was omitted from report as sent to the Editor. It will appear in August issue.

#### MINORITY REPORT.

In my opinion no changes should be made in the constitution and by-laws at present.

Signed: B. C. Rodgers.

Motion was made by Dr. J. W. Mc-Donald, seconded by Dr. J. N. Simpson and comes, "That a delegate be appointed to the conference of the A. M. A. committee on Medical Education but that this delegate shall serve without expense to the association."

There being no other business, the llouse of Delegates adjourned.

# WHAT THE STATE ASSOCIATION CAN ACCOMPLISH.

By Howell Wright, Secretary of the Cleveland Hospital Council.

Read at Meeting W. Va. Hospital Assn., Wheeling, W. Va., May 18, 1916.

The State Association with its various represented hospitals may be likened in

some respects to certain voluntary or incorporated associations of large business corporations. In general, its purpose is to preserve and promote the common interests of the constituent members. While not obligated by any former agreement the hospitals have a common obligation to assist each other as follows: By coordination of action and development of the most efficient methods in the performance of their various functions, thereby simplifying problems of management, preventing duplication of effort, eliminating waste, reducing costs and improving the service rendered; to give the public an intelligent accounting of their stewardship; to educate the public to a substantial degree of willingness and desire to give moral and financial support; to initiate and favor wise legislation and to oppose all legislation inimicable to their field of work. While the chief object of business concerns so associated is to increase profits, the aim of the hospitals so associated is to increase the service rendered to the community. In both, however, great financial and human interests are involved.

On the financial side, the hospitals represented in each of many state associations will be found to possess land, buildings and equipment valued at millions of dollars; to spend enormous amounts of money annually for salaries and wages, for hospital supplies and other operating expenses. The annual income also from tax collected funds, from patients and from endowments, bequests and contributions will often run into millions.

On the human side, the services of a large number of physicians and surgeons, of pupil nurses, of graduate nurses and of other officers and employes, in addition to many men and women who act as members of committees and boards, are commanded by the hospitals. But above all, think of the number of people or proportion of the population treated annually in hospitals and dispensaries in a given state. Catalog these facts and figures for the one hundred or more hospitals in operation in West Virginia and you will be surprised with the results. And it may properly be said that the accomplishments of the State Association

or any similar association of hospitals will often depend upon the ability of its executive officers to properly organize and make use of these financial and human resources.

The opportunity for great accomplishments, however, by any association of hospitals for local or state-wide activity depends to a greater degree upon the local or state-wide interpretation of the functions of the modern hospital. If the modern hospital is still believed to be limited to the "boarding house" function the association will be able to accomplish comparatively little, even along the lines of least resistance. If its functions are expected to include an extensive sphere of activity then the association has an opportunity to wield a mighty power for the public welfare. In either case it must seem to follow public opinion. West Virginia no doubt demands a broad sphere of activity for its modern hospital, whether it be a tax supported or a so-called "private" institution performing public functions. This paper assumes, and the writer hopes your association will subscribe to it, that the modern hospital is an institution of organized society provided by a community, through the expenditure of money raised by taxation or contributions or both, to care for the sick. It is but a medical means to a social end and that endpublic welfare—must never be forgotten. The modern hospital has outgrown the narrow field of boarding and treating sick people and the time has come when a proper private or public hospital can no longer passively receive the sick from the community at large without regard to the reason why they become sick, sometimes use them chiefly as material and often discharge them without the slightest interest in their convalescence and rehabilitation in wholesome working and living conditions. Hospitals more than any other social agency accumulate the evidence against the dangers to life in the community, dangers from contagion, from ways of living and from industry, and they must feel the responsibility to study this evidence and become leaders in the progress of preventive medicine. The idle convalescent is of no more value in the community than

the bedridden and scarcely less expensive to support. It is not only charity and social service but also sound economy for a community to supervise convalescence through its proper hospitals; to make it such that the patient can return to his work the sooner. modern hospital of today must continue to give to a community scientific care for its sick and must afford opportunities for medical and nursing education and for the study of disease. But above all it must through its social service work and through co-operation with all other effective community social agencies give a watchfulness over public health and results that are more days of life and work and happiness to its citizens. What then can be accomplished by a properly organized State Association which accepts these as the functions of the modern hospital: The care of the sick, the training and education of doctors and nurses, the study of disease and the guarding of the public welfare through various social service activities?

First: The State Association should take the lead in urging hospitals adopt a uniform accounting system uniform at least in the essential particulars of modern hospital accounting. Such a system should make it possible at all times for each hospital to give the public an intelligent statement of the work done and the unit cost of the same. This is fundamental. In some hospitals accounting is sadly neglected. The bookkeeping is often left to a young or inexperienced clerk who in addition may have other duties. In others, the daily census of patients is not taken and the number of days of treatment given can only be obtained by the drudgery of going through the pages of many books. Frequently the average daily per capita cost of maintenance is not known or reported and sometimes the person in charge of the books doesn't know how to find it out. The State Association can be helpful in remedying such difficulties and it will have the support of the public in the adoption and publication of a comprehensive program. It might prescribe and publish a simple hospital accounting system together with a standard code of classification of expenditures and with

detailed instructions showing how to record and report patients treated, the number of days treatment given and other important data. The hospitals represented in the Cleveland Hospital Council are adopting the following form of reporting statistics of patients treated:

Pay patients are those who pay at least the cost of their care; part-pay patients those who pay only part of the cost of their care and free patients those who pay nothing. Dispensary patients and emergency cases, remaining in the hospital less than twenty-four hours, are reported separately.

Uniformity in accounting and reporting of patients is an important factor in informing the public what service hospitals are actually rendering and what that service costs. The association can secure the help of the benefactor who helps support the "charity" work of hospitals in bringing about the adoption of uniform accounting. Officials of state, county or city who are responsible for subsidy payments to private hospitals will demand it when the association shows them its real meaning in dollars and cents.

Second: In co-operation with local organizations and in states which are burdened with the "subsidy" system, with the proper officials, the State Association might make a study of rates and charges to patients. A study of hospital rates for private rooms is often interesting and sometimes productive of results. Sometimes they are rented for less than their full maintenance cost. Why should hospitals tax the charitable funds of the community to help maintain hospital service when people who buy it are able to pay for it? Or why should the funds available for free service be further limited to provide for the maintenance of private patients in private rooms? Why should any hospital receiving charitable

funds from the community care for accident or industrial cases either for the State Industrial Commission or corporations carrying their own insurance at less than the maintenance cost and charge the balance to "charity" or to those contributors frequently called upon to make up annual deficits? Is it easier sometimes to get contributions than to increase earn-

Third: The Association should urge the adoption of economies in management found wise locally or elsewhere. Important among such economies are the store room system of control and distribution of supplies and co-operative buying of certain hospital supplies. The latter may be done best locally in some instances; in others through the New York Bureau of Standards and Supplies.

Fourth: Hospitals represented in State Associations should by all means keep informed through their central organization of all legal matters and particularly of all legislation, local or state, affecting their financial interests or their public welfare responsibilities. Almost every trade, business or profession will be found represented in some way in matters of legislation. Hospitals in an organized group seem often to have been lamentably weak in initiating or favoring legislation and often in opposing legislation inimicable to their field of work. In some states they have been most active in the process of legislative "log-rolling" for state funds; in others they have done almost nothing in an organized capacity when the legislature has been concerned with such important matters as state registration of nurses or workmen's compensation. The State Association has a great opportunity to make the influence of the hospitals felt and if it properly organizes its great resources it can easily create an atmosphere of public opinion which will make any legislature "stop, look and listen." And no one has his ear closer to the ground listening for the strongest currents of organized public opinion than the practical politician in the legislature.

Fifth: Another important field of exploration and operation for the State Association is that of medical education. There is always local and state-wide com-

petition for interns. Hospitals frequently spy upon one another to find out when examinations for interns are to be held and then often set their examinations so as to get in ahead of their neighbor. Medical students join in the competition and take examinations for positions in several hospitals. Often if a student succeeds in passing the examination in one hospital he signs an agreement to accept an appointment and later if he finds he has succeeded in securing a more desirable place elsewhere he signs up again without regard for his previous agreement or for the "ethics of the profession." Such competition is unwise and unnecessary. Co-operation within the limits of reason may be substituted for competition. The State Association may very properly take the lead in cooperating with medical schools to adjust

the supply and the demand.

There is often the keenest competition in the selection of members for the hospital visiting staff. Although strange and inconsistent as it may seem, this competition has in some communities resulted in monopoly of hospital positions by a few members of the medical profession to the exclusion of many who might become, with real opportunity, an honor to the community and to the profession. While the prime function of the modern hospital is to care for the sick, every "publie" hospital has an important obligation to meet toward the education of the medical profession at large. No hospital is going to give every doctor in the community an opportunity to treat the sick regardless of his ability and training. Yet, it should not too often neglect to avail itself of the services of the many well educated and well trained young physicians and surgeons in a community who are having limited opportunity to study disease and avail themselves of modern hospital facilities. As a rule it is a surprisingly small number of acceptable physicians and surgeons represented on the hospital staffs in a community in proportion to the total acceptable number residing and practicing in that community. And this failure of hospitals to afford a wider use of their facilities to the medical profession at large is one reason or excuse for the numberless number of good, bad and indifferent little socalled private hospitals cropping up here and there, few of which for evident reasons contribute to the cause of medical or nursing education. The State Association can well afford to discuss and

study this problem. Sixth: In matters of nursing education and nursing care of the sick also, there is often competition. Many hospitals hesitate to recognize training given a pupil nurse in any other hospital. Some hospitals, because of their special nature, having limited groups of cases for nursing care, hesitate to send their pupil nurses to or exchange them with general hospitals because they fear they may lose them. The State Association can accomplish much in urging the substitution of co-operation for competition in such matters. It might well be concerned with such problems as the limited supply of pupil nurses, the raising or lowering of educational standards, affiliation of training schools, and the training of nurses to teach and nurses who can nurse.

Seventh: Hospitals represented in a State Association have a great opportunity to co-operate in working out a satisfactory division of labor between tax-supported and so-called private hospitals and dispensaries. Most private hospitals, even though they appeal to a community for funds, like to make this division of labor, one which has as its basis the care of "desirable" and "undesirable" cases. They like to care for the acute medical and surgical patients who can pay for the service they receive as "desirables." While willing to care for a few part-pay patients, the majority, unless for educational purposes, prefer to admit as few free cases as possible and leave the balance to others as "undesirables." This is not always the fairest division of labor. It is manifestly unfair when urged and maintained by hospitals exempt from taxation, recipients of free water from the city, occupants of buildings constructed equipped by contributions from the community at large and seekers of contributions to make up annual deficits or to pay for "charity" which sometimes is represented only by "uncollected" bills.

While it is recognized that many municipalities have been backward in assuming their full responsibility in the care of the sick and the prevention of disease and injury, wonderful progress in municipal ownership and operation of hospitals in this country has been made in the last ten years, and greater progress is to be made in the next ten years. More and more the municipalities are assuming their responsibility for the hospital care of contagious diseases, including tuberculosis and venereal diseases, and also of chronic cases—cases which nearly all private hospitals term as "undesirables" even though able to pay for their care. And this division of labor should be encouraged, for the city government may use its police power when necessary to isolate and quarantine such cases as are a menace to the public health.

The first duty of the county or municipality is to provide hospital care for the sick who cannot pay for it themselves. As a working basis it has been suggested in some communities that the municipality provide all or a greater part of the free hospital care and leave the pay and part-pay work to the so-called private hospital. In the long run such a division would be found to be more effective and less expensive than other divisions of labor now existing in some cities, including the so-called "subsidy system." In some communities the activity of the state, county or city government in assuming responsibility for the care of the sick would be assured by continued persuasive activities of State Association, assuming of course, that the private hospitals themselves would in turn be willing to meet their full obligation.

Eighth: The State Association has its greatest opportunity in urging its hospitals to organize and develop social service departments. The responsibility of the modern hospital for the patient does not cease when he leaves the hospital. There is a further responsibility on the part of the hospital to supervise his convalescence and to see to it when necessary that he is returned to wholesome living and working conditions. The State Association must not permit its

members to be satisfied with the simple process of allowing patients to leave their hospitals and then enter upon their medical and surgical histories, as the final chapter, the often meaningless terms, "discharged cured" or "discharged improved." Rather it must convince them that a social service department is neither fad nor fancy; that it is a necessity; that, properly organized, it is both life saver and money saver; and that it produces results that are more days of life and work and happiness to the citizens of the community.

All of these activities on the part of the State Association would cost money. In some instances they would mean the employment of a large paid force. If funds are limited, however, much can be accomplished through voluntary committees. Experience has proved that active voluntary committees always pave the way for paid workers and sometimes to greater accomplishments. In a word it is possible for a State Association of Hospitals to become a great factor within its own field for hospital co-ordination and progress.

ACUTE SURGICAL LESIONS OF THE ABDOMEN COMPLICAT-ING PREGNANCY.

By CHESTER R. OGDEN, M. D., F. A. C. S. Clarksburg, W. Va.

Read at Annual Meeting, Wheeling, May, 1916.

As we review the history of the human race, we discern with horror the frightful toll of life exacted as a result of ignorance and superstition. Amid the grandeur of the profession's triumphs, there still remain some fallacies and misconceptions; chiefest among which is the supposed immunity possessed by pregnant women to disease; that because she is pregnant, nature fortifies her against many of the afflictions common to other individuals.

As a profession, we are permitting the pregnant woman to entertain the thought that she must, necessarily, expect many distressing disturbances, we allow her to go unattended and relieve ourselves of the responsibility of investigation by dismissing her complaints as natural accompaniments of pregnancy. It is time that the medical profession should be as alert to the possibility of grave lesions being present when the expectant woman complains, as it is when called to attend the common run of patients. The pregnant woman should be taught that certain pains, abdominal and vaginal disturbances are not normal conditions, that early and most energetic recognition should be given them and that they be reported to her physician. The unrecognized cases of appendicitis, gall bladder disease, pyelitis, tubal pregnancy, placenta previa, premature separation of the placenta, concealed hemorrhage, myomata and auto-intoxication are still very many for the reason just mentioned, and these patients are permitted to go to their destruction because the profession is still prone to share in the misconception that nature has the power in some mysterious manner to right the wrongs in the pregnant woman. Every woman should be told that pregnancy in fact predisposes to dangerous complications rather than be taught that nature takes care of all troubles coming to her during her expectant period. Surgical lesions of the abdomen occurring in the pregnant, should be met promptly, and with no consideration of the pregnancy being a contra-indication for operative procedure, no matter what the duration may be. Appendicitis, so common in individuals, is, therefore, common in the pregnant. Pregnancy predisposes to constipation and intestinal stasis, for reasons that are apparent—pressure of the gravid uterus, lack of exercise, etc., and constipation and intestinal stasis, predispose to appendicitis. In our service at St. Mary's Hospital, Clarksburg, 47 cases of appendicitis in the pregnant, on which operation was performed, have been tabulated, showing no mortality and no disturbance of the fœtus. The duration of the pregnancy in these cases ranged all of the way from the second to the eighth month. These operations were done through the median abdominal incision, as are nearly all of the operations for lesions of the lower abdomen in females over fifteen years of age. We have been able to follow up these cases and find that there was no history of complications or discomforts whatsoever that could be attributed to the operation. One case, operated upon at the third month of pregnancy, developed a fatal eclampsia at term, a condition, which, in my opinion, could not have been attributed in any way to the operation done in the early months of her pregnancy.

Some one has said that modern surgical methods have proved that the best way to treat a diseased condition or to unfold a puzzling symptom-complex, is to expose the afflicted parts to the light of day and to the eye of the surgeon. Some of the older members of the profession will remember that in their student days, the professor taught them to carefully evade the peritoneum, that to disturb it was to invite certain death to the patient. But since those not very remote days, one by one, the cavities of the human body have yielded to the surgeon, and, his boldness of exposure and directness of attack have brought victories undreamed of in those former times and placed the treatment of hidden diseases on a sound and scientific basis. We are daily impressed with the value of direct inspection and treatment of pathological conditions under the guidance of the eye as compared with earlier blind methods of diagnosis and treatment. The pregnant woman, simply because she is pregnant, should not be left to nature to correct the trouble when some pathological condition is present complicating or co-existing with pregnancy, and no hesitancy should be felt in revealing to the eye the true condition. No paper on this subject would be complete without mentioning the importance and frequency of ectopic gestation as one of the complications of pregnancy. Every surgeon who is called upon to deal with extra-uterine pregnancy, with or without ruptured tube, must not lose sight of the possibility of a co-existing pregnancy in the uterus or the other tube. In our service, two cases of extrauterine pregnancy have been observed in which there was a co-existing uterine pregnancy which was undisturbed and went to term. In both cases there were positive findings. Because of this possibility when treating tubal pregnancy, one should always perform the operation for its relief with great care and avoid undue handling of the uterus and appendages. In the business world, merchants vie with one another not so much as to style and price of their wares, for these are more or less uniform, but one merchant is more successful than the other because of certain petty attentions directed for the comfort and convenience of his patrons.

The surgeon operating upon the pregnant woman must surely in this, as well as he should in all other cases, remember that gentleness is next to cleanliness. The peculiar success attained by certain surgeons of the country is due, in a great measure, to their gentle handling of the parts concerned in the operation and their attention to the little details in the procedure which make for the comfort and well being of their patients.

It is possible for the pregnant woman to have, of course, every acute surgical lesion of the abdomen known to medical science, and, it is, therefore, only necessary to say, with respect to such conditions, that they should be met as promptly and with the same assurance of successful outcome as when occurring in other individuals.

One of the most important surgical procedures which concern the pregnant woman and the profession, is Cæserian section or hysterotomy, for the reason, that it seems to offer the greatest hope of life to both mother and child in some of these distressing conditions complicating pregnancy. This operation has been looked upon, heretofore, too much as a procedure of last resort, and the efforts of our ancestors, or even our older associates, to avoid the peritoneum in its proper performance, explains its great mortality. While natural methods are preferable, it must be admitted that when grave conditions are present, it is not wise to rely on these methods till great damage has been done to the soft parts by operations from below or till the patient has become exhausted, for, when performed under these circumstances after a long period of watchful waiting, the patient is depressed beyond her power of endurance or has become so infected, that the high mortality condemns the operation. Deaver, in one of his papers on the value of hysterotomy, says, that the average physician will concede that in certain contractions of the pelvis, hysterotomy—a term so recently popularized by him—is permissible and is indicated; but, that they are not yet willing to concede that it is the operation of choice in the greater number of cases of placenta previa, premature separation of the placenta, eclampsia, toxemia of pregnancy, in some rare cases of pyelitis when profound septic symptoms are present, in certain tumors of the uterus, in cases of prolapse of the cord with a live child in the primipara with rigid and non-dilatable cervix, and in some cases of unexplained uterine hemorrhage. One of the saddest experiences of the physician or surgeon is the witnessing of a woman giving up her life as the result of pregnancy and its complications, or, in her efforts to bring forth her young.

There is nothing so disturbing to his peace of mind as the horrifying spertacle of a human female with distorted

expression in convulsions.

The present day treatment of eclampsia is far from being what we desire even if we rely upon palliative expectant methods or resort to the more radical measures in its treatment. I confess, that, personally, I always feel a sense of helplessness whenever I am summoned to a case of eclampsia. While we are vet forced to admit our ignorance as to its true cause, we are sure that there exists a profound disturbance of metabolism and a severe toxemia. We would not advise against palliative treatment—for it is the rational treatment to be instituted at first—but palliative measures should not be continued long in the face of progressively threatening symptoms allowing the patient to become so profoundly toxic and depressed—that surgical interference promises nothing. No one will deny that there are many cases which improve and recover under the expectant palliative treatment; but, too often, after such measures have been instituted, one is slow to change the treatment, even in the face of rapidly progressive symptoms, and, thus permitting the patient to go steadily down, lose the chance of doing anything surgically. Our experience and observation in the treatment of eclampsia have shown that the mortality is about equal between cases treated by expectant palliative measures and by the forcible dilation of the cervix and vaginal delivery, especially in the primipara.

Unquestionably our best results have been by performing hysterotomy when this procedure was resorted to carly before the patient became exhausted and infected by delay, or by too much mani-

pulation from below.

The question is, then, would it not be best in most cases of eclampsia, especially in the primipara, when there is great uncertainty as to the ability to rapidly dilate the cervix and effect a ready delivery without great damage to the soft parts, to resort, without delay, to what has proved to be the most promising procedure in its treatment?

In Cæserian section there is the advantage of clean cut tissue, the situation is always well in hand, and, one has the advantage of direct inspection under the guidance of the eye; while in the vaginal route, the shock of the manual and instrumental dilation of the cervix, surely aggravates the situation; for, there are, usually, deep cervical lacerations, tears and hemorrhage with the almost certain addition of infection.

Personally, I have come to the conclusion, that when palliative methods in the treatment of eclampsia do not show very early improvement, that I will exclude from consideration vaginal section in the procedure, unless the patient be a multipara with good dilation, free pelvic outlet and the conditions for a safe and speedy delivery promising.

Peterson shows that the mortality of eclampsia increases in the ratio with the number of the convulsions and the amount of manipulation and interference through the vagina previous to operation.

Deaver has given some very interesting and convincing facts relative to the

compared mortality in cases treated expectantly, vaginally and by hysterotomy.

Williams of Hopkin's University, states that in his own experience, premature separation of the placenta as a complication of pregnancy is a more common factor in the causation of antepartem hemorrhage than placenta previa. He says that in two thousand deliveries in that institution the complications were noted seventeen and fourteen times respectively.

In a recent paper, he points out, that in many of these cases, the danger to the patient lies in the disorganization of the muscular wall of the uterus as a result of the hemorrhage which has deprived it of the power of contraction. He shows that in certain cases of these atonic and infarcted uterii, not only is hysterotomy indicated but complete hys-

terectomy as well.

In placenta previa, Deaver has shown a complete absence of mortality in the mother and a feetal mortality of forty-three per cent. by hysterotomy.

The high fœtal mortality, as he explains, was due to the early stages of pregnancy before a viable child could be

delivered and survive.

While pyelitis in the pregnant woman is not in itself an indication for Cæsarian section, as local medical palliative methods of treatment should be first tried, but there is an occasional case in which the sepsis is so profound as to call for evacuation of the uterus.

At the Webster Springs meeting, ten years ago, I had the pleasure of presenting a paper to this section on the "Use and Abuse of the Uterine Curette." The conclusions in that paper were, that the uterine curette, though generally considered harmless, was, in reality, one of the most harmful instruments in its usual application that was tolerated by the profession.

My observations and experiences since presenting that paper have more thoroughly convinced me of the dangers of the promiscous application of this instrument as it has been and is still being used. In our service, considering it in the way for which it was originally intended, it has fallen into disuse, and no uterus is ever curetted (except it be in

the rare desire to get scrapings for diagnostic purposes) unless abdominal section is performed at the same sitting. The emptying of the uterus of retained products of conception is not to be regarded as curettage. Not wishing to criticise, but I am compelled to say that this relic of barbarism still exists in some localities and its baneful effects observed. Quite recently there was brought to my service a woman with a most threatening peritonitis.

Her condition on admission to the hospital was so alarming as to preclude the possibility of surgical intervention. She was given careful and energetic palliative expectant treatment, when, after a few days some improvement was noted

in her general condition.

Taking advantage of this temporary improvement, abdominal section was performed. A belly full of pus, a uterus in dissolution full of fibroids and with three large punctured wounds leading from the cavity through the fundus, were observed. This patient had been curetted a few days before coming to us for supposed retained products of conception. Complete hysterectomy was required and notwithstanding the gravity of the case, I am pleased to report that the woman made a perfect recovery. In conclusion, I wish to emphasize the importance of giving early recognition to those many grave lesions which so often befall the pregnant woman during the month's of her expectancy, that we may give her and her unborn child the cightful chance of life; continue to be real benefactors of the race and worthy of the name which we profess.

# POSITION OF PLACENTA IN UTERO.

By H. G. Steele, M. D., Bluefield, W. Va.

Read at Annual Meeting of West Virginia Medical Association, Wheeling, May, 1916.

We often hear of a man writing or talking on a subject he knows very little about and on the contrary we know of able men writing or saying very little on a subject they are thoroughly familiar with—the less we know the more we talk and the more we know the less we talk. In this case the writer wants to be understood as being classed in the former, and at the same time hopes to say just enough to get more thinking along this particular line of obstetries, with the object in view, that those obstetricians here today will bring out in a discussion many valuable points to us all—the general practitioner as well as the accoucheur.

You know many general practitioners who dislike and some even despise obstetric practice and the surgeons or some of these would-be surgeons do obstetrics simply to hold their patients, and not because they love the work. We need more good, honest, upright, obstetricians in this state who would relieve you worthy physicians and surgeons of these allnight tea parties, which so much breaks you down and make you unfit to give your patients their just due, which you are thoroughly capable of furnishing, if you had not had two to four maternity eases in that many nights, in succession.

What the writer means by a would-be surgeon is no disrespect to their surgical ability, for we nave some of the best surgeons in this country right here in this Little Mountain State of ours, and we have much better equipped hospitals, of their class, in West Virginia, than you will find in roost of the large cities, of New York, Baltimore, Philadelphia, Chicago, Cincinnati, and many other cities I know nothing about, but I simply mean this, one who poses before the people and wants them to understand that he is a surgeon, and at the same time accepts every obstetrical, medical, and all other cases that come his way.

To my mind, a physician as well as a mechanic, merchant, or any other man in any walk of life, does not do his work so well when he dislikes it as when he is in love with it, therefore, for that reason you well know that some women oftentimes do not receive the careful attention they should, during and after confinement.

SIZE AND SHAPE OF THE PLACENTA.

It is a flattened, roundish or oval organ 15 to 18 cm. in diameter, two to three cm. in height at its thickest part, and its weight is about 1-6 of that of the fœtus, 500 to 600 grams. spreading it out over the palms of one's open hands it sometimes covers a little more than one, while at other times it more than covers both hands. It has a maternal and a fœtal surface, the maternal surface is covered with little mountains and valleys while the feetal surface is ridged here and there with blood vessels which come together at a certain point near the center or close to the margin, and assist in forming the umbilical cord. This surface is covered by a thin membrane called the amnion.

In syphilis the placenta may weigh one-quarter, one-third, or one-half as

much as the feetus.

A patient delivered recently by the writer, was a syphilitic, but the placenta

was extremely small.

In albuminuria it undergoes a relative increase. It becomes the largest in general dropsy of the fœtus and weighs from 1,140 gramms to 1,200 gramms (Williams) and Cohen mentioned where it sometimes weighs as much as 2,900 gramms.

We sometimes meet up with two or more placentæ in the same uterus, but that is very seldom, and will not be considered in this paper any more than to mention that it exists.

#### ATTACHMENTS OF THE PLACENTA.

"The placenta may attach itself to any portion of the uterus, the fundal insertion being the rarest of all, the posterior wall being the most common site, next the anterior wall, then the sides, and next to last in frequency, the lower uterine segment—the isthmus uteri. The lower edge of the placenta must be at least 10 cm. from the internal os, and well above the upper border of the isthmus uteri, to be normal."

When the inferior border lies just at the isthmus uteri, it is spoken of as low insertion of the placenta; when this edge just reaches the internal os, it is called placenta prævia marginalis; when only part of the opening of the cervix is covered it is said to be placenta prævia lateralis or partialis, and when the os is completely roofed over, placenta prævia centralis or totalis.

#### PLACENTA SOUFFLE.

The Uterine Souffle. Kergaradec, in his paper (1822), described a sound which he heard while listening at the side of the uterus and he ascribed it to the rushing of the blood through the placenta, calling it the "placenta souffle." It is a soft blowing sound, synchronous with the maternal heart, having a rushing character, similar to the bruit heard in an aneurism or in the veins of the neck, or like the French "vous," pronounced in low, blowing tone—"voo."

DeLee says, "It is heard best at the left side of the uterus, low down, but may be heard on the right side or anteriorly—occasionally all over the uterus or on both sides."

It has been the writer's brief experience in carefully locating this sound to find it about the middle of one of the walls of the uterus, and on the left side in most of the cases. Should it be heard over considerable area on that side, very little or no sound is heard on the extreme right, but if it is slightly heard on the left side, then it is more or less distinctly heard on the right, and if not heard in front you can make up your mind that the placenta is located on the posterior wall of the uterus. Likewise if you hear it plainest on the right side, covering a large area, with very little sound heard on the left of the linea albia and none in the left lumbar region, then you can say the placenta is attached to the right wall of the uterus. In like manner I feel that it can be heard when attached to the anterior wall or fundus.

Now if we should hear this sound low down on both sides, in front and possibly well posterior in both lumbar regions and not high up on any one of the sides, or even if the upper edge is heard onehalf or two-thirds up the side of the uterus and the greater portion of the sound is heard low down in the region of the cervix, why not say we are dealing with a low attached placenta and look out for placenta prævia, make the necessary preparations and get our patient in a hospital where she can be watched carefully, before one of the usual symptoms — hemorrhage, causes alarm, which manifests itself without any pain or apparent cause and more often appears in the last tri-mester of pregnancy

This sound may be loud, drowning the fœtal heart-tones, as has been heard by the writer many times, or soft, hardly audible—even absent in some cases. DeLee says it may be heard at one time and absent in the same place later. In my mind that is due to the slight shifting about of the uterus or the overlapping of the intestines on the sides or over the fundus. Whether the origin of the sound is in the large vessels, arteries and veins in the sides of the uterus, or in the placenta itself I care not, but I believe the sound is heard best where the placenta is attached to the wall of the uterus, and can be located in seventyfive per cent. or more of the cases. course influenced somewhat upon thickness of the abdominal wall and the size and position of the placenta, you would not expect to hear so well through a thick wall of adipose tissue as in a thin person, or if down low behind a very much distended bladder, as when the bladder is empty and out of the wav.

One author contradicts himself in saying it is not in the placenta because it has been heard after the placenta is removed, and at locations far from the placenta site, and turns right around in the same paragraph and says it seems loudest near the placenta site.

Very little is said in our books on the subject, and some authors go so far as to say the placenta cannot be located. When an accoucheur makes such a statement I feel that he has collected his data through inexperienced students and not given it much of his personal attention.

Some think it is a diagnostic sign of pregnancy not to be relied on too strongly, as the same sound may be heard over all rapid growing tumors—fibroids, ovar-

ian cysts, even in enlarged spleen and liver, and in cases of anæmia and maternal heart disease, the cardiac murmurs being transmitted. But it is our duty to make a differential diagnosis between this and pregnancy, which might be very difficult in some cases without a clear cut history and other usual symptoms and signs of pregnancy.

HOW EARLY CAN THE PLACENTA SOUFFLE BE HEARD AND ITS POSITION LOCATED?

Depaul has discovered the uterine souffle as early as the twelfth week, but most observers have not heard it until the sixteenth week.

I cannot say that I have ever made it out before the end of the fifth month but depend more on locating its position from the seventh month on.

Will mention a few of the locations of the placentæ in some of the histories

taken recently:

- 1. Placenta souffle heard in the upper right and left quadrant posterior. Diagnosis on the upper part of the posterior wall of the uterus.
- 2. Placenta souffle in the left flank but not heard plainly. Diagnosis on the left wall of the uterus rather low and slightly posterior.
- 3. Placenta souffle heard high behind.
  4. Placenta souffle heard in the left

lower quadrant greatest intensity in front of anterior superior spine.

5. Placenta souffle heard in left up-

per quadrant slightly posterior.

There might be a question in your mind, "Well, how do you know the placenta is in the lower left or right upper quadrant?" On a few occasions after locating the position of the placenta the writer found it necessary, after the delivery of the child, to detach the placenta with his fingers, and found it attached to that wall of the uterus where located beforehand.

### WHAT ADVANTAGE IS THERE IN KNOWING THE POSITION OF THE PLACENTA?

1. In a small or deformed pelvis, or where we are dealing with an extremely large child, and a Cæsarian section becomes necessary, the surgeon can avoid cutting through the placenta which, oftentimes causes considerable hemorrhage in the midst of the operation and en-

dangers the patient's life.

2. A vaginal Cæsarian section may be performed with more ease and safety, when required, when we know the location of the placenta. This method is often selected in eclampsia, in threatened death of the mother from heart disease, in threatened occlusion of the umbilical cord, and in the event of sudden death of the mother, the fœtus surviving.

3. In placenta pævia I feel the diagnosis can be made oftentimes long before any of the usual symptoms present themselves. "In these cases the child is situated abnormally high, mal-presentations are common, there is a striking absence of the sensation of the hard lower pole of the fœtus in the lower uterine segment, and the bleeding comes on as a rule after the thirty-fourth week.

The cause of placenta prævia is not definitely known. It is much more common in women who have previously borne children than in those pregnant for the first time.'' (Barkley & Bunny.)

After being engaged to take care of an obstetrical case I feel it my duty to find out what I can about the condition of the patient and the fœtus. If she is in labor there may be an opportunity to make the usual examination and take a brief history, again there might be only time to tie the cord and see the

placenta expelled.

If the patient has some time before she expects to be confined and is out walking around, she is requested to come to my office for an examination, or I call at her home and proceed as follows: A brief history is taken, the pelvic measurements noted, find out the condition position and presentation, if possible, of the fœtus, auscultate the abdomen for fœtal heart sounds and the placenta souffle, note the location of the first, the position and circumstance of the latter.

In the early months of pregnancy these latter may not be made out, but in the last three months it is my opinion they can be located in most cases if we will only search for them long enough.

My object in expressing these thoughts to you today is to get your ideas and co-operation on this subject, which is very important to us American people at this critical time in the history of the world. Let us put forth our best efforts to locate the position of the placenta and in event we should diagnose a case of placenta prævia, that we get our patient into a well equipped hospital long before the danger signs manifest themselves. And when it becomes necessary for a Casarian section to be performed, the cutting through of the placenta, when located on the anterior wall, may be avoided thereby preventing considerable hemorrhage and loss of time which is very valuable to these patients.

## FRACTURE-DISLOCATIONS OF THE SPINE.

By B. B. Wheeler, M. D., Supperintendent McKendree Hospital No. 2, West Virginia.

Gentlemen :-

The subject upon which I wish to address you this afternoon is the fracture

and dislocation of the spine.

Owing to the fact of my holding the position of superintendent of the Mc-Kendree Hospital, it has been my good fortune to have under my personal observation more than the average number of cases of fracture-dislocations of the spine.

I use the word fracture-dislocation because, although there has been considerable distinction made between "fracture and dislocation" of the vertebræ, during the past few years it has been demonstrated by means of the X-ray that in nearly every case of spinal fractures we very rarely find that it is not complicated by some articular displacement and that dislocations without fracture of some portion of the vertebræ are very exceptional. So, I think, that owing to the very close association of the two conditions the phrase "fracture-dislocation" is most satisfactory and accurate.

I have had under my observation ninety-five cases of fracture-dislocation of the spine of which thirty-eight have died. I have operated on thirty, that is, I have performed laminectomy, but I

am sorry to say that the results from these operations have not been as satisfactory and encouraging as one might wish, and I think it is a question, upon which there has been considerable discussion, as to whether, when you operate early, the outcome would not have been the same.

It is quite evident that if we operate immediately after the injury has been sustained, we are bound to have failures that should by no means be charged against the operation itself, and if it is possible, we should hesitate before operating until the question can be definitely decided as to whether the patient will overcome the shock or will succumb to conditions brought about directly by the

effects of the injury.

There is also another objection to immediate operation. In the so-termed concussion of the spine, it is quite possible that there may be a certain amount of anæsthesia and paralysis. The recovery of the patient, however, will be complete or at least so nearly so that no appreciable lesion can be noticed. Therefore, immediate operations in cases of this kind would be entirely unnecessary as they would have recovered spontaneously had they been left alone for a sufficient duration of time. It is impossible, too, in my opinion, in the first few hours to determine with any degree of certainty how severe the injury really is, nor can we absolutely localize the injury to the cord.

Referring to the discouragement we sometimes receive in operations of this character, we must remember that regional statistics are important in determining the results of such operations. Loyd quotes, "Thus we find out twenty-seven affected in the cervical region operated upon immediately, twentyone died, while out of ten operated on at a later period, only two died. In the dorsal region, out of forty-nine operated on immediately twenty-three died, while those who were operated on later only five died from a total of sixty-three. Even in the lumbar region the same disproportion exists. Thus, from six immediate operations four died, while from twenty-two done at a later period only four were fatal."

At the present time, however, I think it is commonly agreed by the majority of surgeons that complete crushing injury to the cord should not be operated upon on account of the hopelessness of the condition. The difficulty in arriving at a decision as to when and when not to operate in a given case arises from the difficulty in rendering an accurate diagnosis of the condition.

Partial lesions to the cord and injuries to the cauda equina demand operative intervention in almost all cases. But then again, however, the peculiarities of each individual case must be taken into consideration by themselves, and also the complicating conditions, for instance, shock and injuries to other portions of the body, especially the skull, which will necessarily modify the indications for operation, and determine the most appropriate time for its performance.

Burrell recognizes three type of cases:
(1) Those in which the cord is crushed,
(2) those in which doubt exists as to
whether the cord is irremediably damaged, and (3) those in which it is fair
to assume that the cord is not irreme-

diably damaged.

The first class forms by far the largest number of spinal injuries, and it is to those in this category, or to be exact, those cases of fracture-dislocations were we are positive that the cord has been severed above the lumbar enlargement, and in which we therefore have no hope of regeneration of the cord, to which I refer.

The indications to be made in the treatment of these cases are far more complex. Not only have we to consider the fixation of the spine, but the relief of the symptoms resulting from the complication is also demanded as far as may be possible. When an absolute diagnosis of complete crushing of the cord has been made, I am of the opinion that operation is contra-indicated for the reason that it can do no good.

In the after treatment, our attention is first directed to the maintaining the fixation of the fracture, but the most important feature of the whole treatment resolves itself into the proper drainage or emptying of the bladder and the prevention of trophic sores.

One of the most discouraging conditions with which we have to contend with is that of cystitis which almost invariably develops following the constant use of the catheter, and it is most important that the strictest aseptic precautions should be observed in catheterization. It is advised by some, that if it is possible, it is better to rely on the bladder emptying itself, even when a moderate degree of urinary distention is present. Gentle massage of the distended viscus will very often result in a fairly satisfactory evacuation of the bladder, and although this method cannot be claimed to be ideal, yet is it far better to proceed along these lines than to resort to the catheter with its almost inevitable train of disastrous results following infection of the genitourinary tract.

If the bladder should become infected during the after-treatment, it is sometimes advised best to establish a permanent drainage to control the condition.

Suprapubic cystotomy may also be performed. This possibly is as satisfactory a method as any in dealing with infection of the bladder. The bladder should be washed at least once a day with a boric acid or potassium permanganate solution. Some surgeons prefer perineal drainage. A permanent catheter has been employed with success, but the urethra will not tolerate the presence of a foreign body indefinitely.

In the foregoing remarks, I have endeavored to sum up briefly the ordinary conditions and the means taken in cases of fracture-dislocations of the spine. I now wish to draw your attention to a particular point in which I have departed from the usual methods of procedure.

I hope you will particularly bear in mind, that the cases to which I refer are those in which I have come to a definite conclusion that the cord has been severed above the lumbar enlargement, in which case, therefore, I knew there could be no regeneration.

The condition of the patient is one so obviously hopeless that it seems to me a part of wisdom to secure their comfort and ease, even though it be necessary to resort to means, that at first glance, may appear to be most radical measures.

One of the primary factors in securing this added degree of physical comfort to the patient is the elimination of that distressing condition arising from

trophic sores.

After the fixation of the fracture has taken place, and the drainage of the bladder has been accomplished, this may be a month or possibly six weeks after the injury has been sustained, I amputate both legs in upper third of femur; I do a double thigh amputation. This operation can be done without shock to the patient and can also be accomplished without the aid of an anæsthetic. As I have said before, this may appear at first to be a most radical measure to undertake, but after consideration, I am of the opinion that the results of the operation are such as to render the radical measures advised justifiable.

The results are as follows: We have removed this large amount of dead tissue, enabling us to handle the patient with greater ease and cleanliness, and not only this, we have made it possible for the patient, instead of being absolutely helpless to even lift himself into a wheel chair by the use of his arms. But the most important feature of the treatment is that we have performed the greatest aid in

the prevention of trophic sores.

To sum up my address to you, Gentlemen, in a few words, I wish to say that the whole treatment of fracture dislocation of the spine, where the cord has been completely severed, resolves itself into the one difficult problem, that is the prevention of trophic sores, and the proper drainage or emptying of the bladder. Both these essential features can best be accomplished by amputating the legs, and, although, this may be thought a drastic means of treatment, I have found the results so encouraging that I thought it worthy of your consideration.

### Announcements

Washington, D. C., June 15, 1916. Dear Sir:—

The next examination for appointment in the Medical Corps of the Navy will be held on or about August 7, 1916, at Washington, D. C., Boston, Mass., New York, N. Y., Philadelphia, Pa., Norfolk, Va., Charleston, S. C., Great Lakes (Chicago), Ill., Mare Island, Cal., and Pugct Sound, Wash.

Applicants must be citizens of the United States and must submit satisfactory evidence of preliminary education

and medical education.

The first stage of the examination is for appointment as assistant surgeon in the Medical Reserve Corps, and embraces the following subjects: (a) anatomy, (b) physiology, (c) materia medica and therapeutics, (d) general medicine, (e)

general surgery, (f) obstetrics.

The successful candidate then attends the course of instruction at the Naval Medical School, which will begin on or about October 1, 1916. During this course he receives a salary of \$2,000 per annum, with allowances for quarters, heat, and light, and at the end of the course, if he successfully passes an examination in the subjects taught in the school, he is commissioned an assist surgeon in the navy to fill a vacancy.

Full information with regard to the physical and professional examinations, with instructions how to submit formal application, may be obtained by addressing the Surgeon General of the Navy, Navy Department, Washington, D. C.

The foregoing information is furnished as it is believed that it is of interest to you, and that you will want to give it some notice in your journal.

Very truly yours, W. C. BRAISTED, Surg. Gen. U. S. Navy.

# PHILADELPHIA ACADEMY OF SURGERY.

The Samuel D. Gross prize; fifteen hundred dollars. Essays will be received in competition for the prize until Janu-

ary 1, 1920.

The conditions annexed by the testator are that the prize "shall be awarded every five years to the writer of the best original essay, not exceeding one hundred and fifty printed pages, octavo, in length, illustrative of some subject in

Surgical Pathology or Surgical Practice, founded upon original investigations, the candidates for the prize to be American citizens.'

It is expressly stipulated that the competitor who receives the prize, shall publish his essay in book form, and that he shall deposit one copy of the work in the Samuel D. Gross Library of the Philadelphia Academy of Surgery, and that on the title page, it shall be stated that to the essay was awarded the Samuel D. Gross Prize of the Philadelphia Academy of Surgery.

The essays, which must be written by a single author in the English language, should be sent to the "Trustees of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery, care of the College of Physicians, 19 S. 22nd St., Philadelphia," on or before January 1, 1920.

Each essay must be typewritten, distinguished by a motto, and accompanied by a sealed envelope bearing the same motto, containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay.

The committee will return the unsuccessful essays if reclaimed by their respective writers, or their agents, within one year.

The committee reserves the right to make no award if the essays submitted are not considered worthy of the prize.

WILLIAM J. TAYLOR, M. D. JOHN H. JOPSON, M. D. EDWARD B. HODGE, M. D. Trustees.

#### WARNING.

We are advised that a very clever swindle is being worked by a young man calling on physicians in various sections of the country. He is fraudulently soliciting orders and collecting money for subscriptions to medical journals and for medical books published by various firms. He usually represents himself as a student, working his way through college and trying to get a number votes to help him win a certain contest. He sometimes uses the names of L. D. Grant, H. E. Peters, R. A. Douglas and F. C. Schneid-

er and he usually gives a receipt bearing the heading of some society or association, such as United Students Aid Society; the Alumni Educational League, the American Association for Education,

The description given of this swindler is—young man of the Jewish type, rather slender, with very dark hair combed straight back and shows his teeth plainly when talking.

The whole scheme is a fraud. The societies mentioned do not exist. The idea is to collect money by offering special discounts and prices on medical books and journals and skip with the money.

This young man does not represent W. B. Saunders Company, whose name he frequently uses. He is a fraudulent subscription agent and physicians, generally, should be on the lookout for him.

# ANNUAL MEETING OF AMERICAN MEDICAL EDITORS' ASSOCIATION

The annual meeting of this association will meet at the McAlpin Hotel, New York City, on October 25 and 26.

A most interesting program is in course of preparation and the local committee composed of the following members is an assurance of a successful convention.

Dr. Thomas L. Stedman, Chairman, (Editor Medical Record.)

Dr. R. H. Sayre, (New York Medical Journal.)

Dr. Brooks H. Wells (Editor American Journal of Obstetrics.)

Dr. Frank C. Lewis (International Journal of Surgery.)

Dr. Ira S. Wile (American Medicine.)

The officers of the association for 1915 and 1916, are as follows:

Dr. Edward C. Register, President, (Charlotte Medical Journal, Charlotte, N. C.)

Dr. W. A. Jones, first vice-President. (Journal Lancet, Minneapolis, Minn.)

Dr. G. M. Piersol, second vice-President. (American Journal Medical Sciences, Philadelphia, Pa.)

Dr. J. McDonald, Jr., Secretary and Treasurer. (American Journal of Surgery, New York.)

Executive Committee:

Dr. C. F. Taylor, (Medical World, Philadelphia, Pa.)

Dr. John C. MacEvitt, (New York State Journal of Medicine, New York.)

Dr. A. S. Burdick, (American Journal of Clinical Medicine, Chicago, Ill.)

Dr. Joseph MacDonald, Jr., (American Journal of Surgery, New York.)

The meeting on October 25 and 26, will be devoted exclusively to problems of a strictly journalistic nature, which will be of importance and interest to every editor and publisher of a medical journal. Among the papers to be presented are the following:

"Editorial Control," "The Editor's Prerogative in Editing Original Articles," "Book Reviews in Medical Journal," "Problems of the Subscription Department," "The Relationship Between Medical Journals of the Day," "The Uplift in Medical Journalism," "The Influence of the Medical Press and Profession in Public Affairs," "The Rights of an Author in the Disposition of His Contributions," etc.

### Hospital News

Dr. G. R. White is equipping a new hospital in Logan and will have it ready for opening on or before the first of July.



The new Nurses Home at McKendree is under contract and work will begin at once. This will complete a splendid series of improvements carried out by the State at this hospital.



On the twelfth of June, the Logan Hospital at Logan, West Virginia, had its formal opening. This institution was established primarily for the benefit of the miners of the Guyandotte Valley and secondarily for the general public.

The hospital building consists of a four-story brick structure erected at a cost of some \$40,000 and from reports is a very modern and up-to-date institution. The staff consists of—

Dr. L. E. Steele, general surgery.

Dr. S. B. Lawson, general surgery.

Dr. H. H. Farley, general medicine.

Dr. J. E. Robertson, medicine and surgery.

Dr. T. W. Moore, eye, ear, nose and throat.

C. W. Jones, president.

E. M. Davis, superintendent of nurses.

### The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR

C. R. ENSLOW. M. D. (ASSISTANT EDITORS

HARRY W. KEATLEY, M. D., BUSINESS MANAGER

#### Huntington, W. Va., July, 1916

THE JOURNAL issued on the first of each month

Subscription Single Copies \$1.50 50 per year 20 Cents

All original articles for this Jonrnal 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 tuthors will have their contributions typewritten before submitting them for publication. The expense is small to the anthor—the satisfaction is great for the aditor 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 Chemistry and Pharmacy of the A. M. A.

#### REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chair-man 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 Jour-nal for publication. The author or communicant shall be held entirely responsible.

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

Sixth District—P. A. Haley, Charleston, W. Va., one-year term; B. B. Wheeler, McKendrie, W. Va., two-year term.

### Editorial

There is a great movement on foot in nearly all the states of the Union to establish certain forms of health insurance. It is more than likely that at the next session of the legislature of West Virginia a number of bills will be presented supplementary to the Workmen's Compensation Act now in force.

It behooves the medical profession to think upon these matters and take such steps through its Committee on Medical Legislation to see that the interests of our particular branch of public service are protected.

The Editor hopes to have some extended statistics to present to the readers of the Journal in the next issue, but he would insist that the physicians throughout the state be thinking as to

the provisions which they feel will be necessary to protect us.

Any suggestions which members may have to make will be appreciated by the Editor, and communications which may come in will be published if the writers desire them. Please let us know what vour ideas are.

We have recently been making an effort to gather statistics concerning contract practice. In the last two or three years there has been more or less of a complaint that contract practice is lowering the standard of the medical profession in this state. We realize that contract practice in certain forms is almost a necessity in certain localities.

We wish that those men who are members of our State Association and who do contract practice would write us and

give information. Without this it is impossible for us to reach any kind of a

satisfactory conclusion.

The Editor desires to hear from the men scattered through the coal fields, lumber camps, etc., in regard to rates paid them for services which they agree to render, and so on.

On one or two occasions in previous issues, we have called the attention of our members to the fact that the advertisers in our State Journal have been carefully investigated as to their responsibility.

Again we desire to request of you that you support those firms which advertise

with the State Journal.

When writing to advertisers, please be sure to mention the fact that you are writing them because you have felt that they deserve support since they are carrying space in our advertising pages.

This Journal does not belong to the Editor. It belongs to the West Virginia Medical Association, and every member of the State Association is a part owner thereof. It is your journal, and unless we are loyal to our advertisers, we cannot expect to make our journal all that it should be.

Again we would call the attention of our members to the affiliation of this journal with the Co-operative Medical Advertising Bureau of the American Medical Association and to the advantages of the service which they render. At any time you wish to make inquiries regarding instruments, books or even household supplies, write to them at No. 535 Dearborn Avenue, Chicago, Illinois, and I assure you that you will get prompt service.

### State News

Dr. T. N. Goff of Kenova, attended the meeting of the N. & W. surgeons, in June, at Norfolk, Va. From there he went to Philadelphia to the meeting of the B. & O. surgeons.

Dr. W. F. Farley of Holden, spent a

few days recently in Huntington while enroute to Kentucky.

Dr. A. A. Shawkey of Charleston, left on June 12 for New York, where he will take a six months course of study in Pediatrics and on his return he will limit his practice to that specialty.

Federal Inspector George B. Kenney, who was in Huntington during the month of June, declared that West Virginia had made the best showing of any state as to decrease in the use of narcotics. The decrease has been approximately 85 per cent. since the passage of the Harrison Anti-narcotic Law.

Dr. C. C. Coleman of Richmond, spent several days in Huntington the guest of Dr. Wilkinson of the C. & O. Hospital while enroute to the A. M. A. at Detroit.

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Dr. J. W. Lyons of Laredo, was in Logan recently on professional business.

Dr. L. B. Rupert of Nuttallburg, spent a few days in Chicago recently with his brother from the west, who is attending clinics.

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The Fayette County Medical Society will have two of its members on the republican ticket for the November election for the legislature, Dr. C. W. Lemon of Claremont, and Dr. G. F. Grissinger of Gamoca.

—o— Dr. A. A. Shawkey of Charleston, attended the A. M. A. at Detroit.

Dr. T. W. Moore of Huntington, accompanied by Dr. R. H. Pepper of the same city and Dr. Kincaid of Catlettsburg, Ky., drove through in his car to Detroit to the meeting of the A. M. A.

Dr. J. E. Rader, President-elect, of Huntington, is in Baltimore on professional business. Dr. J. W. Lyons formerly of Huntington, but now of Laredo, has tendered his services to the state. The tender has been accepted and he will receive a commission in the medical corps of the West Virginia National Guard. He will be assigned to duty with the second regiment.

Dr. H. W. Keatley of Huntington, captain in the medical corps of the West Virginia National Guard, has been made chief sanitary officer of Camp Dawson at Kanawha City mobilization camp.

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Dr. J. H. Steenbergen of Huntington, spent some time recently in Baltimore attending clinics.

Dr. C. J. French of Huntington, a member of the Cabell County Medical Society and the West Virginia State Medical Association, died early in June at Kenova. from cerebral hemorrhage. The doctor moved to Huntington some two years ago and immediately affiliated himself with the Cabell County Society. His death came to his friends as a very great shock. Cabell County Society has lost one of its very enthusiastic and loyal members by Dr. French's death. The profession extends to the doctor's family its most sincere sympathy in their bereavement.

Dr. R. J. Wilkinson of Huntington, at tended the meeting of the A. M. A. at Detroit.

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Dr. H. B. Wood has recently been added to the force of the State Health Department. Dr. Wood is an M. D. and also a doctor of public health from the University of Pennsylvania and it is interesting to note that he is the first physician in this country to receive the degree of Dr. P. H. in course. He has been engaged in public health work ever since his graduation.

Dr. R. H. Dunn, formerly of Pond Gap, Kentucky, has moved to the City of Charleston and established his office in the rooms in the Odd Fellows' building, formerly occupied by Dr.

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Morris, who died recently from the effects of injuries received by jumping from his office window to the pavement below while suffering from mental aberration.

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At the 31st annual meeting of the State and Provincial Boards of Health of North America, held in Washington, D. C., May 16, Dr. S. L. Jepson, State Health Commissioner, was elected vice-president of that body for the coming year.

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On June 5 a County Medical Society was organized at Mullens with four charter members. Dr. W. L. Hunter of Tralce was elected president, and Dr. F. S. Robertson of Mullens secretary. Dr. Wood of the State Health Department was present and assisted in the organization. This is the first meeting of the medical fraternity ever held in the county. The society will hold regular monthly meetings on the third Thursday of each month, and it is hoped that all the physicians of the county will become members of this organization.

Dr. J. H. Bell of Staunton, Va., has located in Beckley for the general practice of medicine.

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# Society Proceedings

CABELL COUNTY.

The regular monthly meeting of the Cabell County Medical Society was held June 8, in the assembly room of the Frederick Hotel, President eKatley presiding.

There was a very large attendance and routine business having been completed, the society listened to a very instructive address by Dr. Claude C. Coleman, of Richmond, Va. The doctor's subject was "Plastic Surgery," illustrated with lantern slides. Some of the results as shown by slides were particularly instructive. The doctor pointed out to us the remarkably satisfactory results which can be obtained in this particular field of work by those who are giving it special study. It is hoped by the Secretary that

his address will be secured for publication in the Journal at an early date.

After the scientific program had been completed, lunch was served in the Dutch room.

Jas. R. Bloss, Secretary.

# FAYETTE COUNTY. (MAY MEETING.)

The May meeting of the Society was held in the Assembly room of the Mt.

Hope Hotel, Mt. Hope, W. Va.

An interesting program was prepared and the best meeting of the year turned out. Dr. Wells of Hinton, read an interesting paper which appears in the current issue of the Journal. Dr. Coleman of Beckley, read a paper on the present-day view of appendicitis. Dr. Grissinger's paper on Typhoid brought out some new data in the method of treatment which we hope to get before the Society in the near future.

After the Society had completed its program the members present retired to the dining room, where a splendid feast awaited them. Dr. Coleman presided

in his usual jolly mood.

H. C. Skaggs, Secretary.

### (JUNE MEETING.)

By invitation of the management of the Sheltering Arms Hospital the June meeting of the Society was held at that place on the afternoon of June 7.

One of the best programs of the year was carried out. Papers were read by Dr. Moore of Huntington, and Dr. J. A. Tyree of Page. Dr. Moore's paper consisted of a general discussion of diseases of the eye as they relate to the general practitioner. It was ably gone over and many interesting points brought out by Dr. McCarty, a specialist in that line, of Cincinnati. Dr. Tyree's paper consisted of a general plan of tonsillar infections and their relation to the other diseases of tonsillar origin.

A number of interesting clinical cases were demonstrated by Drs. Hunter and

Laird.

A vote of thanks was voted the hospital management for their splendid entertainment.

H. C. Skaggs, Secretary.

#### MERCER COUNTY.

Princeton, W. Va., May 25, 1916. The Mercer County Medical Society held its monthly meeting in the waiting room of Dr. C. C. Peters's office, with the following doctors present: Thompson, Wallingford, C. T. St. Clair, E. E. Vermillion, B. W. Bird, McGuire, S. R. Holroyd, C. C. Peters, F. F. Hoyroyd, Slusher, Bee, Hare, Todd and Steele.

The president, E. E. Vermillion, called the society to order at nine o'clock p. m., The minutes for the previous meeting were read by the Secretary and with a

few corrections were adopted.

Under clinical cases, Dr. B. W. Bird, reported that the tumor on the man's neck, whom he presented to the society at the previous meeting, had grown to twice its size, as shown before the society. The man had gone to some quack doctor to have an X-ray picture taken of his tumor. The tumor was growing very rapidly and the patient becoming much emaciated. Dr. Thompson reported a similar tumor of the neck in a patient whom he has given Coli vaccine by giving one-quarter of a minim, and increased in proportion as according to reaction it produces. He said at that time the patient was improving nicely, and said he also wanted to state that the patient had had some X-ray treatment. He hopes to show the case at the hospital clinic in August.

Under report of the second day's program at the meeting of the State Association at Wheeling, Dr. S. R. Hoyroyd said that from a standpoint of papers and program it was the best he had attended in the past fifteen years, but the social features were not in keeping with some of the other meetings we have had.

First on the program was the oration on Medicine: Diagnosis and Treatment of Chronic Nephritis, J. T. Thornton, M. D., Wheeling, W. Va., which was a most excellent paper and most too deep for a great many of us to appreciate.

Second was The Use and Abuse of Exercise in Treatment of Pulmonary Tuberculosis, S. S. Clovis, M. D., Terra Alta, W. Va., who told us about the cost of running the State Institution, and how they care for the patients sent there,

and said very emphatically he gave no preference to rich or poor, democrat or republican, one with influence or no influence, but did show some preference to a patient who was sent there with great hopes of improving or a complete cure.

Following Dr. Clovis was Dr. E. E. Watson, of Salem, Va., who read a very good paper on Symptoms and Diagnosis of Incipient Tuberculosis, and these two papers brought up quite an extensive discussion in the medical section.

Leaving the medical section I went to the surgical section, and first on the program was: I heard Dr. C. R. Ogden, of Clarksburg, read a very interesting paper on Acute Surgical Lesions of the Abdomen, Complicating Pregnancy.

Next on the program was these reports: Abdominal Pregnancy with Living Child, Vesical Calculus in Boy Twelve Years Old, by our elected president, Dr. J. E. Rader, of Huntington,

W. Va.

Then came Dr. C. A. McQueen, of Charleston, with a paper on Some Remarks of Surgery of the Gall Tract. After which Dr. W. H. St. Clair, one of our own members, read a very unusual and interesting paper on Acquired Diverticulitis of the Large Bowel; with Report of Cases.

The paper on Abdominal Pain: Diagnosis and Treatment, by Dr. R. B. Miller, Parkersburg, W. Va., brought out some very interesting points, in the diagnosis of Appendicitis, and Compli-

cating Troubles of the Bowels.

Some were disappointed, while others seemed not to care when the Governor did not appear and read a paper on Pre-operative Surgical Technique.

Dr. Frank L. Hupp, of Wheeling, read a paper on Exososes of the Orbit; with case reports, with photographs showing operations performed. Dr. Hupp said these cases were very few and the first he had ever had.

The paper on The Open Treatment of Fractures, by Dr. J. Ross Hunter, of Huntington, and one on Fractures and Dislocations of the Vertebræ, by Dr. B. B. Wheeler, of McKendree, took up most of the afternoon. Dr. Wheeler reported where he had had 95 cases of fractures and dislocation of the vertebræ, and

showed where he had operated on six cases by removing both legs at the upper third of the femur, with very beneficial results. In this way you get rid of the dead members, get a better action from the bladder and rectum, and the patient is much more able to handle himself and move about from chair to bed and around in the bed. These limbs are amputated without an anæsthetic, and all present approved of Dr. Wheeler's method in removing the legs where there was a paralysis caused from a fracture or dislocation of the vertebræ. This idea came from an Italian who was in Dr. Wheeler's hospital suffering from fracture of the spine, who insisted on Dr. Wheeler's cutting off his legs, which were of no use to him, and in many respects a hindrance to his moving about.

One of the papers which seemed to cause quite a little comment was: Goitre, Embryology, Histology, Pathology, and Treatment with lantern slides by two of our members, Dr. C. M. Scott and Dr.

T. E. Vass.

The attendance of the society did not seem to be quite up to the standard.

Going back over to the medical section, we were somewhat disappointed in not hearing our own Secretary read his paper on Position of Placenta in Utero, but hope he will read it at our next annual meeting at Fairmont.

On the third day's program first thing in the morning, came the election of of-

ficers.

Dr. J. E. Rader, of Huntington, was elected President.

Dr. E. II. Thompson, of Bluefield, was elected one of the vice-Presidents; Drs. Nicholson and Anderson were re-elected Treasurer and Secretary.

Your Secretary made the following report of the third day's program at the

state meeting:

First was The Present Status Treatment of Bladder Tumors, by John T. Geraghty, M. D., Baltimore, Md., who described these conditions very clearly and showed some very beautiful lantern slides, and spoke of how they removed a specimen of these tumors and examine them under the microscope, to see if they were malignant of benign, and said oftentimes they were able to make a dis-

tinction microscopically after some little experience in examining these tumors

through the cystoscope.

Next on the program was Dr. J. E. Burns, of Baltimore, who told us about Thorium: A new agent for Pylography, and said one objection to its use was on account of its expense. Dr. Burns showed quite a number of lantern slides and in them were very beautiful pictures of the pelvis of the kidney, and showed where one kidney had two pelvises.

Wayne Babcock, of Philadelphia, Pa., who told us of the different Spina Bifida and Its Surgical Treatment, along with showing many interesting lantern slides. Dr. Babcock showed the methods of operation and advised when these cysts are ruptured or covered with a very thin membrane, it is necessary to operate at once, or right soon, and when they are very low or down in the sacral region and covered with true skin, they might go for months before they are operated on. Said he had operated on twenty-five with seventeen recoveries, and he did not consider any of them out of danger of dying from this congenital condition until after they were three years old.

Dr. J. S. Horsley of Richmond, Va., gave us a very good talk and showed some instructive lantern slides on Plastic Operations for Acquired Deformities

of the Face and Hands.

In the afternoon of that same day Dr. Lewellys F. Barker of Johns Hopkins, Baltimore, Md., gave us an excellent talk on Advances in the Study of Syphilis, and the Recognition of Obscure Forms of the Disease. If you have ever heard Dr. Barker lecture at Hopkins, it is needless for me to say that the room was crowded and he had a very attentive audience, both men and women. Barker advised the use of salvarsan and neosalvarsan in the early stage, but advised the use of iodides and mercury in all the stages. Before he pronounces a patient entirely well he insists that a Wasserman test of the patient's blood be made every three months until four tests are completed, and then if all these prove negative he says we can advise our patients that they are well. Now these tests are to be made after the treatment

is stopped. He said he was very much disappointed in finding that the U. S. Army and Navy had discontinued the prophylactic treatment of mercury inunctions over the genitalia and use of Protargol and Argyrol solutions in the uretha. In the latter stages of syphilis he says we have no cures without the use of iodide of potash and mercury.

Dr. X. O. Werder, of Pittsburgh, Pa., read a very interesting paper on Ectopic Gestation: With Special Reference to Treatment, and the way Dr. Werder handled his subject, we realized that he had had wide experience along this line.

The Secretary read a letter from Dr. Willis, of Richmond, stating that he was very sorry that a previous engagement prevented his accepting our kind invitation to read a paper before our society in June, but that he would be glad to read a paper before the society in the fall.

Amendment No. 1 to the by-laws was discussed freely by Drs. J. R. Vermillion, S. R. Holroyd, E. E. Vermillion, Bee, Thompson, Peters and Steele, and was finally laid on the table until our next regular meeting. A motion was made by Dr. F. F. Holroyd and seconded by Dr. C. T. St. Clair, that the regular annual business meeting of the society be held the third Thursday in June, which was carried.

The applications for membership of Dr. W. E. Ritter, of Whitewood, Va., and Dr. A. D. Wood, of Bluefield, W. Va., were read before the society and having been in the hands of the Secretary for some time, Dr. S. R. Holroyd made a motion that we suspend the rules and admit these two doctors to the membership of the Mercer County Medical Society at once. This motion was seconded by Dr. McGuire and unanimously carried.

Curtis-Pearson bill for mimeograph work, \$2.00, was allowed.

Adjourned at 11:10 p. m.

After enjoying a nice little luncheon Third on the program was Dr. W. which was found in the adjoining room, we all went home.

H. G. STEELE, Secretary.

July, 1916

### Health News

#### DO YOU KNOW THAT-

Walking is the best exercise—and the cheapest? -0-

The United States Public Health Service administers typhoid vaccine gratis to Federal employes?

A little cough is frequently the warning signal of tuberculosis?

Bad teeth and bad tonsils may be the cause of rheumatism?

--0---Unpasteurized milk frequently spreads disease?

-0-The air-tight dwelling leads but to the grave?

Moderation in all things prolongs life? The careless spitter is a public danger?

Efficient muzzling of dogs will eradicate rabies?

The protection of the health of children is the first duty of the nation?

Bad temper is sometimes merely a symptom of bad health?

Insanity costs every inhabitant in the

United States \$1 per year?

The United States Public Health Service has proven that typhus is spread by

lice? -0-

Untreated pellegra ends in insanity? -0-

In the lexicon of health there is no such word as "neutrality" against dis-

ease? --0-

The death rate of persons under 45 is decreasing; of those over 45 it is incerasing?

Dirty hands spread much disease?

A high bred dog has a right to have his birth registered—so has a baby?

The United States Public Health Service guards American ports to exclude foreign disease?

Health is a credit with the bank of nature? -0-

A clean garbage can is a good example to the family?

Filth breeds flies—flies carry fever? --0--

Slouchy postures menace health? -0-

Health brings happiness-sickness sorrow?

#### --0--HEALTH INSURANCE.

In response to public interest in health insurance the Massachusetts Legislature has created a commission to study social insurance with special reference to sickness. The state department of health and the bureau of statistics are directed to co-operate with the commission of nine members which will prepare a report and recommend the form of legislation to be introduced in January, 1917. California has a similar state commission already at work on this problem which is attracting wide attention since the introduction this year of bills for health insurance in Massachusetts, New York and New Jersey. Proponents of this legislation believe it will bring about a movement for "health first" comparable to the safety first campaign which followed workmen's compensation for accidents.

Twenty-five out of every one thousand employes in American industries, according to recent statistics, are constantly incapacitated by sickness, the average worker losing approximately nine days each year on this account. This "non-effective rate" for the great army of industrial workers in the United States

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barely suggests the total money loss to employers and employes. The lessened efficiency, the effects of reduced carnings in times of sickness, as well as the cost of medical attention, and the economic loss from deaths, swell the cost to industry and to the nation to almost incalculable figures.

That much of this loss is nothing less than preventable waste and that this waste can be largely reduced by a properly conducted system of governmental health insurance for wageworkers are conclusions set forth in Public Health Bulletin No. 76, containing the results of a study of "Health Insurance—Its Relation to the Public Health," just issued by the United States Public Health Service.

The preventive value of health insurance is given especial emphasis in this study. "Any system of health insurance for the United States or any state should at its inception have prevention of sickness as one of its fundamental purposes," says the bulletin. "This country should profit by the experience of European countries where prevention is being recognized as the central idea necessary to health insurance if health insurance is to attain its greatest success in improving the health and efficiency of the industrial population."

Such a system, it is pointed out in the

bulletin, would,

1. Provide cash benefits and medical service for all wage-earners in times of sickness at much less cost than is now possible. Adequate medical relief would thus be placed within the reach of even the lowest paid workers who are most

subject to ill health.

2. Distribute the cost among employers, employes, and the public as the groups responsible for disease causing conditions and afford these groups a definite financial incentive for removing these conditions. This can be done by means of small weekly payments from employes, supplemented by proportionate contributions from employers and government at a rate reducible in proportion to the reduction of sickness.

3. Become an effective health measure by linking the co-operative efforts of the three responsible groups with the work of national, state and local health ageneies, and by utilizing these agencies in the administration of the health insurance system.

4. Afford a better basis for the cooperation of the medical profession with

public health agencies.

5. Eliminate the elements of paternalism and charity-giving by making employes and the public, as well as employers, joint agents in the control of this fund.

"A governmental system of health insurance," concludes the study, "can be adapted to American conditions, and when adapted will prove to be a health measure of extraordinary value."

## THE THREE "C'S" OF CARING FOR MILK IN THE HOME.

The three "C's" for the proper care of milk in the home, according to the dairy specialists of the United States Department of Agriculture, are:

Keep milk (Cold. (Covered.

Milk is a highly perishable food and the length of time it will remain sweet and safe, especially for children, depends, the specialists say, almost entirely upon the constant care it receives from cow to consumer. Milk passes passes through three agencies: the producer, the dealer, and the consumer. If the first two have done their part, clean, safe milk will be delivered, thoroughly chilled, to the consumer. The consumer's responsibility begins the moment the milk is delivered at his doorstep.

Because milk poured from vessel to vessel on the street is very liable to contamination from dust, manure particles and germs, milk is best delivered in capped bottles. If bottled milk can not be obtained, the housewife should try to have someone in the family receive the milk in a clean, scalded utensil, cover it instantly, and put it without delay into the refrigerator, or the coldest available place. Under no circumstances should an uncovered pitcher, bowl or pan be left out on the porch to receive bulk milk. The vessel, both before and after the milk is poured into it, is accessible

to flies and eolleets particles of dust and dirt.

Even in the case of bottled milk, however, the consumer must see that the bottle is not left out in the heat for a moment longer than is necessary. should be delivered and kept at a temperature of 50° F. or lower—the colder the better. At such temperatures bacteria develop very slowly and milk undergoes little change until consumed. A slight rise in temperature above this point, however, permits bacteria to multiply rapidly and brings about rapid deterioration of the milk, which may render it unfit for ordinary use and make it highly dangerous for babies and little children. For this reason bottled or other milk should not be allowed to remain in a warm place, as on a sunny porch or in a hot kitchen, for a moment longer than is necessary.

#### DELIVERY OF MILK IN HOT WEATHER.

In hot weather the best plan is to have the milkman put the milk directly into the refrigerator, because at that time of year milk cannot be kept properly without ice. If a refrigerator is not available, provide a small box containing ice, and if ice is unobtainable, provide some tight container with insulated walls that keep the heat from getting rapidly to the cold milk. A home-made fireless cooker is admirable for this purpose, especially if partially filled with iee. In the absence of any of these devices, arrange with the milkman not to leave the milk in the sunlight, but to put it in the coolest, shadiest place around the house.

#### HANDLING MILK IN THE HOME.

In handling milk around the home, do not pour it from one vessel to another until it is to be consumed. Do not let the bottle of milk remain out of the refrigerator a moment longer than is necessary. Keep the milk eovered, using paper caps or an inverted tumbler on bottles, or storing it in covered utensils. Any household utensil that is to be used as a vessel for keeping milk should first be eleaned thoroughly and scalded.

Before opening a bottle of milk, wash and wipe the neck and outside of the cap with water and a clean cloth. The little depression on the top of the cap may collect dust or water and any milk that leaks out may attract flies. Lift out the cap with a pointed instrument, so that the outside of the cap, which may be contaminated, will not be pushed down into the milk. Each time the milk is to be poured from the bottle it is a wise precaution to wash the neck as described.

#### MILK IN A REFRIGERATOR.

The refrigerator where milk is stored should be cleaned regularly, especial care being given to keep the drip pipe free and clean. The ice rack also should be cleaned and any place where food is kept or milk stored should be scalded occasionally with sal-soda solution. The refrigerator, even though cold, may quickly be contaminated by a few drops of spilled milk, or by small particles of food. No matter how clean the refrigerator, milk should never be kept in an open vessel. As milk absorbs odors easily, such food as fish, cabbage, or onions should not be kept in proximity to it.

#### CLEAN EMPTY BOTTLES.

As soon as a milk bottle is emptied, rinse it thoroughly with cold water. Do not return dirty bottles and do not use milk bottles except to hold milk. Returning dirty bottles to the milkman may mean that a few days later either you or your neighbors will get contaminated milk. Milk bottles should never be taken into a sick room. In case of infectious or contagious disease, all bottles should be boiled thoroughly and should not be returned to the dealer without the express permission of the attending physician. Such diseases easily can be made epidemic through disregard of this precaution.

#### WHERE THERE ARE CHILDREN.

Care of milk, important for all, is a vital necessity in a home where there are children. It is absolutely essential to the safety of babies. No intelligent mother will leave to an ordinary servant the task of caring for or preparing the milk for her baby. Mothers of small

children should get, from their own physicians, explicit directions for the proper handling of milk and for cleaning and sterilizing nursing bottles. Pamphlets on infant feeding may be obtained from the municipal milk stations or health officers. Milk for babics can not be kept too cold, and too much care can not be given to keeping it clean and covered.

Further information on this subject may be had by writing to the United States Department of Agriculture, Washington, D. C., for Farmers' Bulletin 413, "Care of Milk and Its Use in the Home."

# Medicine and Surgery DRS. ENSLOW AND RADER

#### **MEDICINE**

Tom A. Williams, writing on Intestinal Stasis in the *Proctologist and Gastro-enterologist*, recommends for the constipation in neurasthenia the following:

In the morning upon waking, five to ten ounces of hot water containing ten to twenty grains of sodium bicarbonate or potassium eitrate. Half an hour later,

Breakfast: A large plate of fruit and milk or cream, followed by abundant cereal and milk with bread and butter. No meat, eggs or fish. Wait five hours.

Dinner: Not more than four ounces of meat or fish, which must be quite fresh, a very large plate of green vegetables, potatoes sparingly, and preferably nothing more than a taste of sweets. Five hours later,

Supper: May be a repetition of breakfast; but succulent vegetables may replace the fruit, and macaroni or a similar dish may be substituted for the eereal.

Thirst and hunger between meals may be satisfied by water and fruit about one hour before a meal or during the night.

Abstain from meat juices (gravy and soup), gelatine, coffee, tea, coffee, salt and strong condiments, alcohol, pastry.

All starches and meats well cooked. Fresh vegetables not overboiled.

QUININE.—Probably no other one drug has so well deserved its reputation as a specific, or so ill deserved its repute as

a general all-round remedy, as quinine. For the curative treatment of malaria and postmalarial manifestations quinine is unequalled; but the pharmaeologist may rightfully challenge the preferential use of this drug for any other affection. Yet in how wide a field has the employment of quinine been advocated! Scarcely a febrile movement known but has been treated with this alkaloid. Neuralgia, whooping eough, rheumatie fever, influenza, pncumonia, diphtheria, typhoid, the exanthemata, rhinitis have had quinine recommended; yet in none of these illnesses are there adequate clinical or laboratory data to indicate that the drug is actually beneficial or that it is not even positively detrimental.

In the case of malaria, however, we have extensive laboratory and elinical evidence that quinine is toxic to the plasmodia, even though the degree of toxicity seems to vary widely with different protozoan strains and with differing physiological conditions. An exceedingly important consideration is the fact that, in varying degrees, quinine is a poison to all forms of protoplasm; as a result, even medicinal doses will produce a diminution in the number of leucocytes and will destroy many erythrocytes. Many other cells of the body, as well as the ferment bodies, will have their efficiency and activity lowered by this drug. Obviously these incidental results are usually neglible in comparison with the advantages conferred by quinine in malaria; but they are not neglible whenever sufficiently compensatory manifestations are not normally determinable.

EMETIN: A NOTE OF WARNING.—While it may be accepted as a truism that remedies marketed under fancy propreitary names too often are not what they pretend to be and do not accomplish what they claim, it must not be lightly assumed that the converse is equally true. The physician is rightly suspicious of such products; but on the other hand, he should not take it for granted that because a drug bears the name of a definite chemical compound, it is true to name and pure, and therefore trustworthy in ite actions. Of this fact we have recent demonstration in respect to emetin. The

use of this drug has greatly increased, during the last two or three years, owing to its extensive employment in pyorrhæa alveolaris and in amebic dysentery. Furthermore, it is being used by certain mail-order "pyorrhea cure" quacks. It is administered in quantities not far removed from the subtoxic dose, while, from the very nature of the maladies in which it is used, the patients are frequently in a condition of exhaustion. These facts combine to render it vitally important that, in prescribing this remedy, we should be assured that it is of uniform composition and pure. Nor, in this particular instance, is there any reason why this standard should not be constantly attained.

For this reason, a recent article in the Archives of Internal Medicine\* must have come as a rude awakening of the manufacturer, and the reputed harmlessness of emetin, have been employing this potent remedy with an easy mind.

Two cases from the Johns Hopkins medical clinic are described in which symptoms of poisoning and in one instance death, resulted from the administration of emetin hydrochlorid. The fatal case occurred in a man who entered the hospital with a diagnosis of syphilis and amebic dysentery. He was treated for twenty days by subcutaneous injections of emetin hydrochlorid. The average daily dose was 1½ grains; the total amount he received was 29 grains. A pre-existing slight diarrhea was at first ameliorated and then markedly intensified till, on the eightcenth day of the treatment, there were eighteen stools in the twenty-four hours. This diarrhea ceased five days after the discontinuance of the injections. From the sixteenth day on, signs of grave kidney mischief developed. There were marked acidosis and acute renal insufficiency, with blood in the urine. Bronchopneumonia supervened and, after a period of dyspnea, the patient collapsed and died thirty days after the first injection and ten days after the last.

The other patient was a woman who received only one-half grain daily during four days, for pyorrhea alveolaris. She developed intense diarrhea with pain and tenesmus. These symptoms cleared

up six days after withdrawal of the emetin. The patient was then in a toxic delirious state which lasted one week. These symptoms were quite out of proportion to the moderate dose employed. The particular preparation employed in this second case was, therefore, suspected to be unusually toxic. This suspicion was confirmed by an elaborate experimental research into the toxicity of emetin hydrochlorid preparations obtained from five different commercial sources, in the course of which investigation sixtvtwo animals were used. The toxic effects manifest themselves in various ways but in using emetin one must be on the lookout for such danger signals as intense diarrhea, albuminuria, and peripheral neuritis.

It is true that this fatal case is the first recorded in the literature, while instances of grave toxic effects have not been reported. But these facts must not be accepted at their face value. peculiarities of the action of emetin (or of the associated impurities) conspire to In the first place, certain of the toxic effects closely imitate the symptoms of dysentery, the very disease in which emetin is most extensively used in large doses. Secondly, the maximum poisonous effect tends to be deferred, oceasionally manifesting itself some days after the drug has been discontinued. The phenomena of intoxication therefore, apt to be interpreted as an exacerbation of the pre-existing morbid condition.

The case of emetin is not unique in the history of pharmacology. At one time the products marketed under the name of "aconitin" varied startlingly in their toxicity. At that period the chemistry of aconitin and of its eongeners had been very inadequately investigated. No such excuse avails regarding impure emetin. This albaloid is a well defined chemical compound. It is commercially practicable to ascertain, with precision, the emetin content of the hydrochlorid and to insure its freedom

<sup>\*</sup>Levy, R. L., and Rowntree, L. G.: On the Toxicity of Various Commercial Preparations of Emetin Hydrochlorid, Arch. Int. Med., March 1916, p. 420.

from dangerous impurities. In the article referred to it is proved, clinically and experimentally, that at least one house of repute is supplying, under the name of emetin hydrochlorid, a product so unusually toxic as to prohibit its use at any rate, in anything approaching the

ordinary dose.

It is open to the manufacturer referred to to say that its greater toxicity is due to its greater purity. There is, however, nothing in the facts which supports such a contention, and there is much which militates against it. However, this may be, one indisputable fact stands out: The products supplied as emetin hydrochlorid are variable in composition and in toxicity to a degree which constitutes a serious danger. It therefore behooves physicians to insist some declaration from the firm supplying emetin hydrochlorid as to its purity and as to the standard employed.

### Surgery

Dr. J. Chalmers Da Costa, in the Pennsylvania Medical Journal, makes the following timely comments on "The Sur-

geon's Responsibility':

The surgeon who hesitates to direct the necessary treatment is like the general who abandons his place on the eve of a battle or like the fire chief who retires from the ground when he finds there is a real conflagration. The surgeon has no right to allow this responsibility to rest on the shoulders of any other person, it matters not how broad these shoulders may be. He must never act purely on any other person's say so, however eminent, positive or persuasive that person may be. The surgeon's own shoulders should bear the burden and he must see to it that they do.

It is the mandate of our calling that it shall be so. This mighty responsibility is a splendid dignity. If a surgeon's shoulders are not sufficiently broad, strong and able to carry great personal responsibility, such a man belongs to some other calling. The trials and triumphs of surgery should not be for him.—J. Chalmers Da Costa in the Pennsylvania Medical Journal.

GALL BLADDER DISEASES. C. H. Mayo, Rochester, Minn. New York Medical Journal, March 4, 1916.

Cholecystitis is an effective disease of the gall bladder. The bacteria are in the tissues of the gall bladder.

Infection may be mild, acute, chronic, or recurring.

Gallstones may occur in mild infections.

Cholecystitis or cholecystectomy without stones or local evidence of infection will not improve the symptoms for which the operation was made.

Gallstones may cause mechanical ob-

struction.

Cholecystostomy (with removal of stones, if present) gives high percentage of cure only if the infection has subsided or has been maintained by stones.

Cholecystectomy with or without stones in diseased gall bladders or existing cholecystitis gives a high percentage of cure.

Reflex gastric symptoms are caused by the infection.

The infection may through local peritonitis cause adhesions to bowels or stomach or of the liver to the abdominal

Symptoms of mild gastric trouble may be nearly constant, increase with exacerbation of infection and subsidence of attack, much like those of ulcer.

The etiology may be a small local focus primary in the mouth or secondary in the appendix.

Typhoid bacteriemia may be the etiological factor.

THE TREATMENT OF GUNSHOT WOUNDS OF THE KNEE JOINT. A. L. Lockwood. British Medical Journal, January 29,

The author bases his observations upon the study of sixty cases. The most important points in connection with such wounds are the following:

That all foreign bodies, whether metal or loose bone, should be removed from the knee joint at the earliest possible moment.

2. Perfect immobilization is absolutely necessary. Do not start passive movements too early; wait at least three weeks after the inflammation has subsided.

3. Absolutely complete excision of all necrotic or even edematous tissue.

4. The capsule should be closed at the

first operation if at all possible.

5. Antiseptics, except saline solution and formalin, should not be introduced into a joint.

6. Tubes should never traverse the joint surface as in Barnard's method.

7. Patients should not be moved till one is satisfied that infection has been

successfully combatted.

There was only one death. Amputation was necessary only three times and free movement of the joint was obtained in forty-nine of the cases.

### Book Reviews

THE CLINICS OF JNO. B. MURPHY, M. D., at Mercy Hospital, Chicago. Vol. V. Nos. 2 and 3, for April and June, 1916, the series being published bi-monthly by the W. B. Saunders Co., Philadelphia, Pa. Price \$8.00 per year, have been received. A careful perusal will furnish information of great value as to the treatment and operative technique applicable to the different conditions noted which will amply repay for the time and money expended. In the April number Surgery of Tendons and Tendon Sheaths, Phlegmon of the Spinal Cord and Disjunction of the lower Epiphysis of the Humerus will be found of special interest, while the June number is chock full of interest and valuable information "from kiver to kiver."

THE ART OF ANAESTHESIA, by Paluel J. Flagg, M. D., lecturer in Anæsthesia, Fordham University Medical School, Anæsthetist to Roosevelt Hospital; Instructor in Anæsthesia to Bellevue and allied hospitals, Fordham Division; Consultant Anæsthetist to St. Joseph's Hospital, Yonkers, N. Y., Formerly Anæsthetist to the Woman's Hospital, New York City. 136 illustrations, price \$3.50. J. B. Lippincott Company.

The author in his preface states the proper administration of an anæsthetic is more than a mere mechanical performance, it is an art. The truth of this state-

ment is beyond question. The layman, the student, the interne and the practitioner may readily acquire the mechanical knowledge and dexterity, but not all of these can acquire the art.

The book is written with the view of supplying information leading to the acquirement of knowledge sufficient to enable one to become a proficient anæsthetist. The different anæsthetics both general and local, with their various combinations are taken up and described their actions discussed and advantages explained. Their most common untoward effects mentioned and measures suggested for remedying the same. A valuable book on a very important subject.

International Clinics.—A quarterly of illustrated clinical lectures and especially prepared original articles on Treatment and Medicine, Surgery, Neurology, Pædiatrics, Obstetrics, Gynæcology, Orthopædics, Pathology, Dermatology, Ophthalmology, Otology, 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 collaborations of Chas. H. Mayo, M. D., Rochester, and others with correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels and Geneva. Vol. II. Twenty-sixth series, 1916. Philadelphia and London. J. B. Lippincott Com-

pany.

From the above excerpt from the title page one would be lead to expect a volume of stupendous proportions. Not so, however, as it is all contained in 365 pages and an index. There are a number of illustrations with one colored frontispiece. There are quite a number of articles of interest, among which we note one on the American Mineral Springs. Clinical Manifestations of Abdominal Lesions, Relation of Mental Defect to Crime. In the surgical line one by Martin on Colon Resection and its indications, one by Halstead on Cancer of the Rectum. Generally the views set forth are in line with the latest conceptions by the profession on the subjects under consideration.

# The West Virginia Medical Journal

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THE VALUE OF MORBIDITY AND VITAL STATISTICS.

S. L. Jepson, M. D., State Commissioner of Health, Charleston, W. Va.

Read at annual meeting of State Medical Association, May, 1916.

The State Health Department is earnestly desirous of doing well the work expected of it, and making a record of which the medical profession need not be ashamed. For many years the appropriations made for their maintenance were so meager that the old Boards of Health could not possibly do any work at all effective in the reduction of siekness and death. Correct reports of births, disease, and deaths form the very foundation of the science of sanitation. Our professional brethren have not yet come to realize the value of vital statistics, although much has been written on this subject in recent years. Since papers on this topic appear chiefly in sanitary publications, which do not reach the eye of the general practitioner, I may be pardoned for here presenting some thoughts on the subject in the

hope of securing the interested co-operation of the practicing physicians with the Health Department in its efforts to secure something approaching full and correct reports.

The record of an infant's birth, or the failure to make a record, may be attended with consequences of the gravest character. A correct record fixes a child's parentage and determines the question of its legitimacy. The date of its birth being thus fixed, proof can always be easily and speedily furnished as to the age when it may legally enter school. "Various schools, colleges and institutions, many benevolent homes, or training schools and orphan homes have an age limit for admitting applicants and for graduation. Many of these rcquire a birth certificate. If none is obtained, the applicant is either rejected for a year or two, or is permanently debarred." (Dr. Wood.) Many states, our own among the number, have enacted laws compelling children to attend school until a certain age is reached. Such laws also fix the age at which boys and girls may be employed in factory or other work. Registration of births removes the difficulty in establishing this age. For girls the age of consent is also fixed by law, as is also the time

when a young person reaches the age of manhood or womanhood, and when property may be inherited or a contract of marriage be entered into. For purposes of life insurance and for admission to the professions, the age must be correctly determined. The old family bible with its record of births, is not found in many homes, and even if it were in all, its pages may easily become defaced or the birth days be purposely changed for some selfish purpose. public record is much safer, is always easily reached, and will be accepted in law at all times without question. Dr. Riley, Assistant Health Commissioner of Chicago, says there is hardly a relation in life, from the cradle to the grave, in which the evidence furnished by accurate registration of births may not prove to be of the greatest value, as, for example, in the matter of descent; in the relation of guardian and wards; in the disability of minors; in the administration of estates; the settlements of insurance and pensions; the requirements of foreign countries concerning residence, marriage and legacies; in the enforcement of laws relating to education, and to child labor.

It is especially necessary to have accurate official information of the age of a child or grandchild of foreigners to settle questions of inheritance. It must be proven that the claimant is of age and that he is a legitimate descendant of the testator. Dr. Wood tells of a lawyer elected to a judgeship in Vermont who was obliged to forfeit his office because he failed to furnish legal proof of his age. Records of births, when compiled and analyzed, give useful information regarding the rate at which the population is increasing, and the relative rate of increase in the different classes of our population; also the rate of increase in relation to the deaths. As an illustration of the value of birth registration, Secretary Hurly of the Indiana State Board, tells of a young lady who was to inherit a farm when she reached her twenty-first birthday. No record of her birth could be found, but a neighbor farmer remembered that a valuable cow of the girl's grandfather had given birth to a calf

the day the girl was born. The grandfather's farm records were examined, the date of the calf's birth found, and the girl got her farm. The birth of blooded stock is carefully reported, but not so with the birth of human beings.

That the birth record is frequently of great consequence in legal actions is shown by an instance that recently came to light in which a physician's failure to report a birth cost a child a legacy of \$12,000. In another case a mother was unable to prove the legitimacy of her child because of her inability to produce a birth certificate. Americans living abroad have been put to considerable inconvenience, and have occasionally lost fortunes because they had no proof of their American birth. A recent newspaper remarks, "Even a busy physician it would seem, should be able to find time for performing the important service of reporting births and thus obeying the law. Indeed, it is part of the work for which he collects his fee. The responsibility to the individual and to society should be sufficient to impress physicians with their duty. The careful practitioner will report births promptly."

It is a surprising fact that but eight states have anything like a correct registration of births. In our own state, although it is the legal duty of physicians to report their cases of birth and the law provides a fee for the report, we must depend largely on the assessors to collect the births, and by this method the result can never be accurate. In the reports that reach my office are numerous cases reported without the full name of the child. Sometimes it is living. sometimes premature, sometimes dead, without any cause assigned. To be of value the full name, the accurate date, the names, residence and nationality of the parents should be given. If still born, the cause should be stated, as eclampsia of mother, accidental or unavoidable hemorrhage, etc.

If anything more need be said to prove the necessity of a proper records of births, I may add, that within a month three applications have been received at the Health Department office for transcripts of birth records wanted for important purposes, and in not a single case could the desired information be

given.

The necessity for prompt reporting of communicable diseases is even more imperative than that for reporting births. Upon this, indeed, depends the success of public health administration. early informed of the existence of disease is the first step in efforts to ascertain the cause, mode of progress and geographical distribution, and without such information it is impossible to set in operation measures for its control. An outbreak of typhoid fever, for illustration, a disease so prevalent in this state, is frequently easily traceable to its eause. If impure water be the origin, the remedy is at once apparent, and when properly and promptly applied the result is speedy and effective. have had the greatest satisfaction, during the past year, of promptly terminating several local outbreaks of this disease by the work of our sanitary engineer in using chemical disinfection, or in installing permanent water purification

The carly report of suspected diphtheria leads to a baeteriological investigation and an early diagnosis, when means for the prevention of its spread may at once be set in operation. ure to make early report of an infectious eruptive disease has in the past three years led to the erroneous diagnosis of chicken pox for smallpox, and thus hundreds of cases of small pox have been propagated needlessly, and different communities in the state have paid thousands of dollars uselessly in the care of cases, the support of quarantined families, and the destruction of infected

property.

The early report of eases of tubereulosis leads to the education of the patient and family in the proper mode of living to reduce to the minimum the danger of spreading infection. The basis for any eampaign against siekness must be an accurate and early knowledge of its existence. Just as the reduction of mortality is furthered by a complete registration of deaths and their eauses, so our efforts to reduce the frequency of disease depends upon machinery for re-

porting the eases of sickness, their causes, and their duration for each group in the community. (Dublin.)

The report and registration of communicable diseases mark the efficiency of health administration, local or state, and if cases are properly reported in time, facts can be tabulated in proof of either the success or failure of efforts in the control of such diseases. Vaccination has demonstrated that it is a positive and certain factor in the control small pox. Typhoid preventive inoculation has also proven its value as a sanitary measure in outbreaks of this disease. Quarantine and isolation certainly have a decidedly beneficial influence. But none of these valuable measurcs can bring about the very best results unless employed early in an outbreak. To delay until there have been many exposures means greatly increased labor for the health authorities, with greatly diminished probability of speedy sneeess in the enotrol of an outbreak. Hence the necessity for promptness in the report of infectious eases. No one ean doubt that the reduction of mortality is furthered by the early report of cases, with the complete registration of deaths and their causes, and our efforts to reduce the frequency of disease depends on machinery for reporting the eases of sickness, their causes, and their duration for each group in the commun-(Dublin.) Trask is very positive in stating that without information thus derived attempts at the control of disease are very apt to be ineffective, and the proper protection of the health of the people is impossible.

Again, the reporting of disease with a earcful and systematic record of the same, in time establishes the character of a locality for healthfulness or the reverse. When capitalists are seeking a location for a new industry, there are several things to be considered, as transportation facilities, cost of fuel, abundauee and purity of water supply, and healthfulness. A notoriously unhealthful locality is certain to be avoided. On the other hand, if it can be shown by statistics collected by the health department that a locality otherwise favored is also healthful, the question of loca-

tion of the industry will probably be determined by this fact. It is, therefore, to the interest especially of the many healthful places of this state, to have the fact made a matter of record. Trask says that letters are daily received by the U. S. Public Health Department from people who are contemplating buying property or moving from one state to another, inquiring as to the health conditions of certain localities. things being equal, people prefer to make their homes where there is pure water, freedom from malaria, typhoid and other controllable diseases, and where there is an efficient health administration.

Vital statistics, it is almost needless to say, are the foundation of the business of life insurance. The statistician of the Metropolitan Life Insurance Company points out that life insurance companies provide protection against economic losses resulting from death. Consequently they must have, as guides for making their premium rates, the facts as to the mortality of their possible membership. The data of mortality must be analyzed for each year of age and for such distinctions as color, sex, and the general economic and social condition of the insured. This is the basis of the life insurance companies' interest in vital statistics, and, just as they have been dependent on this science for their safety and growth, so have they been, in turn, a very potent influence in its progress.

At the risk of some repetition, I quote the following from Dr. Chas. V. Chapin, one of the most eminent sanitarians of the country:

"The first duty of the department of health is to secure the complete registration of vital statistics. It is no mere academic expression to say that this is the foundation of all public health work. Vital statistics are of the utmost practical importance. How is it possible to know how much attention to give to tuberculosis, how much to typhoid fever, how much to the distribution of antitoxin for diphtheria, unless it is known how prevalent these diseases are? How can we be certain

what towns have a safe water supply unless we know how many people die of typhoid fever? Statistics alone can show whether the most attention should be devoted to the city water supply, or the country privy. What is the infant death rate? Is the case fatality as low as it should be? These vital questions, vital in every sense of the word, can be answered only by an accurate registration of births and deaths.''

From the considerations here presented, it is very evident that health authorities should receive the information that will enable them to lay a foundation for an efficient sanitary administration, and in time make it effective in the reduction of disease.

I, therefore, kindly but earnestly urge the physicians of the state to report the births and the communicable diseases, as the law requires, and to write for the undertaker a proper certificate of death in every case in which death has resulted, being careful to avoid such meaningless terms as "complications," "stomach disease," "unknown, etc." trying at all times to make as accurate a diagnosis as possible. Only in this way can we hope to see our beloved state put in the registration area, and our physicians who certainly average as high as those of any state, receive the credit to which they are entitled.

#### BRONCHIAL ASTHMA.

By Dr. A. H. Grigg, President Raleigh County Medical Society.

Eccles, W. Va.

Gentlemen of the Raleigh County Medical Society:

Never do I feel my incompetency so thoroughly as when called upon to prepare a paper to be read before a medical society.

I have consented to come before you this time with the hope that my paper will be fully discussed by members of the society and in that way be of some value.

The subject I have chosen to write about is not a new disease or organism, but a syndrome which has been diagnosed and treated for many years. As intimated above I fear the choice of subject is somewhat selfish but as I have had the misfortune to have several cases in the past year suffering from this disease and only very occasionally being able to be of any special service to them, I present this discussion somewhat in the manner of an S. O. S. call.

Bronchial Asthma. And by this I mean to confine my discussion of the subject to those cases in which the symptoms are referable purely to the bronchial tree. Not including asthma due to the heart, kidneys and thymus gland.

The etiology of this affection being unknown and the symptoms so uniform I have chosen to discuss a few of the numerous theories concerning its origin.

There are five theories advanced by different men, four of which I think are worth discussing.

#### I. SPASM OF THE BRONCHIAL MUSCLES.

From the beginning of the onset of symptoms the character of the dyspnoea suggests an obstruction. The freedom of the upper respiratory tract and the character of the rales, suggests the obstruction to be in the finer chonchi. The general distribution of the rales throughout the lungs indicates a general, rather than a local bronchial involvement. To me the suddenness of onset and suddenness of termination of paroxysm is the very strong argument in favor of this theory.

Antagonists to this theory have argued, Why if the paroxysm was due to a spasm of the bronchial muscles, did the expiration suffer more than inspiration? I think this can be explained by the more powerful muscles of inspiration, the constant negative pressure the lung is under and the histological structure of the uner bronchi. Anfrecht has shown the finer bronchi to be made up of a thick strong layer of circular muscle fibres and a very weak layer of longitudinal fibres which probably have to do with expiration and expectoration.

Some confirmation of the muscle theory has also been offered by the research-

es of Dixon and Bodie. These men have shown that the bronchial muscles are ennervated by the Vagus nerve; the latter causing both contraction and dilation of the bronchial muscle fibres. By stimulating this nerve they were able to demonstrate a diminuation of air entering and leaving the lung. Clinical manifestation of this ennervation is probably demonstrated by the relation of asthma and affections of the nose.

One other very strong point in favor of this theory, is in the findings of the pharmacologic laboratory. It has been shown that a typical attack of asthma may be produced in animals by giving a small dose of Muscarin. (The latter stimulating the periphial vagus endings, Pilocarpin, Physostigmin and Digatalin doing the same.) It has also been shown that Gold, Bariom and Varatum cause a constriction of the same fibre by acting on the muscles directly.

The strongest point against this theory seems to be an explanation for the secretion. I am unable to explain this unless the secretion is due to the constant contraction of the muscles causing the glands to become more active.

### II. SWELLING OF THE BRONCHI MUCOUS MEMBRANE.

This theory has a number of followers and no doubt very beautifully explains the abundant secretion. The suddenness of onset and character of dyspnoea are against it. Also with this theory some have advanced the hypoyhesis that the peculiar crystals have something to do with the paroxysm. Personally I doubt this as the latter are often absent.

#### III. SPASM OF THE DIAPHRAM.

This theory to me has no points in its favor, other than the low position of the diaphram. Clinically this is true, but I doubt seriously if it is the case always at autopsy. I remember one case distinctly in which it was not. Asthma was not the cause of death in this case, but the patient died during a paroxysm.

#### IV. NERVOUS SYSTEM AS A FACTOR.

We have all seen eertain nervous individuals, who state that, from the least

irritation, fright or unusual emotion, an attack of asthma follows. Merely because a patient is nervous has never seemed sufficient cause for an attack of asthma. It is true that in a very nervous person, the vagus is probably more irritable, but admitting this, to me, it is all the more evidence in favor of the bronchial spasm theory. I believe if the history is gone into carefully enough, it will be found that asthma has been present since childhood and in these cases, the nervousness is more than likely a result of the asthma.

#### V. BRONCHIAL ASTHMA AS A PHENOMENA OF ANAPHYLAXIS.

Meltzer, writing for the Association of American Physicians, states, "Bronchial Asthma very closely resembles anaphylaxis produced experimentally in animals." He has shown, if a gninea pig is injected with horse serum and after an interval of ten or twelve days is again injected, the animal dies immediately with symptoms of respiratory failure. The lungs being greatly distended. Auer and Lewis have shown death in these cases to be due to Bronchostenosis of periphial origin, this necessarily being through the vagus. To me this is the theory which appears to explain all the symptoms of asthma most satisfactory. If we consider persons suffering from bronchial asthma as persons who have been sensitized to some form of foreign protein, it is easy enough to account for the symptoms when this person again comes in contact with the protein. Our most convincing evidence of such a theory is the behavior of some persons after the second dose of diphtheria antotoxin. I think the protein most likely originates from the digestive tract.

I also believe the cases who appear to be benefited by removal of adenoid tissue, nasal spurs, deflected septums and enlarged tonsils, can be explained by admitting the pathological condition of the removed tissue to be a very potent factor in keeping the vagus in the hypersensative condition, consequently reacting quick and forcibly to a foreign protein or sensitizer.

As stated above the etiology of bronchial asthma is unknown but there are several etiological factors which I consider worth mentioning.

- a. Hereditary. This appears to bear some relation to the disease, as at present I have two families in which two generations are manifesting the disease. In one case, father and son, in the other mother and son.
- b. There is no doubt but that many persons are relieved by the removal of pathological conditions from the nose. I have observed such relief on two occasions by the removal of enlarged turbinates and one occasion, by the sub-mucous resection of a deflected septum. In each of these instances I do not believe the pathological condition to be the exciting cause, probably only acting as a very potent contributing factor.

Dr. Frances claims to have cured three hundred cases of asthma by cauterizing the nasal septum. He regards that part of the septum opposite and immediately over the middle turbinate, the most satisfactory to cauterize.

The symptoms and physical signs I will omit other than make mention of two symptoms which I have observed in asthmatics which I believe are rather rare. In one I was able to demonstrate the T. B. bacillus and in the other case the patient runs a temperature with each attack from one to two degrees.

The pathology of asthma has in most instances resolved itself into the study of the sputum and blood, as very few cases are on record where post mortems have been made on strictly asthmatics; death generally being due to some complication.

In the study of the sputum there are three constituents which are present in practically every ease and the only condition in which the three are found so intimately associated. These three are the Curschman Spirals, Charcot-Lyden Crystals and the marked Eosinophilia in both sputum and blood.

Eosinophilia is the most constant finding and in some cases has amounted to as much as ninety per cent.

#### TREATMENT.

This should be divided into the treatment of the attack and the interval. For the attack, I always give calomel followed by a saline. After this I put the patient on one of the following drugs or combinations. Sodium Salicylate, Potassium Iodide, Tr. Lobelia. In one or two cases I have found Adrenalin Chloride to act favorably.

I must confess I have had very poor results from drugs in the treatment of the paroxyms and have to give Morphia to get any marked relief in the majority

of cases.

Atrophin in ascending doses in very highly recommended but I have never tried this form of treatment.

Diphtheria Antitoxin has been suggested by someone as on several occasions after the administration of the latter, the patients have been relieved of attacks. This treatment I consider dangerous as we have reports of several deaths due to the giving of diphtheria antitoxin to asthmatics. Since we now have a method of determining the susceptability of an individual to antitoxin by the Shenk method, there will probably be fewer cases of anapylaxis.

The last patient I treated, not reacting to Morphia, I gave a high enema of five per cent. sodium bicarbonate, the paroxysm was relieved in about twenty minutes. I will try this again. Several drug firms are now putting out an asthma phylocogen, which I am convinced is of value in certain cases.

During the interval the patient should be advised to have any pathological condition removed which might act as a contributing factor. Climate appears to have some influence on the disease but I have never been able to tell before trying which patient would be benefited by low and which by a high altitude.

Patients are generally freer from attacks in dust-free climates, although I knew one man who said his attacks were relieved by the smoke from a train.

Diet in my opinion is very actively responsible, although I have never been able to find the error in any particular case.

#### TRANSACTIONS OF WEST VIRGIN IA STATE MEDICAL ASSO-CIATION.

Wheeling, May 16, 17, 18, 1916.

The Forty-fourth Annual Session of the West Virginia State Medical Association held in Wheeling, May 16 to 18 inclusive, proved to be one of the largest, most successful and harmonious conventions ever held by that organization.

It was characterized by able papers on a great variety of subjects, enthusiastic discussions and royal entertainment.

The general assembly was called to order by President A. P. Butt at 9:25 o'clock Tuesday morning, May 16, in the McLure Auditorium.

Rev. Dr. Breltingham of Wheeling, pronounced the invocation.

Mayor H. L. Kirk, being unable to be present on account of ill health, sent as his personal representative City Solicitor J. H. Breman, who extended a most hearty welcome to the Association on behalf of the city of Wheeling.

He said he would refrain from using such stock phrases as "We hand to you the keys of the city," because he felt this to be a peculiar delegation, which had assembled in their midst. One which the neighbors, looking out of their windows, envied. One which did Wheeling honor, for were not these men assembled the conservators of the public health; the benefactors of mankind, and the alleveators of human suffering? Hence, Wheeling was glad we had come and extended us a heartfelt welcome.

Dr. Chas. A. Wingerter then extended to the Association a hearty welcome on behalf of the Ohio County Medical Society. He said they felt each visitor displayed great zeal and interest in the cause of medical science and in the Association, because they felt he sacrificed much in getting to the meeting. The advances in all sciences had been great in the last fifty years, and they were not least in medicine and that the medical men of West Virginia had kept pace with this progress. Hence great things would be enacted here during this meeting, the

influence of which would be felt throughout the Commonwealth for all time.

Vice-President A. S. Bosworth, M. D., Elkins, in behalf of the Association, responded to the welcome extended in a most masterful manner. It would be futile to attempt to reproduce the oratorical outbursts of Dr. Bosworth, one had to be present to get an adequate idea of the manner in which he expressed the appreciation of the Association of the hearty welcome extended.

The scientific program was then opened by Dr. W. W. Brown, Shenandoah Junction, by a paper entitled, "Long Life and How to Obtain It."

He said the state wants strong men, the church wants strong men, the profession wants strong men.

When growth ceases, death results, in church, in state and in political party. When men cease to grow they must die. Man is master of his own destiny and if he dies before eighty years, he dies prematurely. He questioned the statement that this was the age of young men. All men who have shown greatness in the European war are past middle age. Hindenberg is 68 years old. In our Civil war, Lee gas gray in beard and Grant was no youngster when they won victories.

He divided all diseases into two classes. First, infectious disease, concerning which we look forward with hope to the time when they will be mastered so that they will be fewer and less violent. Second, Degenerative diseases. Degeneration of habits precedes degeneration of ductless glands which in time precedes degeneration of tissues. He pointed out the great factors in degeneration were too much alcohol, too much tobacco, unnecessary and useless operations, heredity and environment. But after all it was not how long we live, but how we live.

A plea for mothers was the next paper delivered by Dr. E. H. Thompson, Bluefield. He claimed no branch of medicine or surgery required more care and education than obstetric work for upon its able handling depends the life and hope of a nation. Hence advocated its "place in the sun as a specialty." He then ably

discussed the care of the mother before, at, and after labor.

In discussing this paper, Dr. H. W. Daniels, Elkins, laid great stress upon preliminary treatment as the key not to eliminate trouble at and after labor.

Dr. W. F. Braasch, Rochester, pointed out the importance of kidney lesions as related to pregnancy.

Dr. O. H. Hoffman, Thomas, advocated use of chloroform to alleviate suffering of mother during labor, stating it was almost criminal to permit a mother to suffer when such relief was at hand. He advocated use of bare hand when exploring inside of uterus.

Dr. A. B. Bonar, Moundsville, called attention to the necessity of carefully examining the placenta after its expulsion as a guard against a disastrous aftermath.

Dr. C. S. Hoffman, Keyser, advocated use of anæsthetic and of ergot. He advised against exploring uterus with hand but careful examination of placenta. He also urged necessity of clean surroundings.

Dr. S. D. Hatfield, Iæger, advocated ether as the anæsthetic of choice.

Professional Efficiency vs. Professional Inertia by Dr. O. O. Henry, Fairmont, then claimed the attention of the Association.

After a most excellent presentation of the progress in the study of medicine, Dr. Henry raised the question as to whether the length and the expense of the present course in medicine promises sufficient rewards. Is a shorter, less expensive, more practical course not advisable? He asked if the latest 1916 model doctor is not put to a disadvantage when he has to leave the science system and equipment of the college hospital behind and has not the means to surround himself with such equipment. He then referred to the recent article of Dr. Richard Cabot on Better and Cheaper Medical Attention as worthy of attention.

The Association then adjourned for lunch.

The general assembly was again called to order by President Butt at 1:30 p. m. May 16.

A motion was made by Dr. Henry, seconded by Dr. Jeffers and passed to send

a telegram of sympathy to ex-President Henri P. Linsz, who on account of poor health is confined to Battle Creek Sanitarium.

Dr. W. F. Braasch, Rochester, then presented his paper on "Clinical Data

on Nephrolethiasis."

He first took up diagnosis and gave as the three great factors which a surgeon should consider as, first, X-ray; second, Cystoscope, and third, Clinical Observations of himself and of the general practitioners who has had charge of the case. No one sufficient-all necessary. The cause of pain found in stone in kidney is internal tension of kidney. Unlocalized abdominal pain should call for X-ray examination. Gastric symptoms are usually present in insufficiency. Pus and blood in urine should call for X-ray, but if absent do not exclude stone, and if present do not always corroborate X-ray shadow as being stone, but only point to stone. Only two-thirds of cases showing shadow mean stone in kidney, therefore shadow must be corroborated by cystoscope and phenolthalein test.

As to treatment, he said medicine has to be abandoned. It may prevent formation, but will not dissipate and carry

away stone.

Three-fourths of all stones are passed, therefrom; in case of renal colic three or four months should be given for stones to pass before surgical interference is instituted. The presence of large branch stones usually means neprectomy for they recurr. Pocket stones give hope. Cabot says 51% recurr. Mays says 15% recurr.

This paper was ably discussed by Drs. Cannaday, Charleston; Mathews, New York; Smith, Cincinnati; Pepper, Huntington, and Dr. Hupp, Wheeling.

Dr. Smith pointed out that sand gives all symptoms of stone in kidney; that pus in urine plus supposed uterine trouble may be only pregnancy; that both kidneys should be examined by X-ray even though only one seems to be in trouble, and that only one-eighth to one-fourth kidney tissue is necessary to adequate function.

Dr. Pepper advised repeated examinations by X-ray of kidney as absence of shadow does not prove that stone is not present. Also use X-ray immediately before operation as stone may have passed.

Dr. Hupp, in discussing Dr. Braasch's paper said: "Since the nephrolithiasis renal function test was brought to the notice of the profession by Rowntree and Gerahty in 1907 the general impression prevails now that the definite estimation of the work of the kidney is imperatively needed before any surgical intervention can safely be attempted on the urinary tract. The very interesting clinical and laboratory observations of Dr. Braasch bearing on this point was most interestingly brought out in his paper read before the G.-W. Section of the A. M. A. meeting at Atlantic City in 1914, detailing the results in some 612 cases—this paper taken with the talk we have heard this morning to my mind, make a classic. In my limited experience in this field our observations are in accord with the contention of Dr. Braasch when he claims that the degree of diminuation of the dye secretion will not always be commensurate with the degree of destruction of renal tissue. Certainly bilateral nephrolithiasis, as Dr. Braasch has claimed if but a trace of the phthalen appears after two hours in the combined urine, the inference would be certainly interdicted with this evidence of insufficiency. It seems to me, however, that in all of these, as in other departments of surgery, that clinical data; mature surgical judgment and the personal equation of the patient must be conservatively measured up with all of these diagnostic aids.

Dr. Braasch closed by stating that the insufficiency of the kidney is greatly exaggerated by stone imitation and that the prognostic value of phenol-thalein test is not great, but is more valuable in differential diagnosis, this, answering Dr. Hupp's question is diminution of Phelein always commensurate with kidney tissue destruction.

Methods and Results in Surgery of the Stomach and Intestines, by George W. Crile, M. D., Cleveland, was the next paper. In substance he said, "Operations upon the stomach and intestines have in the past caused a high mortality despite the increasing perfection of technique in these cases. Laboratory researches and

clinical observations have shown that the cause of this high mortality rate is acidosis. This being recognized, a new plan of dealing with these patients has been devised by which the mortality has been reduced two-thirds." Further, he said, fright, exertion, worry, operations and acid all produce changes in the liver due to hydration, dehydration is the recovery. Sleep will produce dehydration and is practically the only thing that will do this, i. e., changes back to the normal. Face contrasts when we lose sleep, and becomes larger during sleep. This is because the liver takes up fluid causing shrinkage of face. When dehydration takes place from liver the fluid goes to face and other outside tissue. This water is drawn to the liver to neutralize acids which accumulate in the liver as result of waste. You never see a patient get well without sleep. Pneumonia patients who sleep usually get well. If H— is given intra-venously we produce the same results as we get in shock, worry, etc, therefore, these conditions produce acidity. Destruction can only be repaired by sleep. Stomach and intestinal lesions cause starvation and acidity, therefore, surgeons should increase the alkalinity before and after operation. In bad risk patients Crile usually proceeds as follows:

- 1. Gives 2000 cc. saline solution under the skin.
- 2. Gives 100 gr. soda bicarbonate by mouth.
- 3. Gives sleep naturally or artificially to patient the night before the operation.
- 4. Gives local or Nitrous Oxide anaesthesia.
- 5. Traumatics as little as possible at operation.
- 6. Past operation gives morphine to obliterate pain and give sleep and 2000 cc. of saline solution during the first 24 hours.

Mortality rate has been cut 4 to 1 by following this procedure.

He advises the dividing of an extensive operation into two parts to conserve alkalinity.

In conclusion he stated our attention has been too exclusively focussed on technique and local lesions. We should see our patient as a whole and there conserve life.

Dr. Crile's paper was then discussed by Dr. O. H. Hoffman, Holland, Hupp, Mathews and Noom.

Dr. O. H. Hoffman, Thomas, in discussing this paper raised the question, "May not less of sleep predispose towards tuberculosis?" He advocated the use of phenocetin in typhoid fever from the beginning of the case to produce sleep.

Dr. Holland, Fairmont, asked why is acidosis releived by sleep? Is it by relieving patient of mental activity?

Dr. Mathews, New York, cited a case in which the removal of the pancreas caused diabetes and stated that the coming on of diabetes is retarded by the administration of soda bicarbonate.

Dr. Noom advocated the free administration of morphia to relieve pain, especially in peritonitis to aid nature in splinting intestines. He advised morphia

as opposed to its derivatives.

Dr. Hupp, Wheeling, in discussing the paper, said: "Our society is to be congratulated in having Prof. Crile here at this meeting of the men of medicine in West Virginia, bringing to us personally the fruits of his wonderful labor. Observations based upon operative work done on two continents whose labors and writings are known and quoted wherever our art is practised throughout the world. That no clinic has ever reduced the mortality rate of any considerable series of resection of the stomach below 10% and this rate was applied to infected, obstructive common duct operations, as well, hopeless spirit which augments the peril of a patient already weakened by disease when the surgeon announces that their chances for recovery were only about 1 to 10.

Dr. Crile offered a definite explanation of this post-operative morbidity and mortality, which has been accepted by surgeons everywhere not only relating to the work done in the upper abdomen, but in the neck, the brain, and other parts of the body as well.

In giving to the world his anoci-association, with its wonderful improvement in the operative recovery of patients, demonstrating the traumatic, emotional and bio-chemical origin of shock, Sir Berkley Moynihan has said, and with whom we all agree that "The greatest contribution to medicine since the immortal Lister gave as clean surgery."

Physic quiet; pre-operative elimination of worry and anxiety; diminuation in the acid production during and after operation by complete anoci-association; ample incision and a feather edge technie; a sharp knife and bloodless dissection; elimination of pulling and tearing manipulations; minimum sponging; a wholesome respect for the splanchnie nerves; a jealous regard for the functions of an almost overwhelmed liver and adrenals; a sclected anæsthetic skilfully administered. These are golden aphorisms which have come to us from our distinguished visitor, Crile, and should be repeated by the surgeon after his appeal to Almighty God before each difficult task in the operating room.

Dr. Crile in closing the discussion, said he did not know how sleep restores to the normal condition as asked by Dr. Holland, but he thinks the way is now open for investigation and the discovery of this process. He commented upon the points brought out by Dr. Mathews and then said the United States is developing a new type of surgeons of which Dr. Hupp is an exponent who make the real good of the patient the main goal or idea. This is contrary to the idea of

foreign surgeons.

Dr. Robt. J. Reed, Wheeling, then gave his paper on Intestinal Tumors. In outline he treated his subject as follows: "In obscure abdominal conditions tumors of intestine should always be reckoned with as a possible cause. Classification. Etiological factors. Symptomatology. Treatment, with special consideration of the operative management of new growths near the distal end of Sigmoid."

He ably pointed out the difference in diagnosis of earcinoma, sarcoma and benign tumors and the fact that benign tumors may be present without any symptoms. He cited cases of dermoid tumors arising from the intestines although they are usually supposed to be found only in the region of the ovaries.

Dr. Hawkins, Cumberland, Md., discussing Dr. Reed's paper, cited some in-

teresting eases. One ease of symmetrically enlarged abdomen with vomiting which resembled pregnancy, but upon an examination under an anæsthetic it proved to be a large cystic tumor.

Dr. C. S. Hoffman, Keyser, cited a case in which pancreatis resembled an

intestinal tumor.

A paper on "Chemotherapy, with Special Reference to the Tuberculocidal Action of Arsenie Compounds' was then given by Dr. A. Arkin, of Morgantown. After stating that the discoveries of Paul Ehrlich were the beginning of ehemotherapy, he pointed out that only a few drugs are specifies such as quinine in malaria, and salvarsan and mercury in syphilis. He further said in treating tuberculosis, we turn to chemotherapy because the tubercular bacillus does not produce an active toxin, hence no antitoxin ean be produced and it follows that there is little probability of the discovery of a serum that will act as a specific cure such as we have in diphtheritic antitoxin for diphtheria.

Any drug to be effective as a cure in tuberculosis must possess the following

qualities:

1. It must have a specific action on tuberele bacillus.

2. It must be able to penetrate the avascular tubercle. Crystalloids do this, colloids do not, therefore it must be a crystalloid.

3. It must retain the power of specific

action in the living organism.

He said he took up the study of arsenic compounds because literature attributed to them a specific effect upon tuberculosis. After studying carefully a number of arsenic compounds he concluded:

- 1. They have no specific action upon the tubercle bacillus.
- 2. They do stimulate metabolism and effect it as digitalis does the heart.

Dr. Wingerter in discussing Dr. Arkin's paper ealled it the sign board pointing out the way for the future discovery of a specific drug for tuberculosis. He asked Dr. Arkin concerning the advisability of using Cacodylate of Mercury in tuberculosis.

In closing Dr. Arkin said he could not advise the use of Mercury Cacodylate be-

cause of its great toxicity for host as

well as for parasite.

Dr. S. L. Cherry, of Clarksburg, then read an excellent paper on "Pyelitis." After defining it he pointed out its great frequency, especially in females, declaring it occurred, to some extent, in 20% of all pregnant women. Infection by eolon bacillus was attributed as a frequent cause. He called attention to the fact that the symptomatology often resembled that of appendicitis, typhoid fcver, malaria, grippe or tuberculosis, hence the necessity in all cases of carefully examining the urine. After stating the prognosis of acute cases was promising, he outlined an excellant line of treatment comprising rest in bed, initial purge, urotropin in increasing dosage until point of tolerance is reached with acid sodium phosphate in case of alkaline urine. If improvement does not follow, give potassium citrate until urine is alkaline. When chronic, after excluding tuberculosis and stone, irrigate with some silver preparation.

Dr. Braaseh of Rochester, Minn., in discussing this paper, warned against the belief that an acute infection of the kidney was confined to the pelvis of that organ—pyelitis was only the predominant feature. As to treatment he advised first, Acid sodium phosphate and formin. Second, Pelvic lavage with silver nitrate and not Protargal. Third, Autogenous

vaccines.

Dr. Pepper of Huntington, then gave an excellent treatise on "Roentgen Diagnosis of Gastro-Enterie Lesions." spoke of the advantages of the American method of Bismuth Subcarbonate and buttermilk meal over the Continental method of plain Bismuth meal. He advised a series of successive pictures, one at the time, of one six hours after, and one 24 hours after the meal. He recommended a powerful apparatus and rapid exposure to avoid blurring of plate by movement of stomach.

Dr. L. S. Goin of Wheeling, in discussing the paper heartily seconded the necessity of successive exposures, but also advised further that the position of patient be changed, also, as a variation in the shadow due to change of position aided in diagnosis of caroma and not its presence could be demonstrated.

The Association then adjourned until

8 p. m.

The night session of the Association was called to order by President Butt at 8:15 o'clock.

The first speaker was Dr. Frank S. Mathews of New York, who delivered a masterful oration on surgery, choosing as his subject, "Stones in the Gall Bladder." It is useless to attempt to recount the many valuable points brought out. He urged that diagnosis of gall stones in the young should call for immediate operation before infection and complications set in. He declared it was his belief that gall stone surgery was in the stage appendiceal surgery was a decade ago and that in the near future gall stone trouble would be dealt with in the same prompt manner as appendicitis is now. He showed by statistics that delay in operation means; first, continuance of illness; second, prolonged convalescence; third, danger of malignancy; fourth, a great reduction in chances for recovery -for complications increased mortality He largely exonorated tyfour-fold. phoid fever as an etiological factor. As diagnostic points he placed great stress upon dyspepsia persistent after alleviating medication—pain, most severe in upper abdomen especially in epigastrium, radiating to the back and not bearing any particular relation to feeding. When pain is severe in region of gall bladder he said it indicates complications and is caused by local peritonitis, however, he denied positive diagnosis of gall stone without their presence demonstrated by X-ray.

President Butt was then introduced by Secretary Anderson and delivered a most able address, in which, on the one hand, he pointed out the growth and good qualities of the Association and, upon the other, touched upon its shortcomings and suggested many constructive measures which, if carried out, would undoubtedly elevate the tone and character of the work done by the Association. It is so full of able council that every member should read and re-read it when it is published in the Journal.

Secretary Anderson then appointed Drs. Hupp, Haley and Bloss as a Committee to Report on the President's address.

President Butt then presented Mr. Lee Ott, Chairman of Workman's Compen-

sation Commission.

After giving an interesting review of the Compensation Law and its provisions as related to physicians—he read the following report of the receipts and disbursements from its creation to May 1, 1916:

The Workmen's Compensation Fund on May 1, 1916, showed cash premium receipts, exclusive of payments on guarantee deposit account, since the law went into effect on October 1, 1913, of \$2,573,182.50, and that the administration expense during this period has been \$148,382.00, or less than 6 per cent. of

the premium receipts.

The disbursement out of the fund for expense and compensation has been more than one million dollars, distributed as follows: Medical expense, \$171,487.67; cost of funerals, \$66,033.10; compensation on temporary disability injuries, \$475,896.46; pensions paid in permanent injuries and to widows, children and parents in fatal accidents, \$437,842.74. Total benefits paid \$1,151,619.97.

Over forty thousand eases of personal injury have been handled by the department, or to be exact, 43,369, of which 1,521 were fatal accidents, 54 permanent total injuries, 343 permanent partial, or loss of members, such as eyes, arms or legs, and 41,451 temporary disability in-

juries.

There are now drawing benefits monthly nearly two thousand two hundred pensioners, consisting of 577 widows, 1,027 children under 15 years of age, dependent parents in 184 fatal injuries and five grandmothers, or a total of 1,793 dependents on the payrolls resulting from fatal accident. There are also 54 persons drawing pensions for life on account of permanent total injuries, and 340 drawing pensions for varying periods on account of loss of members, making the total number of pensioners on the pay roll of 2,190.

Mr. Ott then declared that Workman's Compensation was here to stay and urged the members of the Association to cooperate with the commission in making its operation a success, and stated that if in their relations to the law or the commission the physicians desired any reasonable change he would do anything in his power to aid them in attaining it when it was presented in a definite tangible form.

He then gave a short description of the method which should be used by the physicians in handling claims and the reports necessary in each. He also emphasized the importance of the physician's preliminary report, which should be made most fully immediately their attention is called to the case of the patient. Accuracy in giving the details of the injury is most essential, more especially to determine the per cent. of the disability, and requested that the physicians use the words "proximal," "middle" and "distal" when applied to phalanges, instead of "first," "second" and "third."

Mr. Ott then turned to the payment of the hospital, physician and other bills and the work that is considered essential by the commission in various cases. He stated that the commission considers X-ray work necessary in many cases where there are fractures, and suspected fractures, and will be paid for when

cause is shown for its use.

At the close of the address many of the physicians entered into the discussion asking Dr. Ott questions concerning compensation for services of the physicians and the payment for making out reports. Mr. Ott stated that in these matters the commission was doing all that the law allowed. That concerning the latter some provision had been made in the last amendment, but had been stricken out by the legislative committee, and not a member or representative of the medical profession was there to protest or to say a word in the interest of the bill. The hour growing late, Dr. Butt called the discussions to a close and the meeting adjourned.

On Wednesday morning, May 17, the general session was called to order by President Butt at 9:20 o'clock.

The oration on medicine was then delivered by Dr. J. T. Thornton of Wheeling. His subject was Diagnosis and Treatment of Chronic Nephritis.

Dr. Thornton went into his subject with his accustomed thoroughness and gave us a masterpicce in its wealth of detail. He recounted many tests showing their diagnostic value and suggested the most recent and approved forms of treatment.

Then followed a valuable symposium upon Tuberculosis, stimulated by two

able papers.

The first on "The Use and Abuse of Exercise in Treatment of Pulmonary Tuberculosis," by Dr. E. E. Cloves, of Terra Alta, the second on "The Symptoms and Diagnosis of Incipient Tuberculosis," by Dr. Everett E. Watson of Salem, Va.

Dr. Clovis pointed out that no drug was more poisonous to the tubercular victim than exercise. Further that worry, coughing, talking or even reading exciting books should be considered exercise and at times restricted. He said exercisc was necessary to harden the patient so that he may not be an economic waste; that exercise did this by throwing out bacteriological poison in the blood; causing an auto-inoculation and stimulating the immunizing elements of the body and thus raising its immunity. Exercise should be taken only when fever is absent during the full 24 hours of the day. when toxic symptoms are not present. when pulse is below 100, when weight is normal and when there is no moisture at seat of lesion. He advised 15 minutes walk each day, and then increase, gradually, the length of the period.

Dr. Watson said tuberculosis was the most prevalent, possessed the greatest mortality and was the most curable of all chronic diseases. That advanced tuherculosis was due to; first, failure of the victim to seek medical aid in time, or, second, failure of physician to recognize the disease. The only remedy in cach case is more thorough education with regards the early symptoms, the dangers, and the possibility of cure. Figuratively speaking, the first step in the diagnosis of incipient tuberculosis is to throw away the microscope and stethoscope and after obtaining a minute history, both family and personal, keep the patient under most careful observation for two or three weeks, noticing catarrhal tendencies, persistent cough, bronchial trouble, throat trouble, fatigue easily produced and persistent, capricious appetite, gastric disturbances, variation of temperature and pulse due to exercise, increase in moisture in suspected area, and the effect of the tuberculin test. He concluded by stating that symptoms without physical signs demanded treatment, while physical signs without symptoms demanded only careful watch-

Dr. Henry of Fairmont, opened the discussion by advocating larger state tubercular sanitoria for the poor tuber-

cular patients.

Dr. O. H. Hoffman of Thomas, scored the present methods of health supervision by County Courts, declaring that politics thus impaired efficiency along these lines and that money for the carrying out of projects promoting health could not be obtained. He declared tuberculosis a menace to humanity. He pointed out that the state and even the nation, appropriated and expended vast sums of money to suppress an outbreak of hog cholera and not a cent for suppression of the great white plague.

Dr. Judy of Belleville, advocated enlargement of state tubercular sanatoria until there would be no waiting list.

Dr. Steele of Bluefield, found a menace to efficiency in the small pay given the average health officer. He also emphasized the importance of fumigation of acid houses occupied by tubercular victims.

Dr. O'Grady of Charleston, spoke of the dangers of exercise and of tuberculin in treating tubercular patients.

Dr. Arkin of Morgantown, warned the members against overlooking infection in children frequently traccable to supply. He stated that 60% of all children under 14 years of age have at some time been infected and that 95% of all adults of 30 years have suffered likewise.

Dr. Ward of Morgantown, spoke of the social difficulties in controlling tubercular infection in the public schools, and called attention to the problem of preventing tubercular children from attending school.

Dr. Jones of Wheeling, advocated:

1. A free state hospital for advanced cases of tuberculosis in each congressional district.

2. A law compelling those infected with tuberculosis to go to such institu-

tion.

3. The enforcement of spitting ordinance.

4. The enforcement of disinfection of houses.

5. Education of the public by means of a visiting nurse in each county.

Dr. Jeffers of Parkersburg, advocated the instruction of the people by the doctor as to the dangers of tuberculosis and

how to prevent them.

Dr. Clovis closed by stating he found County Courts very fair minded in the matter and sometimes found the doctor at fault. He asked the doctors to urge the legislature to provide 25 more free beds at Terra Alta.

The next paper was presented by Dr. E. W. Stevenson of Pittsburgh, Pa., on "Some Observations in Physical Diagnosis, as Applied to Life Insurance." He gave a most careful and exhaustive exposition of the essential points in, and showed the necessity of a painstaking examination, sounding the warning that most of the errors in examinations are those of omission rather than ignorance. He took up and discussed successively the heart, the lungs, the abdomen, fibrasis, and blood pressure, pointing out the essential factors and their relative importance.

The Association then adjourned for lunch, and re-convened at the call of

President Butt at 1:50 p.m.

The first paper of the afternoon was presented by Dr. O. H. Hoffman of Thomas, on "Erysipelas, with Special Reference to its Specific Treatment." He opened by stating that although, in these days of modern surgery, erysopelas may not be so frequent and may be considered a self-limited disease, yet since, under the old methods of treatment, the mortality is 6%, he considers it worthy of some discussion. After referring to his experiences with many forms of treatment, he immediately advocated the use of silver nitrate, claiming that it may be classed as a specific remedy correspending in efficiency to that of quinine

in malaria. He then cited many cases in which the course of the disease seemed greatly shortened and the area effected limited by this remedy. Briefly his method of application is the rubbing into the skin by means of a mop, a 60% agueous solution, after the skin has been thoroughly cleansed with soap and water and alcohol, the application to extend  $1\frac{1}{2}$  to 2 inches beyond the margin of the eruption and swelling. If the infection has penetrated to the deeper tissues of course incision, disinfectant, irrigation and drainage must also be instituted. He further claimed its use does no permanent harm to the most delicate skin, but advises warning patient that the skin becomes temporarily discolored.

The discussion of Dr. Hoffman's paper was opened by Dr. Bloss of Huntington. He stated his results from the use of silver nitrate had not been satisfactory. He preferred phenol and bicarbonate of soda locally, quinine, iron, whiskey and eggnogs internally. He also advised use of vaccines and usually

gave it into vein.

Dr. Link of Parkersburg, advocated large doses of streptococic serum.

Dr. Maxwell of Morgantown, felt that it is a self-limited disease. Epsom salts applied locally in solution and jaborrandi internally were extensively used by him.

Dr. Butt of Davis, stated that he had used silver nitrate with gratifying results. He did not think the separation of erysipelas cases from other infectious

cases of great significance.

Dr. Hoffman in closing stated he does not use alcohol, but does use iron and sweet spirits of niter in his treatment. His use of jaborrandi had given indifferent results.

Dr. G. A. Aschman of Wheeling, then presented a most able paper on "Aggravated Coryza—So-called Grippe." In a most concise manner he called our attention to the fact that, first, The diagnosis "LaGrippe" or influenza is quite often incorrectly made and treatment accordingly directed towards general symptoms, without due attention being given to congestive changes in the upper respiratory tract. Second, A common coryza will frequently lead to an aggra-

vated coryza with more or less severe implication of the sinuses, the middle ears and the other adnexa. Third, Such implications can usually be prevented if from the start, proper care be taken to establish and maintain proper ventilation and drainage in the whole respiratory tract. He advised the use of a tablet containing 1-800 grain of atropine sulphate, 1-16 grain morphine sulphate and 1-6 grain caffeine citrate. warned against issuing this in prescription form to patient, lest the drug habit be established and further against the too free use of alkaline spray in the early stages, but suggested spray of alboline or benzoinal followed in certain cases with application of some silver preparation.

A most interesting and valuable paper was then presented by Dr. Oliver D. Barker of Parkersburg, the title being, "Use of Urethrascope in Treatment of Deep Lesions of Male Urethra—Case Reports." He first pointed out that the so-ealled prostatic neuroses were frequently none other than diseases of the deep urethra and vera mortanum. He classified his cases as those in which antecedent history gives evidence of some form of infection, and those in which there is none whatsoever, but due to excessive masturbation or some form of sexual misdemeanor. He warned against treating these cases in the dark urged the use of the endoscope and in all cases the straight open air variety. He used the pure stick silver nitrate counteracting pain by instillation of 4% novocain solution. He then reported a number of interesting cases successfully treated in this manner.

Dr. Richard E. Venning of Charleston, not being present, Dr. Chas. A. Barlow of Spencer, presented an exhaustive paper on "Pellegra." After presenting the symptoms and prognosis he recounted in detail the various theories relative to the etiology, closing with an account of the recently made public investigation of Dr. Goldberger of the surgeongeneral's office for the United States Public Health Service in our own southland, the conclusions of which are:

1. Pellagra is not a communicable disease, but that it is of dietary origin.

2. That it depends upon some yet undetermined fault in diet in which the animal or leguminous protein component is disproportionately large.

3. That no pellagra develops in those who consume a mixed, well balanced and

varied diet.

As to treatment he stated medication of little value, but rest in bed, protection from rays of sun, regulation of diet, and soothing ointment or lotion applied to skin lesions.

The excellent paper of Dr. H. G. Steele of Bluefield, on "Position of Placenta in Utero," was then read by title; and as Drs. Fitch and Gerlach of Huntington, were not present, Dr. W. J. Judy of Belleville, read his paper on "Tetanus; with Report of Case Treated with Anti-Tetanie Serum." After treating of the disease itself, the etiology, and the treatment, he cited two most interesting cases. His paper was discussed by Drs. Arkin, Megahan, Carter and Jepson. Dr. Arkin advised administration of anti-toxin via spinal canal and vein. Dr. Jepson called attention to the fact that in fixing the value of anti-tetanie serum, we must remember that if the patient lives for several days after onset of the disease without the serum treatment he will generally get well even though no serum is administered.

Dr. Tunis Nunemaker of Williamson, then presented a paper entitled, "Back to the Pharmacopoea," in which he energetically advocated the use of U. S. Pharmacopoeal preparation in prescribing and sounded a note of danger in too eagerly prescribing non-official preparation put out by proprietary firms.

His paper was discussed pro and con by Drs. Hall, Havell, Barlow, Butt, Jef-

fers and Anderson.

The next paper was one on "The causes and Treatment of Arterios Sclerosis," by Chas. O'Grady of Charleston. He referred to this disease as one of the principals in the fatal tread, Cardio-Vascular-Renal disease, alluded to the difference of opinion as to whether produced by over secretion of the adrenals or under secretion of the thyroid, and spoke of the part played by age, sex, occupation, and other factors ranging from syphilis to over-eating. He consid-

ered the treatment under the four heads, Dietetic, Physical, Medical and Symptomatic. He alluded to the Calcium theory; advised milk diet; warned against use of red meats; recommended mild exercise in open air, baths, electric massage, sodinm iodide, nitroglycerine, veratrum veride and thyroid extract.

Dr. S. L. Jepson, Health Commissioner of West Virginia, then delivered an address to the Association, setting forth "The Importance of Vital Statistics," telling of his aims to bring West Virginia to the front in this matter and urging the carnest co-operation of every physician.

The Association then adjourned until

evening.

On Wednesday evening, May 17, Dr. A. W. Freeman, the official representative of the office of United States Surgeon-General, delivered a most interesting public address before a large and enthusiastic audience in The Carroll Club Auditorium. He was introduced by vice-President Dr. A. S. Bosworth of Elkins, in a most pleasing and oratorical manner.

Dr. Freeman, after being saluted with

a hearty applause, said in part:

"The time has not long gone when most humans, physicians and laity alike, regarded the question of health, both personal and community, in much the same manner as we now regard the weather. That is, something in which we all have vital interest, which effects our comfort, happiness and prosperity, in a very definite and positive way, but which falls without rhyme or reason on the just and nnjust alike. We may converse and complain about it, but it is useless to take any steps toward emproving matters. Two measures, pure water and complete sewerage are fundamental in health protection. As has been shown, pure water is in most cases actually cheaper than impure water. It will be found also, that proper sewerage, is not in the long run more expensive than the old style outhouse. The first cost of maintaining the good system is much less, and in the long run, even leaving out of account the saving of health, will be found cheaper.

While all sanitarians are agreed that

these two fundamentals in sanitation should come first in any community, not all are agreed as to the next step. The speaker is of the opinion and in this opinion most sanitarians will agree, that perhaps the next step in health protection for a progressive community should be the sanitation of the milk supply.

Milk occupies a peculiar position in the realm of foods. It is a particularly perishable food, which must be fresh when consumed, and it enters very largely into the dietary of those most susceptible to impure foods, the infants and the

sick.

Dr. Freeman then dwelt on the necessity of having efficient health departments, and the need of a corps of visiting nurses. He stated that the additional expenditure to get the best health results is comparatively small. In this connection he pointed out that with visiting nurses and medical aid in the schools, children will learn the necessity of keeping their bodies clean and free from germs, which is the seat of much illness.

Food, too, was discussed at great length by Dr. Freeman. He spoke on the various injurious foods and stated that the American people were the greatest people in the world to eat. On their tables they have a great variety of indigestible foods, and after gorging themselves they feel bad and wonder what ails them. He stated that if people would quit the meat habit and cast away the frying pan, there would be a greater percentage of healthy people in this country today. In Russia and various other foreign countries, the populace live in a healthy condition on cabbage soup and dry bread, while in the Orient the people live chiefly upon rice. They are a healthier race than the Americans, because they live on digestible foods.

He then told of the necessity of exercising and claimed walking to be the greatest exercise known to science, unless it be manual labor where one is not exposed to severe strains. Exercise should always be taken in the open air and should not be extreme. Open air sleeping is also more in evidence now than it was ten years ago, according to Dr. Freeman, who stated that about ten

years ago if anyone was seen sleeping outside he was classed as a tubercular and avoided by even his most intimate friends, who believed he was afflicted with the disease and was trying to conceal it from them. Today, however, thousands of people have the habit of sleeping in the open and a comparatively small amount of those who are now practicing that healthful habit have any disease whatever and are not likely to have as long as they keep it up.

Following the address Dr. Bosworth again made a brief talk and adjourned

the meeting.

The scientific program on Thursday morning May 18, was opened by an exhaustive paper on "The Present Status Treatment of Bladder Tumors," by Dr. J. T. Geraghty of Baltimore. The following conclusions were deducted from his treatise:

First. A distressingly large percentage of bladder tumors cases present themselves with the disease so far advanced that nothing more than palliative measures can be employed.

Second. Benign and malignant papillomata should be treated by fulguration and excision or resection should not be practised except when endovesical treatment is impossible or very difficult.

Third. Radium has proved a great aid in treatment of papillomata particularly of malignant variety, and when applied should be placed directly against the tumor.

Fourth. Resection should be practised in cases of papillary carcinoma, with a technique so perfect to prevent reimplantation.

Fifth. Radium not encouraging in

papillary carcinoma.

Sixth. Cystoscopy should be employed at frequent intervals for a year after

resection to detect recurrence.

Dr. Hupp asked Dr. Geraghty: Is it wise to exercise a piece of tissue from the tumor for pathological examination? Is it safe to accept report of pathologist? Dr. Geraghty answered: You cannot tell microscopically whether case is type which can be removed by fulguration. There is danger in delay. Use cystoscope and not microscope in these cases.

Dr. J. Edward Burns of Baltimore, then gave a paper on "Thorium; a New Agent for Pyelography." In this most able production he set forth:

1. Thorium solution fulfills all the conditions necessary for an ideal pye-

lographic medium.

2. It is non-toxic and non-irritative.

3. Pyelograms and cystograms made with this solution show a shadow of unusual clearness and delineation.

4. It makes a clear, watery solution of great fluidity, permitting ready elim-

ination from the urinary tract.

5. It is perfectly clear and does not stain linen which silver solution does.

6. It is inexpensive being one-third

as costly as collargal.

The next paper was a masterly exposition on "Spina Bifida and Its Surgical Treatment," by Dr. W. Wayne Babcock of Philadelphia. In it he discussed the incidence and varieties of spina bifida. The differentiation of the various forms. The prognosis in operated and unoperated cases. The surgical anatomy and operative technique. In cases of combined spina bifida and hydrocephelas, if the former is well covered, treat the latter and postpone operation, otherwise operate upon the former. With his paper he presented a fine collection of illustrative lantern slides.

His paper was ably discussed by Drs. Horsley, Steele and Ogden. The morning session closed with a most interesting talk by Dr. J. Shelton Horsley of Richmond, Va. In substance his remarks were as follows:

"Plastic operations for acquired deformities are somewhat different from operations for congenital deformities as the question of recontraction from scar tissue, which is one of the chief obstacles to success in plastic operations after burns, is not met with in congenital deformities, such as hare-lip and cleft pal-While the general principles in these operations are the same, each case is somewhat of a law unto itself. Deformaties of the hand usually consist of injuries to the palmar surface. Here, repair to be satisfactory, must as a rule, take the whole thickness of the skin which is best gotten from the back by the 'sling method'. Repair of the face

involves many types of deformities, but if it follows a burn, whole skin should be used, usually by flaps transplanted from the neighborhood of the injury or from the neek or arm. Cases as described, showing the different types of deformity of the face and hands and methods by which they were treated."

He illustrated his remarks by a fine series of lantern slides setting forth the appearance of a number of patients before operation, the various stages, and

the results.

The Association then adjourned for lunch.

Dr. Lewellys F. Barker of Baltimore, opened the afternoon session on Thursday with a masterly paper on "Advances in the Study of Syphilis, and the Recognition of Obscure Forms of the Disease."

He first alluded to the aphorism that to know syphilis is to know internal medicine. He then spoke of: 1. The discovery, character and habitat of the specific cause of syphilis, Treponea Pallidum. 2. The experimental production of syphilis in animals, demonstrating the fact that syphilis has become generalized throughout the body for some time before the Hunterian chancre appears, hence, the uselessness of attempting to prevent the generalization of the disease by excision of the chancre, and the further fact that the development of the disease can be prevented after inoculation by application within a few hours either of a solution of bichloride of mercury in sale solution, or by Neissers bichloride paste, or by Metchnikoff's calomel salve. 3. The present status of the Wassermann reaction showing its great and certain diagnostic value both of the presence and the cure of the disease, and the explanation it offers of both Calle's and Profeta's laws. 4. Immunity, cure, and reinfection in syphilis, in which he concluded it does not seem likely that any method of protective inoculation will be worked out. 5. The obscure forms of syphilitic disease among conditions in which we may suspect the possibility of lues, he mentioned the following:

a. Long continued fever otherwise unexplained.

b. Obscure nervous cases both functional and organic, the latter especially when the symptoms "come and go."

c. Chronic laryngitis, tracheal and bronchial stenosis, bronchiectasis, and unexplained infiltration of, or masses in, the lungs and pleuræ.

d. Aneurysms.

- e. Aortic insufficiencies, especially when unaccompanied by other valvular lesions.
- f. Heart block and other cardiac arrhythmias.
  - g. Arterial and venous thromboses.
- h. Certain anemias, resembling the Addison-Biermer type.

i. Paroxysmal hemoglobinurias.

- j. Indolent nodules in the tongue and tonsils.
- k. Enlargements of the liver and of the spleen.

1. Strictures of the rectum.

- m. Atypical joint diseases, and especially obscure diseases of the spine.
- n. Thickenings of, or nodules in, the bones, especially when accompanied by uccturnal pain.
  - o. Unusual forms of renal disease.
- p. Chronic orchitis, or nodules in the testes.
- q. Repeated miscarriages without apparent cause.
  - r. Stillborn children.
- s. In disorders of metabolism and of internal secretion, especially in bizarre cases.
- 6. The treatment of lues—which he sums up as follows:
- a. If seen within a few hours of exposure, thorough rubbing of external genitalia with Neisser's Paste.
- b. In the primary stage, after the Hunterian Chancre has appeared, arsenical therapy—salvarsan possibly aided by mercury either by inunction or intransuscular injection, but iodides not necessary.
- c. In secondary stage—salvarsan and mercury: In this stage mercury is more essential than in primary stage.

d. In tertiary stage—iodides in large doses together with arsenic and mercury.

Dr. Hamilton of Columbus, being prevented by illness in his family from being present, Dr. X. O. Werder of Pittsburgh, closed the scientific program of

the 1916 session, for the paper of Mayo Tallman of Charleston, on "The Work of the Division of Sanitary Engineer-

ing," was read by title only.

Dr. Werder's subject was "Ectopic Gestation; with Special Reference to Treatment." After dwelling upon the developments and changes taking place in the organ involved, a knowledge of which he thinks essential before one can institute an intelligent course of treatment-and after touching upon the symptoms of the condition, he advised, in cases where hemorrhage is persistent and progressive, immediate operation by laparotomy route if possible without moving the patient to hospital and closing abdomen without drainage after pouring a large quantity of hot saline solution in the abdominal cavity. In cases where hemorrhage seems to check and patient tends to rally he advised waiting until she has recovered from shock and to a certain degree from her anemia, then operate by abdominal route.

After alluding briefly to cases in which the fœtal life escapes destruction at time the tragic symptoms occur and developes until it has reached a viable age, he concludes by pointing out that shock is a more dangerous factor than hemorrhage and hence should receive

first and most consideration.

Dr. Ogden of Clarksburg, opened the discussion of this paper. He spoke of the different onset; in some cases it was slow, in other like a thunderclap. He also called attention to the great difficulty in determining the most favorable time for operation and laid stress upon the necessity of handling the parts as gently as possible to avoid shock and lest a uterine pregnancy might co-exist.

Dr. Golden of Elkins, stated he believed frequently delay in operation a life saver for death rarely resulted from hemorrhage, but from shock, therefore, in doubtful cases the least risk was run

in waiting.

Dr. Babcoek of Philadelphia, then discussed the advisability of operating by vaginal route. He said he preferred it because he could reach the tubes and stop the hemorrhage through the vagina with less insult to the peritonlum and hence produce less shock.

The Association then turned its attention to unfinished business.

Votes of thanks were then extended to Dr. L. S. Goin, Wheeling, for his able service in operating the projectoscope; to Dr. H. G. Steele, Bluefield, for his acting as Registrar; to Hoge and Davis Drug Co. for cigars so kindly donated. The following resolutions were presented by Dr. Henry and unanimously adopted:

WHEREAS, the West Virginia State Medical Association welcomes recognition by the State Authorities on matters pertaining to health, sanitation and pre-

ventative medicine,

AND WHEREAS, said authorities have seen fit to enact better laws, appropriate more money and select members from other ranks to carry out these human laws,

Be It Resolved, that we extend our thanks to our legislature, Gov. H. D. Hatfield, M. D., the State Board of Control and the Public Service Commission

for their recognition.

Be It Further Resolved, that especially do we thank Health Commissioner Dr. S. L. Jepson and Workman's Compensation Commissioner Mr. Ott for appearing before us and discussing questions of vital importance to all, thereby causing a better understanding of our relations to these departments.

The following resolutions were presented by Secretary Anderson and

comes:

Whereas, a number of the most distinguished members of our profession have freely given of their valuable time to appear before us and give to us of the ripe fruits of their labors along their special lines of work,

Be It Resolved, that the West Virginia State Medical Association extend to them our most sincere thanks for this their manifestation of their willingness to disseminate their knowledge and of the devotion to the cause of universal medical and surgical advancement.

The following resolutions were presented by Dr. Harriet B. Jones, Wheel-

ing, and unanimously adopted:

Whereas, the existing facilities for tuberculosis patients are inadequate, the West Virginia State Medical Association heartily co-operate with the West Virginia Anti-Tuberculosis League to better conditions, and adopts the following resolutions:

1. That provision be made at the State Tuberculosis Sanitarium for free beds.

2. That wards be provided at the State Tuberculosis Sanitarium for children under fifteen years of age.

3. That a State Tuberculosis Sanitarium be established for negroes in some

suitable place in the state.

4. That county officials be prohibited from admitting cases of pulmonary tub-creulosis to the county alms-houses.

5. That counties be authorized to establish local tuberculosis hospitals for the care of advanced cases.

Adopted May 18, 1916. Wheeling, W. Va.

The following resolutions were offered and unanimously adopted by the Association:

Whereas, The West Virginia State Medical Association is just closing one of the largest and most successful annual meetings in their history,

AND WHEREAS, We, as an organization feel that the success of the session has been largely due to the boundless hos-

pitality of our hosts;

Be It Resolved, That the West Virginia State Medical Association extend their heartfelt thanks to the Ohio County Medical Society, the Ohio Valley General Hospital, the North Wheeling Hospital, the City of Wheeling, the management of the McLure Hotel, and the newspaper fraternity for the pleasant manner in which they have entertained us and the many courtesies extended.

Further Be It Resolved, That we heartily commend the people of Wheeling and of Ohio County for the fine up-to-date hospitals they have provided for the care of the sick and the afflicted and congratulate them upon the high class work of their physicians and surgeons.

On Thursday evening at 8 o'clock the Forty-ninth Annual Session of the Association was closed in a most fitting and delightful manner by a sumptuous banquet tendered by the Ohio County Medical Society as a token of farewell to the visiting members of the Associa-

tion, of whom one hundred and twenty-five were present.

All present stood while Rev. P. J. Donahue, D. D., pronounced the invocation.

While the viands were being enjoyed sweet music filled the air, fragrant with the aroma of the floral decorations.

The first number of the "Aftermath" proved to be an exposition of the magic

art by a fourteen-year-old lad.

Dr. G. A. Aschman, the silver-tongued toastmaster, then introduced Dr. Jepson as the first speaker of the evening. His topic was "The State Health Department and the Medical Profession." The speaker told that thirty years ago he spoke before this same organization and his topic was "New Medicine," and the response was made by Dr. Frizzell, on "Old Medicine." He said the many discoveries of the profession since that time has been wonderful and that these are being increased in number every day. He said the reduction of death rate is due to sanitarians and physicians, but the death rate for men between the ages of 40 and 60 instead of being reduced. are on the increase. His reason for this is that men between these ages adore too greatly Venus, Bacchus and Ballam. He urged the delegates to follow all measurcs for the prevention of diseases as closely as possible and asked their cooperation with the State Board Health. He said if physicians would honorably and scientifically strike at the root of disease, it would only be a few years until there would be a diminuation in the progress of typhoid fever, diphtheria and other contagious illnesses. Seven thousand citizens of the United States die annually from cancer, the speaker said, and he urged a surgical operation for this affliction immediately after the symptoms appear. Suitable sanitary conditions in communities were also advocated by Dr. Jepson and asked the local fraternity to act upon the suggestions given by Dr. Freeman at the Carroll Club last night.

Rev. C. H. Robinson, D. D., pastor of the First U. P. Church, spoke on "Religon and Medicine." He said the incentive and inspiration of medical science came from the gospel and walked hand in hand with medicine. He compared the progress with the dilapidated stage coach of frontier days with the fast moving and well equipped trains of the present day.

Mr. A. W. Paull, President of the Wheeling Commercial Association, was next introduced. He talked on "Business and Medicine," and urged the physicians to lend their assistance in amending the state compensation law at the next legislature.

Hon. W. P. Hubbard talked on "Law and Medicine." He praised the profession for their rapid strides of progress and said they had outstripped in progress his fraternity.

Dr. J. E. Rader, President-elect, of Huntington, was called upon next. He thanked the organization for electing him to the office of President of the society and asked the hearty support of all the members in the fulfillment of his office.

Dr. J. Howard Anderson of Marytown, re-elected Secretary, in responding to "Sentiment," stated no words more appropriate could be said than those appearing on the artistic menu, "Farewell! A work that must and hath been—a sound which makes us linger: Yet Farcwell!"

He then asked that every member use his efforts to make this last lap of the organization's fiftieth year the banner one of all.

Dr. J. Shelton Horsley, Richmond, Va., then extended greetings from our parent state.

Dr. Dickey, Wheeling, then provoked enthusiastic applause by his witty thrust at his dear friend Dr. Jepson and his jovial subtle humor.

Dr. C. S. Hoffman, Keyser, proved himself a philosopher as well as a good story teller.

The toast master then dismissed the gathering with a few well chosen remarks.

#### TRANSACTIONS OF THE COUNCIL.

Forty-ninth Annual Meeting of the West Virginia State Medical Association, Wheeling, May 15 to 18, 1916.

The Council was called to order by Chairman J. E. Rader, at 8:45 Monday, May 15, Drs. Jeffers, Oats, Rader, St. Clair, Wheeler, Butt, and Anderson being present.

Minutes of last meeting were read and

approved as read.

Dr. Butt presented a bill for an additional \$9.00 still due upon the printing of the programs for 1914 annual meeting. The bill was ordered paid.

Drs. Johnson and St. Clair were appointed as Treasurer Auditing Commit-

tee.

Council adjourned at 9 p. m. to meet at the call of the Chairman.

Council called to order at 5:30 p. m.

May 15, by Chairman Rader.

The report of the Committee on Medical Defense was then presented by Chairman J. W. McDonald, in which he stated all cases tried during the past year had either been quashed or terminated favorably. He then brought up the subject of impending cases and referred especially to the case in which suit for malpractice had been instituted by Frank R. Collins against City Hospital-Training School for Nurses et al, of Morgantown and stated the committee had retained the firm of Glasscock and Glasscock as special attorncys for the defense and asked that this action be confirmed and that the retaining fee of \$100 and further fees of \$25 a day for each day actually spent in Circuit Court by said firm be authorized.

This was done by motion made by Dr. Daniels and seconded by Dr. Johnson

and unanimously carried.

Dr. Anderson then brought up the subject of establishing an Association Relief Fund for Aged and Invalid Fellow Practitioners, and read a communication from Dr. Golden with reference to Dr. Lind, formerly an able and active member of the Association.

After much discussion, Dr. Daniels was appointed a committee of one to

investigate the advisability of establishing such a fund and to obtain data as to the best methods of procedure towards

organizing and maintaining it.

Dr. Jepson, retiring editor of Journal, not being able to be present, his report was presented to the Council by Dr. Nicholson. It was accepted and approved with a vote of thanks to him for his long and faithful services.

The Treasurer's Auditing Committee then presented their report on Treasurer Nicholson's books, placing their stamps

of approval upon the same.

Dr. Bloss was then re-elected editor of the West Virginia State Medical Journal for the year 1917, and his salary fixed at \$1,000.

Council adjourned to re-convene at call of the chairman.

Council met again at call of Chairman

Rader at 5 p. m., May 18.

The Lind Committee reported that \$291.80 cash had been raised by voluntary contributions for the immediate use of the committee.

In view of Dr. Daniels retirement from the Council, Dr. Haley was appointed to carry out investigation and formulate ways and means of establishing a permanent Association Relief Fund for Aged and Invalid Fellow Practitioners.

Council adjourned sine die.

The newly elected Council proceeded to officially organize at 5:30 p. m., May 18. Dr. G. D. Jeffers was elected chair-

The following Committee on Medical

Defense was appointed:

Dr. J. W. McDonald, Fairmont, Chairman; Dr. G. D. Jeffers, Parkersburg; Dr. H. R. Johnson, Fairmont.

Council adjourned at call of chairman.

#### OUR SCHOOLS FOR NURSES; PAST AND FUTURE.

Dr. J. M. Sites, Martinsburg, W. Va.

In presenting a few thoughts and ideas I will not adhere strictly to the subject assigned me, but will briefly consider the wonderful progress our hospitals and schools for nurses have made in the past,

and make some suggestions, which I hope may aid in bringing them up to our ideal.

Within the short life time of some of us, there were no hospitals or nurses' schools in the State of West Virginia, but with the marvelous development of the state, in a business and commercial way, came hospitals and training schools, until now every town of importance has its hospital and nurses' training school.

Our record is one of which we should be proud, but we have not yet reached our ideal, or gotten upon the high plane which we must reach before we can ask from other states that consideration for our nurses that should be due them.

The law enacted at the special session of the West Virginia legislature in 1907, in reference to examination and registration of graduate nurses, was a great step in advance, but is not sufficient to meet our present requirements.

According to that law a two-year course of training and instruction, is recognized as sufficient for graduation, and made the nurse eligible for examination and registration.

On their own initiative (most of our schools and hospitals have made a threeyear course obligatory, and the entrance requirements higher, and we are glad to state that the class of applicants for examination each year is improving, but we must not be satisfied until our nursing laws are as good, or better than any in the states.

I am in hearty accord with most of the recommendations of the Superintendents' Society of West Virginia Training Schools for Nurses, as offered at the meeting of the Graduate Nurses' Association of West Virginia, in Charleston, September, 1915.

The preliminary education and entrance requirements of pupil applicants to our nursing schools, should be higher and uniform. There should be a proper standardization and inspection of the nurses schools and hospitals, requiring at least three years training and instruction in theoretical and practical work.

At present we do not have reciprocity with any other state, which works hardship on many nurses.

Our examinations are as difficult as in any of the states, and most of our nurses pass with a high average percentage, but our law puts the requirements and standard so low, and there being no standardization of our schools, we can not ask or get reciprocity until conditions change.

I believe that each nurse to whom a certificate is issued by the State Board of Examiners, should within sixty or ninety days thereafter, present her certificate at the office of the county clerk of the county in which she resided at the time of filing the application, and cause the certificate to be registered, the same as physicians are required to do. have as good material for nurses as any state can put up, and our schools and hospitals are willing to co-operate in any move looking to their betterment, so that all the medical, nursing and hospital organizations of the state should take action and bring to pass laws and conditions to which we can point with pride and satisfaction.

In justice to our graduate nurses, who have fulfilled all the requirements of the law, and for the protection of the public no one except the graduate nurse should be allowed, under penalty of the law, to wear the graduate nurse's uniform.

I have in mind cases where girls spent a few weeks or months in a training school, and from various causes dropped out, who in a little while were posing as nurses, in the uniform of the graduate nurse, deceiving the public and endangering lives.

To illustrate the point, I will cite a case which happened recently in my own

experience.

A girl of about twenty years of age was admitted to one of our hospitals for training and after spending four months was dismissed on account of her unfitness as a nurse. A gentleman asked me to look after his wife in confinement, stating that he had a trained nurse engaged. When called to the case a few days later, I found the so-called trained nurse was the girl I have mentioned, rigged up in a graduate nurse's uniform. When I drove up in front of the house she met me at the street, and said, "Doctor you are too late, the baby is here,

and it's all over; have you any nitrate of silver? I want some for the baby's eyes, to keep it from getting gonorrhoeal infection."

I told her she would not seed silver in that case, and passed to the house and up stairs. To my surprise and horror, I found the patient with a frightful post partum hemorrhage, the cord around the child's neck, not tied or cut, and the child asphyxiated.

After hard work I managed to save the mother and child, and soon got rid of a dangerous woman, disguised in the uniform of a graduate nurse. Ten minutes delay would have meant the death

of mother and child.

### Hospital News

The Ohio Valley General Hospital at Wheeling announces the resignation of Mrs. Fontaine, their principal of School for Nurses, and the assuming of the position by the former assistant principal, Miss Harriet M. Phalen. Further additions to the staff are Miss Francis I. Wales, who comes from the Massachusetts General Hospital, as Miss Phalen's assistant and instructress of the nurses. Miss Mary M. Rock assumes the position of head nurse upon the maternity floor, and will have charge of the obstetrics.

Dr. J. A. Guthrie, proprietor of the Guthrie Hospital at Huntington, is making quite an extensive addition to his hospital in that city. The bed capacity of the hospital will be increased eighteen beds. He is installing an X-ray and electro-therapy department under the supervision of Dr. L. T. Vinson, of Huntington. In addition to this, Dr. Guthrie is installing a Warner Electric Elevator which will add greatly to the efficiency of the services rendered at this popular hospital in Huntington.

### The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR C. R. ENSLOW, M. D. ASSISTANT EDITORS J. E. RADER, M. D. HARRY W. KEATLEY, M. D., BUSINESS MANAGER

#### Huntington, W. Va., Aug, 1916

THE JOURNAL	issued	on the	first of	each month

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All original articles for this Journal must be made 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

should be given.

#### CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if unthors 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 Chemistry and Pharmacy of the A. M. A.

#### REMITTANCES

Should be made by check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chair-man 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 Jour-nal for publication. The author or communicant shall be held entirely responsible.

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#### COUNCIL

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

SECOND DISTRICT—II. W. Daniels, Elkins, 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-J. E. Rader, Huntington, W. Va., one-year term; G. D. Jeffers, Parkersburg, W. Va., two-year term.

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

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

### Editorial

The Editor has the very painful duty of announcing to the medical profession of this state the death of Dr. William Rutledge Hudson on July 23, 1916.

Dr. Hudson was born at Luray, Va., June 22, 1884; was graduated from Washington and Lee University at Lexington, Va., in 1907, with a degree of Bachelor of Arts. In 1912 he was graduated from the Medical Department of Johns Hopkins University at Baltimore, with a degree of Doctor of Medicine; following his degrees Dr. Hudson served two years, about, as an interne at the Hospital for Women of Maryland, in Baltimore.

At the expiration of the year 1914 Dr. Hudson located in Huntington to practice his profession.

He was a member of the Knights of Pythias, the Elks, and it is understood by the Editor, had taken his first degrees in Masonry. His professional affiliations were a membership in the Cabell County Medical Society, the West Virginia State Medical Association, and the American Medical Association.

The Editor feels a particular bereavement in the death of Dr. Hudson, since he was associated with him more or less closely for some time in the same office building.

Will Hudson gave his life just as I should have expected him to do, for the sake of others.

The facts in the case are that Dr. Hudson and two of his brothers, accompanied by their brother-in-law, bathing in the Shenandoah River. brother-in-law could not swim; the younger brother of Dr. Hudson went to his assistance and was dragged under water; Dr. Hudson arriving just in time, made all efforts to rescue the drowning men and gave up his life in the attempt.

Those of us who knew Dr. Hudson best, appreciated him the most. Your Editor is glad that it was possible for him to attend Dr. Hudson's funeral in Luray, and in his weak way, show his appreciation of the man as he was.

It is but meet that an editorial from one of the local papers in Huntington should be published in this connection, since it shows what the man had really come to mean to this city.

#### DR. W. R. HUDSON

Even when we have reason to expect it, news of the death of a friend often causes more or less of a shock in addition to the grief it always brings. But when such news comes unexpectedly, when death in the form of accident overtakes our friends, and the news comes to us as a startling, shocking surprise, with no previous intimation to prepare us for the blow, the shock is doubly severe and the grief doubly distressing. Nor are we prone to look with such distress upon the passing of those who have lived in peace and comparative happiness their alloted portion. It is in nature that we should look with philosophic calmness upon their passing; preparation, the long acknowledged and contemplated certainty of their going, having in a measure reconciled us to the end. But when manly youth or womanly beauty is cut down or snatched away by the relentless and inexorable hand of the death angel, we pause while we grieve, and seek to pierce the inscrutable veil and try to reason why it is that the good, the beautiful, the young, the unoffending, the ministering, the helpful, the hopeful of our kind are thus taken and we thus afflicted. It is not for us to understand the mysteries of death, at least not yet while we know so little of the mysteries of life. But there is that invisible but ever-present kinship within our souls which causes us to feel the keen point of the dagger of sorrow when friends are thus suddenly taken, or when those we know to be in the full bloom of youth and promise and well worthy of our love and esteem are snatched away with such startling suddenness. Such a case is that of Dr. W. R. Hudson, for whom Huntington mourns today. This young man of loving and lovable character, of gentle manners and high ideals was not so well known in Huntington as many other members of the medical profession of longer residence here. But to those by whom he was best known, who knew what he hoped to become in Huntington, and what he could have become and no doubt would have become, had it not been decreed otherwise by the Master of Destinies, the tragic ending of a career of great promise, scarcely as yet begun brought intense pain, and expression of regret surcharged with a deep sense of the pity of it all. But these will not complain or seek to question the ways of Providence. The same hand that afflicts sustains in affliction, and mercy and love are over all. And Dr. Hudson died as he lived—like a man. It will be at least some poor measure of consolation to his family and friends to know that he died for others, that he gave up his own fife trying to save friends from a fate he bravely

shared.—Huntington Herald-Dispatch, 7-25-16.

Your Editor wishes to give you a few reasons as to why should physicians read the advertisements.

Beeause—

First: The State Medical Journal keeps them informed about physicians' supplies, and where to purchase them. It saves them money.

A physician who attended the American Medical Association at Detroit, failed to read the special round trip railroad

offer in his own Journal. He paid full rates.

Second: The Medical Journal is the natural medium in which physicians would read the advertisements. They would not look for physicians' supplies in the advertising pages of magazines

or daily newspapers.

Third: A physician who reads an announcement in the current issue of his Journal, knows he can consult it again. Circular letters go into the waste basket; but advertisements are preserved for future reference in the bound volumes of his Journal.

Fourth: A physician knows advertisements in his State Medical Journal have been censored for his benefit. He

can rely on them.

Fifth: Every physician knows that progressive men read advertisements. The man who don't keep abreast of developments pays a premium for his ignorance.

A bunco artist sold a "gold brick" to a lumberman in the forests of Canada, and was back in Quebec before the "sucker" discovered the trick. On being asked how he came to buy a "gold brick" when newspapers contained accounts of the scheme every week or so, the victim replied: "D—n the news-

papers; I never read them."

Sixth: Every physician who is a members of his County Medical Society is a joint owner in his State Medical Journal. He has a personal interest in its success. If he reads and answers the advertisements they will be repeated. Advertisements supply the revenue for a larger and better Medical Journal. Self-interest should prompt every physician to read his own State Medical Journal through.

Paste this verse on your medicine case:

"Is there a man with soul so dead, Who never to himself hath said, All advertisements should be read."

Moral: Read the advertisements in this issue, answer some of them, and let the advertisers know you saw them in this Journal.

The Editor hopes that you approve of your Journal. Remember, that he asked

you, as owners of it, to give him your help and any suggestions as to its policy. Remember this, brothers, for we must be on the job every day.

And can we count on you?

Each advertiser in this Journal has paid good money to tell you about the service, or goods he has to sell. We said you would be glad to read his statement. May we count on you to do it?

As your personal representative we investigate these products for you; we know you did not have the time and the inclination to do this yourself. We accept the advertisements of products which we believe have merit; and confine the advertisements to such goods as physicians are interested in purchasing.

May we count on you to patronize

them?

As your spokesman, we have told advertisers the acceptance of their business announcement was our approval of them, that our readers know that goods advertised in these columns can be relied on; and all other things being equal, you will give preference in buying, to the goods advertised in your own State Medical Journal.

May we count on you to prove the

truth of these statements?

N. B.: If you want goods, or information about institutions, not advertised here, write the publisher of this Journal, or address our advertising representatives, The Co-operative Medical Advertising Bureau, 535 N. Dearborn Street, Chicago. You will receive a prompt reply.

Loyalty first is our watchword.

May we count on you?

The Journal is delayed a few days in the issue for August. This delay is due to the fact that a number of advertisers did not deliver their copy to the editor at the time that they should.

We regret this very much but trust that you will be patient with us since

it was unavoidable.

#### THE WINE OF CARDUI SUIT.

The Wine of Cardui suit is ended, after a trial of nearly three months. The

Chattanooga Medicine Company, manufacturers of Wine of Cardui, sued the American Medical Association for libel in the amount of \$100,000 and were awarded one cent. Never has such an amount of scientific testimony been adduced regarding the worthlessness of a proprietary medicine.

The company called ninety-seven witnesses and the Association ninety-three. The testimony would fill several large volumes and contain the fundamentals of a medical education on animal experimentation, physiology, therapeutics

and gynecology.

The alleged libel contained two elements; first, a charge that Wine of Cardui was worthless and dangerous, and second, a reflection on the honor of the manufacturer. The judgment of nominal damages of one cent shows conclusively that in the opinion of the jury the business of the Chattanooga Medicine Company was not injured. A fair conclusion is that the jury was satisfied that the worthless and dangerous nature of Wine of Cardui was established, otherwise such unjust claims by the American Medical Association would have resulted in honest trade losses, and the company would have been entitled to substantial damages.

A fair conclusion is that after financial considerations were eliminated, the jury believes the Association had exceeded an allowable degree of "fair and reasonable comment" on the honesty and integrity of the manufacturers, based probably on the terms "vicious and fraudulent," in the Association's comments, as well as its allusions to Mr. Patton's church relations. In other words the judgment means to us that the jury said to the Association, "You are justified as to the wine, but have exceeded your privileges under the Illinois law in your criticism of the manufacturers."

The trial is a good illustration of the difference between justice and law. The questions at issue were not judged by common equity, but as to whether the Illinois laws had been violated or not. Had the suit been brought in Texas, where under the libel law the truth of allegations in general, is not a justification of libel utterances, the Association could not have hoped for a favorable verdict. Had the suit been brought in New York, judging from the freedom of the New York press, the company could not have hoped for a favorable verdict.

The medical profession of this country is laboring for the public good to eliminate useless and vicious nostrums. Wine of Cardui has been branded as such by this decision. That is enough; the character, denunciation or reform of the manufacturers we leave to others.

Editorial Texas State Journal of Med-

icine, July, 1916.

### State News

Dr. H. E. Sloan of Clarksburg, spent the month of July in Boston taking a post-graduate course under Dr. Richard Cabot.

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Dr. E. B. Gerlach, accompanied by Mrs. Gerlach, is spending several weeks in the eastern cities. While away the doctor will take post-graduate work in the Baltimore hospitals in Skin and Children's diseases.

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Dr. J. E. Wilson of Clarksburg, spent the month of July looking over X-ray work in Baltimore, Philadelphia and Washington.

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Dr. and Mrs. I. C. Hicks and daughter, of Huntington, recently visited Atlantic City.

Dr. W. T. Gocke of Clarksburg, spent two weeks in Baltimore looking after professional work.

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Clarksburg has passed a new milk ordinance requiring Tuberculin tested cattle, clean milk, cooled to 50° F., and a bacterial count not exceeding 100.0000 and 4% fat.

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Dr. and Mrs. S. A. Draper of Huntington, made a tour of Central Kentucky in their new touring car recently.

Dr. H. H. Haynes of Clarksburg, has returned from a hunting trip in the Rockies. He bagged six grizzlies and a mountain lion.

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Dr. M. H. Maxwell of Keyser, is at present taking a special course in Pediatries at the New York Post-Graduate Medical School.

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Dr. G. C. Rodgers of Elkins, who has been in declining health for a year or more is quite ill at his home. His friends are very much distressed over his failing condition. He is suffering from a chronic aggravated gastric disturbance, the exact nature of which has not been made known.

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Dr. E. H. Updike, who was at Elk Garden for a short time, is now located at Mill Creek, taking the place of Dr. Kenedy, who was so foully murdered last spring.

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Dr. Harry W. Keatley of Huntington, who has spent five weeks at Kanawha City, being attached to the medical corps of the West Virginia National Guard, has returned to his duties at the West Virginia State Hospital. Dr. Keatley, who is experienced in the military branch of the medical profession, rendered valuable service at Camp Kanawha. Dr. Keatley carried the rank of Major.

Dr. James I. Miller of Huntington, is spending some time with his family at Atlantic City, where they have a cot-

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tage.

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Dr. C. L. Goldsmith, formerly of Harding, W. Va., has resigned his contract work there and is now in the Elkhorn region on the Norfolk and Western R. R. His place at Harding is being filled by Dr. Ballard.

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Dr. R. H. Powell of Elkins, has somewhat retired from his strenuous professional labors and is trying to learn to manipulate his new "Overland," in

which task he seems to be acquiring both skill and experience.

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Dr. O. J. Henderson of Montgomery, is spending his vacation motoring in the east.

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Arrangements have been made to have both Drs. Jepson and Wood of the Public Health Commission at Philippi on August 5, to take part in the discussion of Public Health Measures.

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Dr. Willis of Montgomery, expects to locate in some eastern Virginia city in the near future.

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Dr. H. C. Skaggs, formerly of Kaymoor, has located in Montgomery.

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Dr. H. L. Akridge of McKendree Hospital, is now doing work at Green Sulphur Springs.

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The fall meeting of the Fayette County Society will resume on the regular date in September. The meeting will be held at Thurmond and an extra good program is being arranged.

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Dr. J. C. Schultz of Huntington, recently attended the Pierce lectures in Chicago.

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Dr. C. R. Weirich of Wellsburg, state inspector of preventable diseases, and also inspector of birth and death certificates, delivered an address at Weston, recently. Dr. Weirich was entertained while there by Dr. and Mrs. M. D. Cure.

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Dr. James R. Bloss of Huntington, at tended the regular July meeting of the Mercer County Medical Society at Mercer Healing Springs, and gave a brief talk.

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Dr. W. E. Neal of Huntington, was elected chairman of the Republican County Executive Committee, and Dr.

E. B. Gerlach of the same city, the Treasurer.

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Dr. C. B. Young, Jr., of Lynchburg, who has recently been resident physician at the Chesapeake and Ohio Hospital, resigned to join the regiment of the Virginia National Guards as medical officer.

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Dr. W. L. Hudson of Luray, was a recent visitor in Huntington, closing up the affairs of his late nephew, Dr. W. R. Hudson.

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Dr. J. Ross Hunter of Huntington, recently spent a week in New York City investigating the possible cure for infantile paralysis.

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Dr. Van Pelt of Virginia, has accepted the position of resident physician at the Chesapeake and Ohio Hospital in Huntington.

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Dr. S. M. Stone has returned to Tomsburg from Richmond, where he did a year's post-graduate work in the Virginia Medical College.

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Drs. H. W. Keatley and Dickinson of Huntington, Dr. Ridley of Bluefield, hold appointments in the Medical Department of the West Virginia National Guard, and are in encampment at Kanawha City.

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Dr. Eugene Davis has located in Charleston and will confine his practice to Obstetrics and Diseases of Children.

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Drs. Atlee Mairs, G. H. Barksdale and M. I. Mendeloff, all of Charleston, are in Boston, taking the summer course in post-graduate medicine which is given by Dr. Cabot.

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Dr. A. L. Parsons of Dunbar, has located in Charleston.

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Dr. A. M. Reid of Charleston, has returned from a visit to Baltimore.

### Society Proceedings

#### BARBOUR-RANDOLPH-TUCKER SOCIETY

Dartmoor, W. Va., July 10, 1916.

Editor State Medical Journal.

The Barbour-Randolph-Tucker County Medical Society met at Philippi on July 7. The meeting was intended to be helpful to the people and was to be devoted to Public Health discussions, but as we had to compete with two Chautauquas, the attendance of the physicians was poor, and that of the laity was still worse. In view of these facts, we decided to postpone the health discussions for a special meeting at Philippi on August 5, when there will be an extra effort to get the people to attend, and have them discuss health problems which should interest them, and which should have their co-operation in utilizing all resources to the public good.

Drs. N. B. Michaels of Hendricks, W. S. Smith of Philippi and R. D. Stout of Bennyburg were received as members. Dr. Stout is the Democratic nominee for

the House of Delegates.

While our health laws are much better than formerly, still they seem to lack the power of enforcement, and therefore are rather advisory than imperative. The education of the masses is necessary but there may, and often does come a time when mandatory power must be resorted to. This we fear, we lack.

The health and morality of its citizens is the greatest asset of our country, and yet that is the feature that seems to receive least attention. We should be awakened to the absolute need.

J. C. IRONS, Secy.

#### CABELL COUNTY SOCIETY

Cabell County Medical Society held its regular monthly meeting for July, in the Hotel Frederick on the evening of the 13th. Owing to the absence of the President, Dr. F. A. Fitch presided as President pro tem. Secretary being absent Dr. W. R. Hudson was selected as Secretary pro tem. A general discussion of Infantile Paralysis was the subject of the evening.

Dr. Fitch reported a case of Empyema following a gun shot wound and results of subsequent use of Beck's Bismuth Paste.

Dr. Kessler reported a case of acute obstruction from volvulus.

Dr. Rader reported a case of Pyloric

obstruction (chronic).

A motion by Dr. Rader carried that the meetings of the society be suspended until September, owing to the extreme heat.

A motion by Dr. Rader was carried that the society have a meeting at Camden Park some time in August in conjunction with Boyd County, Kentucky, and Lawrence County, Ohio, Societies. The Secretary being instructed to fix the date after communicating with Secretary of Boyd and Lawrence County Societies. Society adjourned at 10:30.

W. R. Hudson, Sec. Pro Tem.

#### HARRISON COUNTY SOCIETY

A regular meeting of the Harrison County Medical Society was held at St. Mary's Hospital, Thursday, June 29, 1916, at 8:30 p. m. The main subject of the meeting was the discussion of the recent post-graduate course. This will be found under another heading. A motion was made to turn over the remaining funds to the hospital as a contribution to a free research bed and to appoint a committee of three to act as a Board of Censors for determining the desirability of a case before admission to this research bed.

The application of Dr. Geo. L. Howell was referred to the Board of Censors.

The application of Dr. C. L. Bates of Smythfield, was laid upon the table pending reliable information as to our power to admit a man to the society who does not live in the county.

Upon motion the meetings of the society were discontinued until September.

S. L. CHERRY, Secy.

### HARRISON COUNTY SOCIETY

POST-GRADUATE COURSE

At its February meeting the Harrison County Medical Society organized a postgraduate class. Twenty-six men joined and agreed to bear all expenses pro rata. Dr. Paul D. White, house physician of the Massachusetts General Hospital, and first assistant to Dr. Richard Cabot was secured to conduct the course. By a vote from 8 to 10 a. m. was devoted to a didactic talk and 4 to 6 p. m. to a clinic. The course lasted ten days.

The following is the schedule of morn-

ing talks:

May 22. Heart anatomy and physiol-

ogy. Methods of examination.

May 23. Heart; graphic methods, diseases of the myocardium, pulsus alternans.

May 24. Heart; irregularities of the pulse. Tachycardia and bradycardia.

May 25. Heart; endocarditis and pericarditis. Valve lesions. Congenital hearts.

May 26. Heart; sounds and murmurs. X-ray and percussion. Aneurism. Sudden cardiac death. Prognosis and treatment.

May 27. Arteriosclerosis. Kidneys. Nephritis. Renal function tests. Blood pressure. Urine.

May 29. Diabetes. Allen treatment.

Acidosis.

May 30. Blood diseases. Blood Transfusion. Thyroid gland.

May 31. Recent advances in gastrointestinal diseases; pulmonary diseases; stomach contents. Stool. Sputum.

June 1. Syphilis: Wasserman reaction. Tuberculosis. Nervous system. Spinal fluid.

As far as possible recent advances in the subjects discussed in the morning talks were emphasized. Five days were devoted to the heart because Dr. White has devoted a good deal of his time to this work and is noted as an expert. He brought with him many beautiful specimens of normal and pathological hearts. All the talks were well attended. Probably the most important part of course was the afternoon clinic. While cases relating to the morning lecture were preferred no class of case was debarred and as a result material was abundant. A careful history was taken, followed by a physical examination as well as X-ray and laboratory work. When the case was fully worked up the men

were asked to make the diagnosis. Discussion was active; friendly and instruc-

The course was valuable to the society in many ways. The men congregated under the most friendly circumstances. Entire harmony and friendship prevailed. The value of eareful history taking became apparent followed in importance by a thorough physical examination. The course on the heart was invaluable, as the best work has been done only within recent years.

The expense of the course amount to fifteen dollars per man. This included an informal supper at the Waldo Hotel at the end of the course. A small sum of money left over was given to the St. Mary's Hospital as a contribution to a research bed. This bed is intended for such patients whose cases can be worked up and its progress or treatment followed by the society as a whole.

S. L. CHERRY, Secy.

#### MERCER COUNTY SOCIETY

The Mercer County Medical Society held its regular monthly meeting in the dance hall of the hotel, and was ealled to order by President Vermillion at 7 p. m., with the following present: Drs. Vass, McGuire, Craft, J. R. Vermillion, Todd, F. F. Holroyd, Bird. Thompson, U. Vermillion, Wallingford, C. T. St. Clair, E. E. Vermillion, H. G. Steele, Beeker, J. R. Bloss, Huntington; P. H. Killey of Vivian; Pyott of Tip Top, Va.; A. E. Leggett of Princeton, and J. S. Davis of University, Va., twenty-five ladies and Mr. Meador.

The Secretary read the minutes of the preceding meeting and they were ap-

proved as read.

Dr. J. R. Holroyd opened the general discussion on Aeute Poliomyelitis, by reading us a brief, complete and instructive paper on this much discussed subject through the newspapers.

Under discussion Dr. Bloss very highly commended Dr. Holroyd on this paper which very nicely covered the ground,

and was instructive to all.

Dr. Killey was called upon for remarks, but declined.

Dr. Bird, under this head of discus-

sion reported a case of paralysis of one limb of a patient, which occurred some time ago, but is now gradually improving. Dr. Wallingford reported a case which was brought to his attention some time after it had had an attack, to his mind of Acute Poliomyslitis, but at the time he saw it, it was getting better.

Dr. Thompson said he enjoyed Dr. Holroyd's paper and believed it would not be but a few years until we would have a biological product which would relieve all these difficult conditions of disease in medicine. Dr. S. R. Holroyd in a very few selected words introduced to the Society Miss Ellis, who was present at the time visiting the Springs. But Miss Ellis being an Osteopath de-

clined to discuss the subject.

The Secretary in a few words introdueed our Editor, Dr. J. R. Bloss, of Huntington, W. Va., who told us of the condition of the State Journal, when he and his assistants took hold of it, and that now the policy is to stick strictly to ethical advertising. Dr. Bloss left us much valuable food for thought, highly commended the members of the Mercer County Medical Society for the enthusiasm and the progress they are making in their society work, and also suggested that we keep a record of the important eases we meet up with from time to time and report them to the society, then forward the report to the Journal, which reports are often-times valuable to the general practitioner.

And he said that many times the physician back in the country fifteen miles from a railroad, has very valuable experience and if he would only put forth a little effort and report these to the State Journal, we would all be greatly benefited thereby. He said this was many times high class stuff, but he did not receive enough of it; many men have hobbies, and he thinks it would be very valuable if these men would speak of their hobbies and not keep it to themselves.

Under discussion Dr. Thompson said the Society should be highly congratulated in having Dr. Bloss with us at this meeting.

Dr. J. H. McGuire read us a brief history of a ease of Hodgkins Disease in

which he had one under his eare for some time.

Dr. C. T. St. Clair arrived late with Dr. J. S. Davis of Charlottesville, Va.

Dr. Davis then read us his very instructive and interesting paper on Some Difficulties in the Diagnosis of Pneumonia. Dr. Davis was listened to by all present very attentively and all felt that they had derived a great deal of benefit from hearing Dr. Davis' paper on this important subject, and we hope it will come out in our journal later, in order that we may be able to study over it more carefully. Dr. Davis was very highly complimented by several present on his paper.

The Society extended a rising vote of thanks to Drs. Davis and Bloss for being with us and reading these papers.

We then went to the Banquet Hall, where we enjoyed a sumptuous and delightful repast, along with very classical and most delightful musie, rendered by Mrs. Patterson, Mrs. Neal, Mrs. Shafer. and Miss Phelps. And the toasts made by Drs. S. R. Holroyd, being "The Ladies," Dr. Thompson on "Our Society," and Dr. Becker on the "Life of the Society," were very well handled. Society extended a rising vote of thanks to the Ladies' Quartette from Bluefield, for the delightful way in which they assisted in entertaining us and also to Mr. Meador and his help for the banquet and aecommodation rendered us while with him.

Next Dr. Davis was called upon, who made us a very appropriate speech for the occasion, and assured us that he was more than glad to be with us.

After the banquet the following business was transacted by the members present:

The following bills were allowed:
Daily Telegraph Printing Company,
for 150 program folders, \$4.

H. G. Steele, for messages, stamps, etc. as per bill of July 20, \$9.37.

As the Society guaranteed Mercer Healing Springs \$50 for fifty plates, it was decided that after each member present has paid, the Society was to pay the balance including the four guests, which was as per bill rendered:

Fifty plates \$50, two rooms \$1, \$51;

eash from 17 members, \$17, balance, \$34.

The question of getting some good man to come into our county, that is to the eities of Bluefield and Princeton, and give us a post-graduate course, was very favorably discussed by most of the members present. And the Secretary was instructed to correspond with Dr. Cabot of Boston, or some professor at Johns Hopkins, and see what it would east to have a good man come here and give us a post-graduate course of from ten to twelve days, on the subject of Physieal Diagnosis or some branch of medicine which would be interesting to most of our members. Then the Secretary is to send out a circular letter to each of the members saving what this course is to eost, etc., and get an expression from them as to how many desire to take this course, and if justifiable he is to make arrangements with the doctor giving the course, with the understanding that the Society pay any deficiency in the expenses of this course. This seemed to meet with the approval of all the doetors present.

The application of Dr. A. E. Leggett, Princeton, W. Va., was received and ordered laid over one month for the action of the Censors.

We then adjourned and went to the dance hall where we enjoyed some more music from the Ladies' Quartette, and a delightful dance, and then went home.

H. G. STEELE, Secu.

#### RALEIGH COUNTY SOCIETY

The Raleigh County Medical Society met at Stotesbury, W. Va., with Drs. Fisher, Thornhill and Johnson, on Saturday, June 18, 1916.

The following officers and physicians were present. Dr. J. E. Coleman, acting President; Dr. K. M. Jarrell, Secretary; Dr. F. S. McChesney, Dr. W. W. Hume, Dr. E. B. Dovell, Dr. Ira Fisher, Dr. G. W. Johnson and Dr. G. T. Thornhill.

The Society was the gnest of Drs. Fisher, Johnson and Thornhill, and after a sumptuous dinner, which was enjoyed by all, we proceeded to the town hall where the meeting was held.

After a few opening remarks by Dr. Coleman, Dr. Thornhill presented three very interesting cases to the Society, which were examined by the physicians.

Dr. W. W. Hume read a very interesting paper on Occular Hygiene of the school-child, which was discussed and enjoyed by all present. Dr. Hume also presented a case to the Society of an injury of both eyes and face due to an explosion.

Dr. J. E. Coleman, surgeon in chief of the Beckley Hospital, was next introduced, and the Society enjoyed a rare treat from him on Local Anæsthesia. Dr. Coleman dealt with great emphasis on prevention of shock after an injury by blocking the nerves with Cocain or Novocain, before starting patient to hospital and before operating in case of severe injury.

The Raleigh County Medical Society extended a rising vote of thanks of Drs. Fisher, Johnson and Thornhill for the royal welcome given the Society.

On motion of Dr. Jarrell the Society adjourned until the next regular meeting in July in Beckley.

The Raleigh County Medical Society is still on the map with a membership of thirty-two members in good standing.

K. M. Jarrell, M. D., Secy.

#### EASTERN PANHANDLE SOCIETY

Martinsburg, W. Va., July 17, 1916. Editor of State Medical Journal.

A regular quarterly meeting of the Eastern Pan-handle Medical Society was held in the parlor of the Hotel Berkeley at Martinsburg, June 14, 1916, President J. M. Miller presiding.

The following physicians were present: George W. Swimley, H. P. Hirst, J. J. Pittman, W. W. Brown, C. E. Caly, B. B. Ransom, D. T. Williams, J. M. Sites, G. J. Spouseller, E. H. Bitner, Nelson Osburn, A. J. Linwites, E. L. Sincindiver, T. K. Oates, S. T. Krott, H. G. Tompkins, W. T. Heushaw, B. L. Lefever, Hawood Osburn, N. M. Carter, A. B. Eagle.

Dr. J. Mason Hundley of Baltimore, was present and read a splendid paper en the Treatment of Pelvic Inflammatory Diseases in Young Women. This paper was discussed by Drs. Wm. Neill, Jr., and Stewart.

After dinner at the hotel the society was again called to order and Dr. Noland M. Carter read a paper on "Some Conclusions from the Recent Diphtheria Epidemic at Martinsburg." The discussion was opened by Health Officer Dr. C. E. Clay.

Dr. Wm. Neill, Jr., of Baltimore, read an excellent paper, the subject of which was, "Treatment of New Growths with Radium," with illustrations.

Dr. Osburn, a delegate to the West Virginia State Medical Association, made his report to the Society.

The next meeting will be held at Harper's Ferry, September 13.

A. B. Eagle, Secy.

#### LEWIS COUNTY SOCIETY

Weston, W. Va., July 14, 1916. Dr. Jas. R. Bloss, Editor,

Huntington, W. Va.

My Dear Dr. Bloss:

I am going to try to give you a report of our Society which met a few days ago and I hope to be able to give you a report each month hereafter.

The Lewis County Medical Society met July 11, 1916, on lawn of the Weston State Hospital at 2 p. m., with Dr. J. I. Warder, President, in the chair. Those present were: Drs. Cure, Snyder, Cooper, King, Reger, Hamilton, Heath, MeDonald. Woofter, Green, Gray, Denham, C. R. Weirich of Wellsburg, W. Va., and C. W. Halterman, Supt. of the Weston State Hospital, who is a member of the Harrison County Medical Society.

Minutes of the previous meeting were read and approved by the members present.

Three new members were unanimously elected to membership in the Society, namely, Dr. G. M. Hamilton, Weston, W. Va.; Dr. C. L. Cookman and Dr. J. P. Davisson, both of Jane Lew, W. Va.

Dr. C. R. Weirieh, of Wellsburg, Assistant to Commissioner of Health, Dr. Jepson, was present and gave us a splendid lecture on statisties of Births, Deaths, Infectious and Contagious Diseases which was more than appreciated by those present. He complimented the

doctors of Lewis County very highly on their prompt and proper report of infectious and contagious diseases. Then he read a very interesting paper on Diseases of Childhood and Caneer, which pleased all and much discussion followed

by the members.

It was moved and seconded, voted upon and unanimously earried that the Society extend its sincere thanks to Dr. Weirich for his presence and splendid paper and to Dr. Halterman for serving refreshments to the members and they were both made honorary members of the Society. It was one of the best meetings, if not the very best, that ever oecurred in Lewis County. We expect to have more and try to make each better if it is possible to do so.

> Fraternally yours, P. L. Gray, Secy.

### Book Reviews

1915. COLLECTED PAPERS OF THE MAYO CLINIC, ROCHESTER, MINN. Oetavo of 983 pages, 286 illustrations. Philadelphia and London. W. B. Saunders Company, 1916. Cloth \$6 net; half Mo-

rocco \$7.50 net.

This is the seventh volume of these interesting and instructive papers and is fully up to the high standard of former volumes. These papers are prepared and read by the different members of the clinic at Roehester, being based upon the material presented at the clinies. A number of these papers, having a serial connection to a subject are published in full and contain elements of great value to the student and praetitioner seeking information and instruction on these subjects. On account of the number and length of the other papers they have been abstracted, presenting the gist of the matter. They are followed by an extensive bibliography so that any one desiring to go fully into the subject may do so with the least expenditure of the time and trouble. Members of the profession knowing of the value of the papers and desirous of procuring the same may know that they are now available in book form.

We have received Vol. II, PRACTICAL MEDICINE SERIES. This volume is one

of a series of ten issued at about monthly intervals, and eovering the entire field of medicine and surgery. Each volume being complete on the subject of which it treats for the year prior to its publication. The price of this volume is \$2. Price of the series of ten volumes, \$10.

This 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 such parts as most interest them. The text represents the latest trend of professional opinion on the subjects under eonsideration. The subjeet of volume two is general surgery It is edited by Dr. Jno. B. Murphy, Professor of Surgery in the Northwestern University. Attending surgeon and Chief of Staff of Mercy Hospital and Columbus Hospital; Consulting Surgeon to Cook County Hospital and Alexian Brothers Hospital, Chicago. The Year Book Publishers, 327 S. La Salle St., Chieago, Ill.

The articles are necessarily short, but are to the point. Of special interest in view of the heavily laden war atmosphere will be found the articles on Operative Technique, Grafting and Transplantation, Amputations, Wound Healing and Gas Gangrene. We note with approval the return of the oldest flap operation, i. e., the circular, to favor. This form of flap occupying a prominent place in the general diseard seems

to have returned to its own.

Gynecology.—By W. P. Graves, M. D., F. A. C. S., Professor of Gynecology at Harvard Medical School, Octavo volume of 770 pages with 424 original illustrations, 66 of them in colors. Philadelphia and London; W. B. Saunders Co., 1916. Cloth, \$7 net; half Morocco, \$8.50 net.

Not only an excellent text book for the medical student or undergraduate, but also for the surgeon it should prove of invaluable assistance. It presents gyneeology along new lines and in a thorough and systematic way.

The first section is devoted entirely to the physiology of the pelvic organs and the relationship of gynecology to the

general organism. The second portion of the book is devoted to special gynecologie diseases and is particularly arranged for the convenience of the student or practitioner. The third section deals exclusively with surgical gynecology and contains splendid descriptions illustrative of those gynecologic operations that in the author's opinion are most feasible. A number of new operations and modifications of older ones not in other text books are given and illustrated. One of the very valuable sections is devoted to "Technic." The methods described are those in use at the present time at the Brookline Free Hospital for Women, and which the author says "are the result of many years of trial and comparison with other methods." It carries the student along correct lines from the time the patient first comes to his attention until the very last things have been done in the way of care, and teaches him to avoid many er-The arrangement of the whole subject matter is not only good but exceptionally convenient. We predict that the book will become a standard for text books in many of the medical colleges. ---0-

DISEASES OF THE EYE.. De Schweinitz. W. B. Saunders Co., Philadelphia, Pa. Cloth, \$6.

This is the eighth edition of this very interesting and valuable book on the eye. The book is well indexed. Different from the previous editions the doses of the drugs given in the metric system as well as the old method. The work has a number of new illustrations, some of which are in colors.

A number of new subjects have been added to the text. They are as follows: Clifford Walker's method of testing the visual field; Squirrel Plague Conjunctivitis (a very rare disease); Swimming Bath Conjunctivitis. Dr. De Schweinitz points out the similarity between this disease and catarrhal conjunctivitis, noting however that the discharge is not so profuse in swimming bath conjunctivitis, He also calls attention to its resemblance to acute trachoma in certain cases.

Anaphylactic Keratitis; Family Cerebral Degeneration with Macula changes; Ocular Symptoms of Disease of Pituitary Body. The new operations added are: Selerotomy with a punch (Holth's operation); Preliminary capsulotomy (Homer Smith's method for unripe

cataract); Iridotasis (Borthen's method) and Thread Drainage of anterior chamber (Zorab's operation) for glaucoma. Extraction of cataract in capsule after subluxation of lens with capsule forceps (Stanculcanu's operation and a modification of same by Arnold Rapp).

Capsulo-muscular advancement with partial resection (Ziegler's operation) and Tenotomy of Inferior Oblique mus-

cle work.

Under lachrymal diseases — Window Resection of Nasal Duct (West's Operation for Stenosis of Lachrymal Duct).

Dr. Wm. M. Sweet's new method of localizing foreign bodies in the eye is given in detail.

The Mortality from Cancer Throughout the World. By Frederick L. Hoffman, LL. D., F. S. S., F. A. S. A., Statistician the Prindential Insurance Company of America; Chairman Committee on Statistics, American Society for the Control of Cancer; Member of American Association for Cancer Research; Associate Fellow American Medical Association; Associate Member American Academy of Medicine.

An excellent resume of the statistics upon this important subject. Newark, New Jersey, The Prudential Press. 1915.

New and Official Remedies, 1916. Containing descriptions of the articles which have been accepted by council on Pharmacy and Chemistry of the American Medical Association. Prior to Jannary 1, 1916. Chicago. Price \$1. American Medical Association. Five hundred and thirty-five N. Dearborn St. 1916.

This book contains a list of medicinal substances which, having been examined by the Council on Pharmacy and Chemistry of the American Medical Association prior to January 1, 1916, and appearing to comply with the rules of the Council, were accepted for inclusion in New and Non-official Remedies. The acceptance of the article included in the book was based in part on evidence supplied by the manufacturer or his agent, and in part on investigation made by or under the direction of the Council. Criticism and corrections to aid in the annual revision of the matter are requested.

The Editor advises all members to secure a copy of this book as it contains a world of valuable information.

# The West Virginia Medical Journal

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#### ORATION IN SURGERY

STONES IN THE GALL BLADDER\*

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Read before the W. Va. State Medical Association at the meeting in Wheeling, May 16, 1916.

Since at the present time, the only curative treatment for gall stones is by means of a surgical operation, and as all other methods of treatment must be classed as palliative, are we then to consider that every case diagnosed as gall stones is to be immediately treated surgically? In a general way the answer to this question is, "Yes," but there are some important reservations.

1. During an attack of jaundice, operation is to be postponed long enough to give the stone a chance to slip into the duodenum. If, however, the jaundice is increasing, operation should not

be indefinitely postponed.

2. Operation will usually be postponed when gall stones complicate pregnancy.

3. During other severe illnesses, one

would wait until convalescence is well established before operation for stones.

- 4. In operations for scrious abdominal conditions, it would be wiscr not to complicate the operation by the removal of inter-current gall stones.
- 5. In the aged, not so much in years as in decrepitude, in the presence of Bright's disease, diabetes, arteriosclerosis, alcoholism, etc., the case of uncomplicated gall stones may well be treated palliatively. We will then be balancing the risk of operation against the possibility of gall stone complications.

The last mentioned contra-indication to operation, namely, the infirmities of age, has as its corrolary the advisability of diagnosing gall stones in the young, in the gall bladder and in the absence of complications. Gall stones will not be operated on under ideal conditions unless either a diagnosis is made or unless at least a diagnosis is made of upper abdominal discase sufficiently severe to warrant abdominal exploration. I cannot understand the frame of mind of certain physicians who diagnosed gall stones in a young, strong married woman but considered the attacks not bad enough to warrant operation. My advice differed from theirs but has not been followed and the patient

awaits infection, jaundice, obstruction, perforation, or other complications before being put in the surgical class.

We are passing through a stage of development with cholelithiasis not unlike that of twenty years ago with appendicitis. Now nearly all physicians urge operation whenever a diagnosis of appendicitis is made, but many men in the profession will have to give place to others and some modify their point of view before a similar position will be held by the profession at large regarding gall stones.

There are many reasons for urging the early diagnosis and early surgical treatment of gall stones before the stage of complications. The uncomplicated case of gall stones (whether treated by cholecystostomy or cholecystectomy) may be as simple as an appendectomy, while the complications may try the resources of the best surgeons and become of serious moment to the patient. Recent statistics bring out this point.

In the Mayo report of 4,000 gall stone cases, the mortality is given as 2.75%. The uncomplicated gall bladder cases, 2,920 in number, had a mortality of 1.8%. Among the common duct stones (492 cases) the mortality was 8%. (Collected papers 1911. Page 150.) The uncomplicated cases gave a mortality one-fourth as high as the common duct cases. The common duct cases occasioned about 12% of the total number of operations.

Erdmann (December, 1914, Annals of Surgery) presents an analysis of 270 cases of biliary surgery with a mortality of four plus per cent. The mortality of the common duct cases was eight per

cent.

I have been interested especially in the reports of gall stone surgery in the "Medical and Surgical Reports of Roosevelt Hospital for 1915" for the reason that I believe their type of cases is very like my own. The cases were operated on by a considerable number of men and seemed to include many severe cases. The report for the five years, 1910 to 1914, includes 135 gall stone cases. The total mortality of their gall stone operations was 11 9-10%, or, excluding the cancer cases, 10%. When

the common duct was opened, the mortality was 25%. Different operators vary in the number of their cases demanding common duct surgery. It is usually 12% to 15%. In my cases the per cent. has been slightly higher.

These statistics are enough to show that the mortality from common duct surgery at the hands of many operators is several times as high as for simple cholecystostomy or cholecystectomy. Among my own cases, I find no death recorded from an operation for cholelithiasis in a patient under fifty years of age.\*

(I have just lost a patient about fifty years old from ædema of the lungs.)

If morbidity is considered as well as mortality, the contrast between the simple and complicated cases becomes even more apparent. At Roosevelt Hospital, one-half the common duct cases required two operations; either, one before coming to the hospital, or two in the hospital. Whereas the simple cases require a hospital residence of, roughly, two and one-half weeks, the complications may prolong the convalescence for months and leave the patient with a permanent weakness of the abdominal wall.

The chief argument in favor of procrastination is based on the notion that gall stone disease is very common, especially among women, and that most of the cases give no symptoms. In recent years, this notion has been much questioned. For obvious reasons, statistics of the frequency of stones among the population in general are very unreliable if based on autopsy records of alms houses. And further, the more carefully upper abdominal symptoms are analysed, the larger grows the gall bladder group to the reduction of the acute and chronic functional indigestions. Delay then means to the patient a continuance of illness and when the operation does come, a prolonged convalescence greater danger of death. Every gall bladder series contains a few cases of cancer of the gall bladder, nearly all of which occur as a complication of gall stones. I have operated on two of them.

In the past three years, I have twice operated successfully and once unsuccessfully on gall stone intestinal ob-

struction. This variety of obstruction is very deceitful because each time that the stone slips along the intestine, there may be a remission of symptoms. But it is not necessary to enumerate the varieties of cholæmia, infection and intercurrent disease which add so considerably to the gravity of the condition in the complicated and aged case.

Before going into the diagnosis, it may be well to epitomise the story of cholesterin so far as it is now under-

stood.

Cholesterin is insoluble in water but is found in bile roughly in the proportion of two parts of cholesterin to one thousand parts of bile. It is held in solution in the bile by the salts of glycocholic and taurocholic acid. A precipitation of cholesterin, therefore, would be favored either by an excess of cholesterin in the bile or by a decrease in the

suspending bile salts.

The researches of Naunyn date back about twenty to twenty-five years and furnish the basis for the infectious theory of the origin of gall stones. He believes that cholesterin in the bile is not due to cholesterin taken with the food nor is it a true constituent of bile as secreted by the liver cells. He considered that it results from the breaking down of body cells and the small amount of cholesterin found in the bile had its origin in the gall bladder and gall ducts, being derived from their lining epithelium. In inflammation, the destruction of cells is increased and hence the increase of cholesterin. It is well known that cholesterin does originate in this manner from cellular disintegration, for instance, in a branchiogenetic cyst, the content is usually rich in cholesterin. Following along this line is the work of Exmer and Heyrowsky (Die Pathogenese der Cholelithiasis, Archiv fur Klin. Chirurgic, Bd. 86, 1908, S. 609.) who in 1908 showed the important action of the typhoid colon group of bacteria in splitting up the bile salts. We might say in a very general way that the present tendency is to lay emphasis on the infectious element in the origin of gall stones. This reduces the origin of gall stones almost entirely to a matter of the pathology of the liver ducts. But the

infectious theory of cholelithiasis has not been in undisputed possession of the field. The other theory which we rather associate with French research seeks to lay a basis for the trouble in a rather wider pathology. It is spoken of as the stasis theory and concerns itself, among other matters, with the composition of the food, the cholesterin content of the blood, the action of the adrenal body and

the corpus lutean.

The normal blood contains 1½ grams of cholesterin per liter. Under some conditions that are now becoming fairly well understood, that amount may become increased to, say 2 to 31/2 grams per liter. (Biologische Studien Uber die weibliche Keimdruse, Wiener Klin. Wochenschrift, 1911-12.) Herman and Neumann, and Chauffard have shown that during the late months of pregnancy and for the early months of the puerperium, the cholesterin is notably increased in the blood and this increase seems to be a fairly constant phenomenon. Next in importance as a cause of hypercholesterinæmia comes typhoid fcver. Chauffard (Lecons sur la Lithiase Biliaire, 1914) says the cholesterin curve is the reverse of the temperature curve. A hypocholesterinæmia of the febril days is succeeded by a hypercholesterinæmia of the convalescence. Both arteriosclerosis and Bright's disease increase the cholesterin of the blood. As we would expect, cholesterin is increased by resorption in cases of jaundice of any cause.

Cholesterin is a product of tissue or cellular destruction, that is, katabolism, and it seems definitely proven also that the blood content may be increased by administering cholesterin itself or foods rich in it. Grigaut maintained that cholesterin has its origin from the suprarenal body and corpus lutea. Rothschild (Proceedings N. Y. Path. Soc., Vol. 14, No. 6, Oct. 1914) of Mt. Sinai Hospital produced a hypercholesterinæmia in rabbits after the removal of the ovaries and adrenals, hence these organs cannot be considered of the importance which he had attached to them cholesterin makers. It is admitted, however, that cholesterin is found in abundance associated with the lipoids of these

organs. It seems not unlikely that an increase of the cholesterin of the blood would be followed by an increase of cholesterin in the bile though this is difficult of demonstration. But at present, it seems rather definitely determined that gall stone cases are also cases of hypercholesterinæmia.

But even admitting that cholelithiasis is preceded by a hypercholesterinæmia what is the primary cause of its precipitation and agglutination in the form

of gall stones?

One answer is already given to the question of etiology is that it is a matter of infection. Low grades of inflammation increase the cholesterin and split up the bile salts. At present, one can scarcely deny that inflammation takes an important part in the pathology of cholelithiasis, at least after stone formation has begun. But there is the other theory deserving of attention which has been elaborated by Chauffard and may be called the theory of stasis. There is a great deal to say in its favor.

1. The greater frequency of gall stones in women with no very obvious explanation except the occurrence of pregnancy is against the theory of an

inflammatory origin.

2. Negative bacterial findings are more common than positive ones and

should be given equal weight.

3. Stones in association with bacterial infection are not the pure cholesterin ones.

- 4. Typhoid frequently involves the gall bladder, but the number of cases of gall stones following typhoid in any reasonably short time is conspicuously small.
- 5. In the cholesterin nucleus of stones no fibrin and scarcely a demonstrable quantity of albumen is found, while in the pigment envelope of these stones, albumen and fibrin are found in considerable quantity as would be expected in an inflammatory process.
- 6. Bacteria may be secreted with the bile as well as with the urine and may perfectly well infect the stones secondarily. It has been experimentally shown that bacteria can penetrate from the outside to the center of stones and Chauffard has shown that after steril-

izing the exterior of the calculus then placing the calculus in a culture medium, that the bacteria in the center can move outward and infect the culture medium.

Dr. Allen Whipple of New York, has done some interesting work in an effort to get something of clinical value from cholesterin determinations in the blood in cases of suspected gall stones. He finds it is true that a high cholesterin content is strongly suggestive of stones, but there are occasional exceptions, and his results as a whole have been disappointing from a diagnostic standpoint because there are so many disturbing elements such as Bright's disease, arteriosclerosis and fever above one hundred degrees Fahrenheit. These must all be taken into account before one knows how much reliance to place on the blood examination.

This is very disappointing. It was to be hoped that at last we were to find a clinical determination which would admit an element of accuracy into the diagnosis of gall stones where now we are dependent on the uncertain method of clinical history.

Let us take some of the diagnostic factors of gall stones for consideration.

Sex: Some report the proportion of the sexes effected as low as one man to two women (Roosevelt Hospital). The usual statement is one man to three or four women. In my own cases there has been but one man to five women. Chaufford, as mentioned, sees but one reason for the disparity, namely the hypercholesterinæmia of pregnancy. Others mention the use of corsets as perhaps favoring bile stasis. Anatomical ulcers in the stomach and duodenum are more common in men than women, hence in upper abdominal pain sex becomes a factor in the diagnosis since, in women, one would lean to the gall stone diagnosis and in men, to ulcer.

Age: Moynihan gives forty-five as the average age of gall stone cases at the time of operation. Chauffard, a physician, has attempted in his cases to determine the age of the onset of the first gall stone attack and gives the average for women as thirty-seven years and for men, forty-two and one-half years.

Among my cases, the average of all is forty-four, and the average for men is fifty years at the time of operation. The extreme ages in my cases have been sixteen and seventy-two years (Chauffard, ten and seventy-five). Many a gall stone case passes into the complicated stage because of the reluctance of physicians to diagnose gall stones in the twenties. About one-fifth of my cases have been operated on before the age of thirty. The ages of the twelve youngest were sixteen, twenty-one, twentythree, twenty-five, twenty-six, twentysix, twenty-six, twenty-seven, twentyseven, twenty-eight, twenty-eight, twen-When we speak of forty-four as the average age, it is well to emphasize that just as many are under that age as above it. I have just operated on a patient twenty-three years old at St. Luke's Hospital for common duct stone. The diagnosis when I saw her with fever and jaundice was not difficult. As she described her complaint, she had had pain at intervals for six or seven years coming in attacks and located below the ribs on her right side. Some years ago her appendix had been removed, later a nephrorrhaphy was done and not long ago a diagnosis of kink in the ureter was made as a result of combined X-ray and cystoscopic examination. During these years, as operation showed, she had had attacks of peritonitis, had formed hundreds of stones and developed a cholecystitis which rendered the gall bladder wall three-sixteenths of an inch in thickness. I doubt whether, if she had been fifteen years older, so much unsuccessful surgery would have been done. But, the attacks dating back to sixteen years of age, made the gall stone diagnosis seem unlikely, if indeed, it was ever considered, though the location of the pain was just right for it.

Inflammation: I have no personal evidence to indicate that attacks of catarrhal jaundice are later followed by gall stones. I recall but one such case.

Typhoid: Considerable prominence has been given to the subject of typhoid in this connection since first typhoid bacilli were found embedded in gall stones years after recovery from the disease. I never fail to question a suspect-

ed case of gall stones as to a previous typhoid, but get no diagnostic aid from the answers. Very few acknowledge a typhoid. That typhoid is more common among gall stone cases than among others of the population, I would hesitate to say. Chauffard says it is not. Rather curiously, in the only two cases of mine in which a pure typhoid culture was obtained from the gall bladder, typhoid fever has been most vehemently denied. One patient was a girl of sixteen operated on for an acutely inflamed gall bladder resulting from an impaction in the cystic duct. She said she had never lost a day from work or been sick in bed since she could remember. The other, a lady of fifty, when told of the findings, was sure she had never had the diseasc. I have had Widals made in some of the younger subjects who denied a previous typhoid, but always with a negative result. Remember that typhoid may follow gall stones, and as Chauffard has said, the germs may penetrate the stone. So whether a patient answers yes or no to typhoid, we are not in the least aided in making a gall stone diagnosis.

Hyperchlorhydria: The examination of stomach contents has proved disappointing. Some years ago I happened to find gall stones associated with hyperchlorhydria and began to think this a sign of stones. Later, I temporarily abandoned a diagnosis of gall stones in a certain case in favor of chronic alcoholic gastritis because of a low acidity. Later, exploration revealed stones. Now, whatever be the stomach reaction, I consider it independent of the gall bladder.

The X-ray as an aid in diagnosis will be reserved till the lantern slides are shown.

Indigestion and pain are the cardinal symptoms of gall stones. We are scarcely in a position to diagnose them in the absence of pain though it is conceivable that an X-ray examination might put us on the track.

Indigestion: The patient says she suffers from dyspepsia but when we ask her to particularize, she may be surprisingly vague. There may be no nausea or vomiting, and heartburn and hyperchlorhydria are not prominent. There is, however, constipation, gaseous eruc-

tation and a feeling of distention shortly after meals. This reaches the degree of discomfort but not actual pain as in the case of ulcers. Moreover, the patient may be and often is well nourished. Many are conspicuously healthy in appearance. A meal creates the sense of discomfort and the patient attempts to relieve the discomfort by belching gas. The indigestion may precede by months or years the history of pain. On the other hand, patients at the time of the first gall stone attack may deny emphatically any previous indigestion. From a diagnostic side, let us put it this way: When an indigestion is sufficiently prominent in the patient's mind to bring the matter to the physician's notice, perhaps repeatedly, when ulcer. anæmia and appendicitis can be ruled out, and when indigestion continues in spite of the relief of constipation, the diagnosis of gall stones should be considered even in the absence of pain. How often has a doctor treated a case of indigestion continuously without suggesting to himself or patient the diagnosis of gall stones then an attack of pain comes, the nearest doctor is called in and at once makes the correct diagnosis. The patient advances rapidly to the notion that she has been treated for years for her stomach when the trouble was in the gall bladder. To say the same thing in another way, dyspepsia should not appear as a diagnosis but as a symptom calling for explanation and when overeating, lack of exercise, constipation and anæmia have been removed as causes of functional indigestion, if the dyspepsia continues, gall stones, ptosis, or other structural disease should be considered.

Pain: A great deal could be said regarding pain but I must be brief. In the student's mind, cholelithiasis is associated with pain in the right shoulder blade and over the gall bladder but the pain may be located in a variety of places or even on the left side. The commonest site for pain when the trouble is confined to the gall bladder is in the epigastrium. This location seems to mislead those who do not see much of this work because they assume that it ought to be over the gall bladder. A fairly common location is in the middle line

a couple of inches above the navel and this location does not necessarily indicate choledochus or pancreatic disease. When pain is located over the gall bladder, it indicates peritonitis, adhesions or structural changes. Emphasis should be laid on the purely epigastric location of the pain when the stones are confined to the gall bladder. Pain in the back due to cholelithiasis is very likely to be referred to the shoulder or shoulder blade on the right side. With the definite epigastric pain, patients often say that the pains go straight through to the back, that is, to the spines of the eighth to twelfth dorsal vertebrae.

The severity of the pain is of diagnostic significance for when pain is very severe in the upper abdomen, it is more likely to be of gall stone origin than any other. But there are many attacks of pain in which the stones do not migrate into the ducts and in which the pain is but moderate. Gall stone attacks occur with varying frequency in different and in a given case, the intervals between attacks may vary widely. It seems as if night attacks were more numerous than day ones. We say as a rule, and it is a matter of diagnostic significance. that the pain bears no relation to food taking but it is better not to be too insistent on this. I recall cases that, according to their own account, could be kept fairly comfortable by starving themselves and others who were quite sure that a hearty meal would precipitate an attack after bed time. would seem to indicate that gall bladder contractions, gall bladder distention or, perhaps it would be safer to say, something concerning gall bladder activity. predisposes to attacks. The term "Biliary colic," is a misnomer if by that we mean pain of liver origin as distinguished from vesicle or choledchus pain. Presumably the greatest activity of the gall bladder is some hours after a meal. In the cystic duct, and the same is true of the ureter, when a stone becomes impacted, pain soon ceases but with each movement of the stone, pain recurs.

While in cases of peritoneal inflammation patient is prone to remain quietly in one position and has his pain increased by movement, I have seen a gall stone patient run about the room during an attack like a caged animal. The posture of the patient in bed is variable. Many double up and lie on the side, while others sit up, bending forward to relax the recti and this posture with abdominal pain usually indicates gall stones.

Nausea and vomiting as symptoms of biliary colic deserve consideration. Vomiting is often entirely absent in contradistinction to purely gastric attacks though vomiting at the beginning of the colic is not unusual. Nausea will be nearly always admitted as a symptom but close questioning indicates that as a rule there is the feeling of fullness, constriction or distention in the upper abdomen and the patient draws the eonelusion that he might rid himself of the pain if he could only get rid of gas. Hence, it is that they take hot water or mustard or simply stick the finger down throat in an effort to excite nausea and vomiting even when it is not spontaneous. Many times in the absence of food in the stomach, they find themselves quite unsuccessful in getting up gas. Nor does a physical examination in eases indicate much tympanites. the patient is unsuccessful in relieving his pain by resort to vomiting or belching, an enema is often tried with varving success both as to gas and pain. A patient of more than usual intelligence with an acute gall bladder attack, was firmly convinced that he was suffering from intestinal obstruction. It seems likely that the feeling of distention and constriction is related to the condition of the gall bladder and it is only in the patient's mind associated with tympanites.

Physical examination between attacks may reveal nothing, or only slight tenderness localized over the gall bladder. In other cases, a distended gall bladder may be felt. An abdominal support had been applied in one of my cases under the impression that a hydrops of the gall bladder was a kidney; and I once saw a kidney incision made under a similar impression. In two cases seen recently, there has been very considerable difficulty in deciding whether a tumor was a large kidney or a distended gall bladder. The large gall bladder is usually

directed straight downward directly over the right kidney. In a great many cases, when a mass is felt below the tip of the ninth and tenth rib, it is not the gall bladder itself that is felt but muscle spasm or an indurated mass of inflammatory material, chiefly thickened omentum.

After the reading of the paper, lantern slides were shown and attempt was made to show the value of the X-ray in the diagnosis of gall stones in the following ways:

- 1. In not far from 15% of patients suffering from gall stones, the stones may be seen on the X-ray plate. The question of whether a stone would show is in no way dependent upon its size. Stones no bigger than shot may appear in the plate while others the size of robins' eggs may fail to show. It is a question of the quantity of calcium in the composition of the stone. (Fig. 3.)
- 2. As the ealcium containing pigment resulting from inflammatory changes is usually deposited on the outer surface of the stone, some stones will appear as rings, that is, the cholesterin nucleus not showing while the surface pigment casts its shadow.
- 3. X-ray pictures of the gall bladder containing stones and removed from the body, often show that the stone casts a shadow no more dense than the gall bladder itself. (Fig. 1.)
- 5. When the enlarged gall bladder does show, its presence and enlargement are at times made apparent by a deformity which they produce in the duodenal cap or in a portion of the duodenum or stomach. (Fig. 4.)
- 6. The X-ray is often negatively of value. In many cases thought to be gall stones from the clinical side, the X-ray may show evidence of kidney stone, gastric or duodenal ulcer or other lesions which would explain the symptoms.

In general, we find that the X-ray is by all odds the most valuable of our laboratory aids in the diagnosis of cholelithiasis but it should be used in conjunction with other evidence rather than in attempting to base the positive or negative diagnosis on its findings alone.

#### 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 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. COMPOSITION 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 the members of the component county medical societies.

Sec. 3: Delegates: Delegates shall be those members who are elected in accordance with the constitution and bylaws 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 that session, but no vote.

## ARTICLE V. SESSIONS AND MEETINGS

Sec. 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, delegates 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 Commit-

tee of Arrangements.

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.

### ARTICLE VI. 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 county societies, (2) the President and Secretary of this Association ex officio.

# 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 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. 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 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.

# ARTICLE IX. 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 fourfifths vote of the delegates, a quorum being 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, for salaries of officers, for expenses of Journal, for medical defense, and for such other purposes as will promote the welfare of the profession. All resolutions appropriating funds must, if there be no objection to their passage, be referred to the Advisory Committee before action is taken thereon.

### 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 XI. THE SEAL

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

### ARTICLE XII.

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.

#### BY-LAWS.

### CHAPTER I. MEMBERSHIP

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. GENERAL MEETINGS

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.

### CHAPTER III.

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 measure 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.

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 House 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. 12. 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

day of the Annual Session.

Sec. 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

Sec. 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.

Sec. 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.

Sec. 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.

Sec. 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. 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 Sessions. He shall, with the cooperation 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 Delegates, 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 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 questions involving the rights 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 Advisory Committee 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 As-

sociation 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 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 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 Comists,

mittee 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 qualification 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

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 ease 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 State and County 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 permis-

sion 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 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 lieense 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 Secre-

tary 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 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 for the term of three years, and one to be elected every year thereafter.

See. 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 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.

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.

### CHRONIC LYMPHATIC LEUKAEMIA

In dealing with this subject I will not undertake to give you a description of the disease, but rather to point out a few points that I have observed that may throw some light upon the etiological factor concerned in this disease, or probably stimulate a little closer observation of the points embodied in this paper.

I have seen three cases of Chronic Lymphatic Leukæmia in the past six months. A brief history of each will be

given in this paper.

As you all know, the Leukoblastic Tissue is effected in the different varieties of Leukæmia. They undergo more or less hypertrophy with definite pathological changes. In taking the history of these cases, I find that in each case the present trouble dates from an attack of Influenza or Tonsilitis. Instead of the patient recovering from the Influenza they gradually become anemic, lack energy, loss of appetite and some shortness of breath with elevation of temperature at times. You are usually not consulted before there is considerable enlargement of the glands of the neck, axilla and inguinal region. I attribute this late application for relief to the insiduousness of the onset of the disease and lack of any definite pain or discomfort. The diagnosis of this disease is definitely made by blood examination and with that we will be chiefly concerned. blood picture of Chronic Lymphatic Leukæmia is as follows, viz: a hyperleukocytosis, which may range between 12,000 to 500,000. The highest in this series was 231,000 leukocytes per cubic The differential millimeter of blood. leukocyte count shows a lymphocytosis with absence of septic factor; and in this form of leukæmia the percentage small lymphocytes range between and 97%; 97% being the highest in this series. The large mononuclear leukocyte percentage being about normal or slightly diminished. The morphological examination of the cells do not reveal any great change. They tend to preserve their normal contour and make-up, although we may see a few large lymphocytes in this condition.

The polynuclear neutrophil-leukocytes are greatly diminished, but no decided structural change is observed. Eosinophiles are decreased in percentage, but you may encounter a few neutrophilic and eosinophilic myclocytes in the specimen. The plaques are usually increased.

The Erythrocytes are usually diminished greatly in number so that the oligochromemia usually exceeds the oligocythemia thereby resulting in a lowered color index. The total number of erythrocytes range from about 1,000,000 up, or they may be lower. The hæmoglobin may be as low as 30 to 40 per cent. Now if we note the blood characteristics of Influenza, we will see that there is a hyperleukocytosis with absence of septic factor. The polynuclear leukocytes are diminished in percentage while we have a corresponding increase in the lymphocytes of the micro-lymphocitic variety. The percentage of these is between 30 and 40, but may be lower or higher, according to presence or absence

of complications.

One characteristic feature of the percentage of micro-lymphocytes is that it tends to keep up for a number of days after the temperature has returned to normal, following the attack of Influenza. In observing the blood picture in these two diseases we will note quite a number of points in common between the two. The essential difference as far as the blood picture is concerned is a difference in degree. Is there any definite connection between the Influenza bacillus and chronic lymphatic leukæmia? Is it not possible for different strains of the Influenza bacillus to cause the different varieties of leukæmia? this be the case I can see that we can offer leukæmia patients some chance of recovery by preparing serums and vaccines of the same. Anything that would lower the high mortality from this disease would be welcomed with open hands. I hope by presenting this point I may get your views upon the subject, or provoke a discussion whereby we may get a better knowledge of the etiological factors concerned.

#### CASE NUMBER ONE

Mrs. R., age 50, housekeeper, married, no children. Been apparently healthy all her life until about eighteen months ago while visiting on the Pacific Coast she developed an attack of Influenza which lasted four or five days. She apparently recovered but soon noticed she

was getting a little short of breath and her skin a "little whiter" as she expressed it. At times became very hot and was sure she had a temperature. About three or four months after she had the attack of Influenza she noticed that her neck was getting larger than normal. It was at that time she consulted a physician and was told that there were probably tuberculous glands in the neck. I saw her about four months ago, or fourteen months after the time she dates the beginning of the trouble. Upon examination of the neck, which looks about twice as large as normal, I found all the glands in the neck, axilla and inguinal region were greatly larged. Also slight enlargement of the spleen. The enlarged glands of the neck extended down into the chest cavity; being out in the damp or a slight cold made her more short of breath. Heart showed a hæmic murmur, otherwise patient normal. Blood examination showed red corpuscles 3,320,000; hæmoglobin 54%; total leukocyte count 117,000; small lymphocytes 94%; large mononuclear leukocytes 1%; polynuclear leukocytes 4.5%; eosinophiles, .5%. A few oversized red blood cells were found; also one or two large lymphocytes, and an increase in the number of placques. The blood in this case has been examined repeatedly with slight fluctuations above and below the figures given above. Patient still living and getting along fairly well, but the glands still increase gradually in size.

#### CASE NUMBER TWO

B. B., age 3½ years, female. Mother said she noticed the child seemed to gradually get fat, especially around her neck. Previous to this time she had had a bad case of Tonsilitis with a purulent otitis media which gradually got better. The child since this attack of Tonsilitis gradually became very pale, the neck became larger and the mother said the child would stop and rest while at play saying "she was tired." When I saw her she was very pale, glands of neck, axilla and inguinal region moderately enlarged, slight enlargement of the spleen. She was running a very irregular temperature and had to lie quiet as exertion caused shortness of breath. Heart showed a hæmic murmur, but no evidences of valvular involvement. Briefly the blood examination showed red blood corpuscles 2,118,000; hæmoblobin 35½; total Leukocyte count 231,000.

Differential count: Small Lymphocytes 87%, large Mononuclear Leukocytes 3.5%, Polynuclear Leukocytes 7%, Eosinophiles 2%, Basophiles .5%.

The second examination showed higher total leukocyte count with the small lymphocytes going up to 97%. The patient died within ten days of my first examination.

#### CASE NUMBER THREE

Girl, age 8 years. Had a peri-tonsilar abscess about a year ago. Mother says "child has been going down hill ever since." Examination reveals no evidence of t. b. or Lues. Heart, lungs and gastro-intestinal tract apparently normal. The glands of the neck, inguinal region, axilla, moderately enlarged. Blood examination showed, Red Blood Corpuscles 4,125,000; Hæmoglobin 70%; Total Leukocytes 18,120; Small Lymphocytes, 58%; Large Mononuclear Leukocytes, 9%; Polynuclear Leukocytes, 31,5%; Eosinophiles, 1.5%; Basophiles, negative.

Very large number of placques and a number of oversized red blood cells with a few large lymphocytes. Only one blood examination has been made in this case, as I only saw her two days ago. This child runs no temperature but has "hot spells" at times, as her mother calls it.

In conclusion I wish to state that I firmly believe that the Influenza Bacillus plays a very important part in the etiology of Leukæmia, if not the causitive factor, either directly or indirectly. I know not what the intermediate physiological or pathological changes occurring in the body, or the leukoblastic tissue before the definite onset of the leukæmic state are, but nevertheless I am reasonably assured that the changes from the normal to those of this disease must have some predisposing or exciting factor other than that of heredity which seems to

occupy and satisfy the thinking minds of some of our observers. We definitely know that Syphilis, Tuberculosis, Typhoid Fever and Hodgkins Disease are accompanied by a more or less hyperplasia of lymphoid tissue with a corresponding micro-lymphacytosis in a varying degree. Furthermore, this hyperplasia is directly caused by the respective organisms or their toxins, and why not a leukæmic hyperplasia caused by the Influenza Bacillus or their toxins? I will leave that with you for solution.

T. E. Vass, M. D., Bluefield, W. Va.

SANITATION ON CABIN CREEK, W. VA., AFTER FLOOD, AUGUST 9, 1916.

Ellis S. Tisdale, B. S., Assistant Engineer State Dept. of Health.

The question of proper sanitation of Cabin Creek was brought to the attention of the Department of Sanitary Engineering of the State Department of Health by Dr. S. L. Jepson, commissioner, on the morning of August 10, following the disastrous flood of the previous day, and at 7 a. m. one of the engineers started for the flood zone, the other two following as soon as possible. The flood, which was the greatest with which West Virginia has ever had to deal, came with extraordinary rapidity, destroying 18 miles of Chesapeake & Ohio Railroad, and making thousands of people homeless in a few hours' time. Since almost the entire water supply of the 10,000 people who lived on creek was derived from open v which were overflowed by the polluted creek waters, there arose a very present danger of a severe typhoid epidemic. Immediate steps to prevent this had to be taken.

The Department of Sanitary Engineering, Mayo Tolman, director, and assistant Engineers Ellis S. Tisdale and Andrew N. Wardle, decided to go into the flood zone, establish temporary head-quarters at a central point, and handle the problem from this place. Under the

influence of Gov. Hatfield the first and second battalions of the Second West Virginia Infantry were ordered into the flood zone to restore order, carry in food and relieve conditions in every way possible, and since the hospital corps of the regiment moved into the field also, Mr. Tolman decided to procure the co-operation of the United States Hospital corps and the mine doctors with our own department in order to give the antityphoid treatment to all the people in the flooded zone. Five thousand antityphoid vaccines were ordered immediately by telegraph from the U.S. Public Health Service and fifteen hundred complete treatments from Parke, Davis & Co., and later three thousand doses from the National Vaccine and Antitoxin Institute.

While awaiting the arrival of the vaccine, a systematic campaign for the disinfection of all wells which had been contaminated by the polluted creek water was begun. Since the railroad was practically entirely destroyed, nine bridges having been completely demolished in a distance of ten miles, and since the country roads were not anywhere to be found, the engineers were obliged to carry all the chloride of lime into the district on their backs. Even pack mules could not make their way over the debris which lay piled in great masses everywhere along the creek bed.

After proceeding to a point about ten miles up Cabin Creek, burying deal animals and caring for dead bodies as they went along temporary headquarters were established in a partially ruined Y. M. C. A. building at Eskdale. In this locality the slimy mud was two and three fect deep in nearly all the remaining houses. The majority of the houses were unfit for habitation, the people herding together in the few houses left touched on the hill sides. A campaign of publicity was now undertaken by the sanitary engineers, who spent much time and effort getting the news spread up and down the valley that free vaccination against typhoid would be given at certain definite points at definite specified times. The doctrine of typhoid prevention was earnestly preached to the people throughout the valley, and precautions given about boiling the water until the wells could be cleaned and disinfected.

Co-operation was effected with all the mine company doctors on the creek and the hospital corps, so that the vaccine was given to the people just as soon as it could be brought up the valley. Central points such as churches, company stores and doctors' offices were used as headquarters in administering the vaccine. The people responded remarkably to the campaign of publicity, which had at certain points been carried on means of placards that were either posted up or carried by small boys about the devastated towns. All the company doctors used the vaccine distributed them, and calls were soon received at the temporary headquarters at Eskdale for further doses.

During the first few days, all the open wells which had not been filled with mud and sand, and also the drilled wells were thoroughly disinfected by chloride of lime treatment. In many places, details of soldiers were stationed at points to see that wells were cleaned and that proper disinfection was carried on. In addition to this the soldiers aided the people in digging out the dead hogs and poultry which had washed beneath the houses. As soon as the railroad company repaired the tracks so that freight might be carried in, two carloads of line were shipped into the flood zone. This was used about the houses to sweeten up the grounds and make homes habitable. So freely was the lime sprinkled about that the ground in many places looked as though a small snow squall had struck

the ground in many places looked as though a small snow squall had struck the locality.

The department of sanitary engineering remained in the flood zone about two weeks to be assured that all pre-

cautions had been taken. The one striking thing that stood out above all others was the anti-typhoid innoculation record. It exceeded the best hopes, for when the figures were gathered together it was found that approximately five thousand people had received the vaccine. This constitutes, it is believed, a new record in vaccination of civilians.

Of course, the entire United States army has received the treatment with the won-

derful result that typhoid has been practically stamped out of the army, but the Cabin Creek case was one dealing with civilians, and a mining people, who are very difficult to handle. Credit for these results should be given to the untiring work of the mine company doctors, the United States army hospital corps, and the fine spirit of co-operation which everywhere prevailed through the efforts of the representatives of the State Health Department.

A safe drinking water supply has been provided for the people, and all good drinking water wells placarded, and up to the present time no typhoid fever has developed. It is earnestly hoped that these efforts have saved West Virginia from a great typhoid epidemic, following in the wake of the devastating flood. At any rate it is quite certain that, due to the strenuous measures adopted, there will be much less typhoid than overwise

would have occurred.

### Communications

Dear Dr. Bloss:-

The below is a correct copy of a letter recently received from an applicant for license to practice. Print if you think it worth the space.

Sincerely, S. L. Jepson.

May the 27 - 1916.

The deepatment of of the Board of Jentslments. I want to come before the Board of examerianr, to get a Deploma. to Practice medcicine. I have Practicets medicine About 20. Years and under this new Law it gives me a Deploma. So I Just have \$100.00 Dollars in the first nashel Bank of ..... County. Aand I want You all too write me at oncet and tell me all about this matter. I Want You to send me a Applacation for a examanation Aand tell me when the Board meats I have a good edgerreation. I can give You all a good recemendacion by Jude ..... of hour Conty ere any good man of hour County of

Dr.....

#### NECROLOGY

A CONTRACTOR OF THE PROPERTY O

The death of Dr. E. Forest Harbert, which occurred last Thursday afternoon at four o'clock at the home of his brother, James Harbert in West Shinnston, cast a gloom over the entire community, and although he was known to be near the end for several days past, yet his friends could hardly believe the announcement that he was dead. Taken so early in life and right at the threshold of what promised to be an unusually successful career as a practicing physician, his untimely demise is indeed to be deplored. Tuberculosis was the cause of his death.

Dr. Harbert had never enjoyed robust health, but he was possessed of an optimistic spirit and a strong will and he apparently never gave up until the last. Doubtless he realized that he was destined to an early grave, yet he murmured not nor complained, but on the other hand was an unusually cheerful soul and those with whom he associated would never have known of his frail physical condition had they waited for him to speak of it, until he was compelled to take his bed a few weeks ago. Last summer Dr. Harbert underwent a severe illness extending over several weeks and it was feared that he would succumb at that time, but it was decreed otherwise and his friends rejoiced in his partial recovery and hoped that he would be spared for many years. His late illness seemed hardly as severe until the last few days when he suffered from hemorrhages, which hastened his death.

Dr. Harbert's nature was to be gentle and charitable and he seemed to be happy when he could be of service to his fellowman. His chosen profession was in keeping with his disposition to serve. He endeared himself to the people of his boyhood neighborhood early in life by his unflinching devotion to his mother and his watchfulness and attentiveness to her every want during the long ill-

ness that preceded her death.

That noble trait of character remained with him and made its impress upon his life. He was always ready to give the best that was in him. Those to whom he administered in sickness know of his willingness and his desire to aid. He was sober and upright in his living and was a tireless worker, knowing that success in any calling meant close application. He was building up a good practice and his future held brightprospects, had his health not given way.

Dr. Harbert located in Shinnston soon after his graduation from a medical college at Baltimore in 1913. He first did relief work at Wyatt for a physician there and came to this city to take charge of Dr. Rinehart's practice while the latter served as a member of the state legislature, later deciding to locate here permanently. He established offices in the Farmers' Bank building. He was about 33 years of age and is survived by his father, S. W. Harbert, and two brothers, James and Blaine Harbert.

The funeral was held Friday afternoon at the Cunningham cemetery on Cunningham's Run and was conducted in the open by the Rev. F. V. Williams, pastor of the Peoria circuit of the U. B. church. Rev. Williams spoke of the life of the deceased as one of sacrifice and service in the interest of his fellow beings, calling attention to the high regard in which the young physician was held by all who knew him. A very large number of his life long friends and neighbors gathered to pay their last respects to his mortal remains and there scarcely a dry eye in the large assemblage by the time the service was over. The Odd Fellows lodge of Wyatt attended the service in a body.

The deceased was born January 24, 1882, and was therefore 32 years, six months and 24 days of age.—The Shinnston News.

### Announcements

The state of the s

In honor of the fiftieth anniversary of its founding, The Battle Creek Sanitarium will have a notable celebration on October 3, 4 and 5. The program is rich in varied features, among which are a great banquet, receptions, athletic contests, industrial pageant, outdoor spectacle, re-union of former patients, and a series of conferences on sociological, eugenic, sanitary and medical subjects in which prominent speakers from all parts of the country will take part. A considerable attendance of physicians is ex-

pected.

The beginnings of the Sanitarium were sufficiently humble. A two-story frame house on a knoll in the outskirts of an obscure village, two physicians and one patient, comprised the tangible portion of what was called the Western Health Reform Institute. But the true riches of the establishment lay in the ideas on which it was based. These included not only the "water cure," but diet reform, dress reform and other "simple life" measures for the physical welfare of man. These fifty years have seen as big a change in the methods of the Sanitarium as they have in its equipment of lands and buildings, yet those pioneers held the grain of the truth. In one sense, the present great enterprise, with its imposing display of architecture, its marvelous apparatus for accurate diagnosis and the healing of the sick, its corps of skilled physicians, trained nurses and hundreds of other employes, its fame, which has spread to the four corners of the world—is merely the outgrowth of that modest "house by the side of the road."

After a decade of moderate success, the institution came under its present management. New policies, new methods and new principles were introduced. The old time "water cure," which was a rub-of-thumb affair, was replaced by rational hydrotherapy. The newest de-

velopments of medical science, both as to methods and mechanism, were gradually added in the effort to create an institution that would show in practical operation all the resources of physiologic medicine. At the same time, stress was laid on supplying all the comforts of a home and a hotel. In addition to facilities for the administration of baths of every description, electricity in its different forms, medical gymnastics and other rational agencies, with careful regulation of diet.

Steady growth led to successive enlargement of the accommodations. 1902, a fire destroyed the main building and hospital. In planning the present magnificent structure, advantage was taken not only of the experience gained in the conduct of this institution, but of similar enterprises and hospitals in this country and in Europe. The main structure is 550 feet long, fifty feet wide and six stories high. There are three extensions in the rear. To make the place entirely fireproof, wood was eliminated everywhere save in the doors and window cases. A ventilating system supplies 150,000 cubic feet of fresh air per minute. The cost of the building and its equipment has been nearly two million dollars. An annex purchased five years ago has rooms for from 250 to 300 persons, and in addition there are several large dormitories and numerous cottages for patients and employes. At present there are about 1,000 guests, including those not receiving regular medical attention, while a force of about 1,700 persons is employed to care for

This fact gives a striking proof of the elaborateness and complexity of the care bestowed on the sick in a modern sanitarium.

Last year a new surgical hospital was opened, embodying the latest and most scientific ideas in construction and equipment.

Being purely a charitable institution, and having no dividends to pay, the Sanitarium is able to make liberal expenditures for the indigent sick. In one recent year these amounted to over \$150,000, and the total sum for the half century has been over \$1,400,000. The

total number of patients to date is over 104,000; this excluding guests not under a physician's care. At the present time, the patronage is far in excess of that of any previous time.

August 7, 1916.

Dear Sir:—

The next examination for appointment in the Medical Corps of the Navy will be held on or about October 23, 1916, at Washington, D. C.; Boston, Mass.; New York, N. Y.; Philadelphia, Pa.; Norfolk, Va.; Charleston, S. C.; Great Lakes (Chicago), Ill.; Mare Island, Cal., and Puget Sound, Wash.

Applicants must be citizens of the United States and must submit satisfactory evidence of preliminary education and medical education.

The first stage of the examination is for appointment as assistant surgeon in the Medical Reserve Corps, and embraces the following subjects: (a) anatomy, (b) physiology, (c) materia medica and therapeutics, (d) general medicine, (e) general surgery, (f) obstetrics.

The successful candidate then attends the course of instruction at the Naval Medical School. During this course he receives a salary of \$2,000 per annum. with allowances for quarters, heat, and light, and at the end of the course, if he successfully passes an examination in the subjects taught in the school, he is commissioned an assistant surgeon in the Navy to fill a vacancy.

Full information with regard to the physical and professional examinations, with instructions how to submit formal application, may be obtained by addressing the Surgeon General of the Navy, Navy Department, Washington, D. C.

The foregoing information is furnished as it is believed that it is of interest to you, and that you will want to give it some notice in your Journal.

Very truly yours, W. C. Braisted, Surg. Gen. U. S. Navy.

#### AMERICAN ASSOCIATION FOR STUDY AND PREVENTION OF INFANT MORTALITY

To Editors:

If possible kindly direct the attention of your readers to the accompanying announcement.

Thanking you in advance,

GERTRUDE B. KNIPP, Ex. Sec.

1211 Cathedral St.,

Baltimore, Md.

The Seventh Annual Meeting of the American Association for Study and Prevention of Infant Mortality will be held in Milwaukee, October 19-21, 1916.

The subjects to be discussed include:

Governmental activities — Federal, State and Municipal—in relation to infant welfare.

Care available for mothers and babies in rural communities.

Standards for infant welfare nursing.

Morbidity and mortality in infancy
from measles and pertussis.

Public school education for the pre-

vention of infant mortality.

Vital and Social Statistics.

Dr. S. McC. Hamill, of Philadelphia, is president of the Association, and Dr. Wm. C. Woodward, of Washington, president-elect for 1917. Dr. George C. Ruhland, Health Commissioner, Milwaukee, is chairman of the Committee on Local Arrangements.

The sessions will be under the chair-

manship of the following:

Obstetries: Dr. A. B. Emmons, 2nd, Boston.

Propaganda: Mr. George R. Bedinger, Detroit.

Pediatrics: Dr. Borden Veeder, St. Louis.

Governmental Activities and Vital and Social Statistics: Dr. Wm. C. Woodward, Washington.

Public School Education for the Prevention of Infant Mortality: Prof.

Abby L. Marlatt, Madison.

Rural Communities and Nursing and Social Work: Dr. Dorothy Reed Mendenhall, Madison.

The session on Pediatrics will be a joint one with the Milwaukee County

Medical Society. The session on Governmental Activities will be a joint one with the Committee on Vital and Social Statistics, and the session on Rural Communities will be a joint one with the Committee on Nursing and Social Work.

Programs or other information in regard to the meeting can be secured from the Executive Secretary, 1211 Cathedral

St., Baltimore, Md.

The New York State Civil Service Commission calls attention to the opportunities offered to qualified physicians for appointment to positions in the medical service in State Hospitals, Prisons, and Charitable Institutions.

Although the salaries offered seem to afford adequate compensation the number passing the examinations has not been sufficient to meet the needs of the service. An examination was recently held for Prison Physician, salary \$2,000, but the number of competitors was very small and no one passed the examination. An examination for Assistant Physician in the prisons, salary \$1,500, held at the same time produced only two eligibles. An examination for assistant physician in the State Hospitals held January 22, 1916, produced eighteen eligibles but the list was practically exhausted before July 1. Another examination was held July 15, but eleven competitors were secured.

This position carries an initial salary of \$1,200 with maintenance, including quarters, board, laundry, etc., and the salary is automatically increased \$100 a year until \$1,600 is reached, when opportunity is offered for promotion to the next higher grade, Senior Assistant Physician at \$1,800 and maintenance.

The State Hospital Service really offers a career, as there is a regular line of promotion for the medical staff from Assistant Physician to the position of

Superintendent.

Anyone interested in these examinations should write to the "State Civil Service Commission, Albany, N. Y.," for information.

### The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR

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

HARRY W. KEATLEY, M. D., BUSINESS MANAGER

#### Huntington, W. Va., Sept., 1916

THE JOURNAL issued on the first of each month

\$1.50 per year 20 Cents Single Copies

An 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. All original articles for this Journal must be made

#### CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if uthors 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 Chemistry and Pharmacy of the A. M. A.

#### REMITTANCES

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

Editorial Office: Miller-Ritter Building, Hunting-

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

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SECOND DISTRICT-H. W. Daniels, Elkins, 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—J. E. Rader, Huntington, W. Va., one-year term; G. D. Jeffers, Parkersburg, W. Va., two-year term.

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

Sixth District—P. A. Haley, Charleston, W. Va., one-year term; B. B. Wheeler, McKendrie, W. Va., two-year term.

### Editorial

The Editor is in receipt of a bulletin which has been referred to him by one of the members of the State Association, in regard to affiliation with what is called the Medical Society of the United States.

Professionally, we cannot feel that it is "up to us" to join this Association. To begin with your Editor cannot feel that such a rebellion against the American Medical Association should be supported by the ethical members of the profession in this state. Certain of the officers of this so-called medical association have been shown up in one of the lay journals. It seems to us that a professional man who makes an effort to buy not only the sick, but the conscientiousness of physicians, should have no support from those men who are honest.

A recent issue of the Metropolitan magazine contains an article in which evidence is given showing that one of the officers of this organization offers to buy "sick folks."

Not only your Editor, but a number of the other members of the profession in this state have been asked to read papers at the coming meeting of the proposed organization of this association. It is to be hoped that none of us will be mislead.

The medical profession in this country has been wonderfully advanced by the efforts exerted by the executive of the American Medical Association. Regardless of the disgruntled ideas of a number of members of the profession, we do not feel but that a world of good has been accomplished; whether or not

some members of the board have made an effort to control the policy of the A. M. A., we are not in position to state; we do wish to state, however, that in our opinion the profession in this country, by which we mean Canada and Mexico, as well as the United States, owes its wonderful advancement to the American Medical Association.

It is the hope of the Editor of the West Virginia Medical Journal that the members of our association will not be lead to follow "False Gods." We have been told in the Holy Writ that those who follow these "False Gods" are the ones who are losers in the end. Brothers,

do not be led astray!

During the summer months but few of the societies throughout the state have been holding regular meetings. This accounts for the dearth of reports from our various County Secretaries.

I desire to state that the reports personally received, from the local Secretaries are most encouraging, as to the fall and winter programs, and we expect to receive very excellent reports of the monthly and semi-monthly meetings.

In this issue of the Journal is printed the proposed revision of the constitution and by-laws of the State Association. It is to be hoped that all members will carefully read the various provisions in order that, at the next meeting, it can be intelligently discussed.

Whether or not it corresponds to the opinion of the majority of our members we cannot say. It is possible that some changes will be necessary. This is a question that will have to be threshed out by the House of Delegates at the

Fairmont meeting.

The Editor would suggest that the members of the Association write him communications as to their ideas upon this matter, as soon as is possible, in order that they may be published in the Journal and thus have the entire opinion of our membership upon all points. Do not forget this and be sure to sign your communications.

### State News

Dr. Geo. A. Johnson of Weston, died very suddenly August 9. Dr. Johnson, who was 59 years of age, had just returned from a vacation trip to Atlantic City, accompanied by Mrs. Johnson, and was standing in a hall, the entrance to the stairway leading to the offices of Dr. M. D. Cure, in conversation with Drs. Cure and King. He spoke of feeling dizzy, fell into the arms of Dr. Cure and soon passed away. Dr. Johnson was a native of Missouri, and was a graduate of St. Louis Medical College. He had practiced medicine 32 years.

Experts on the treatment of Trachoma have reported finding a number of cases of that disorder of the eye in the mining camps of the Fairmont coal region, and recommendations have been made that all suffering with this trouble be moved to the Trachoma hospital at Welch, where the disorder is treated at the expense of the National and State health departments.

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Four thousand seven hundred persons in the Cabin Creek and Coal River flood zone have been innoculated with antityphoid serum. The work was done by the State Department of Health. It is claimed that this is the largest number of persons ever innoculated at one time, except under the observation of United States army medical officers. The results will be watched with interest.

Dr. E. S. Buffington of Huntington, is spending a few weeks at French Lick Springs.

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Dr. L. V. Guthrie, Superintendent of the Huntington State Hospital, was appointed by Governor Hatfield delegate to the American Institute of Criminal Law and Criminology. The association meets in Chicago. Dr. R. H. Pepper of Huntington, attended the August meeting of the Mercer County Medical Society and read a paper before that body dealing with Roentgen-ray work.

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Drs. J. R. Bloss, C. R. Enslow, R. J. Wilkinson, W. E. Vest and L. A. Vinson attended the C. & O. Surgeons' Association August 18 and 19 at Old Point Comfort, Va.

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Dr. and Mrs. W. E. Neal of Huntington, motored to Sistersville recently.

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Dr. C. R. Enslow of Huntington, was elected to the presidency of the Chesapeake & Ohio Physicians and Surgeons Association, which held its convention at Old Point Comfort, August 18 and 19.

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Dr. S. L. Jepson, State Health Commissioner, directed on August 19 the Monongalia county health officer at Morgantown to establish reciprocal arrangements with Pennsylvania with reference to its quarantine against children traveling from West Virginia without certificates showing that they have not been exposed to infantile paralysis.

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Dr. Robert M. Marshall, of Shenandoah Junction, died at his home. The doctor was a graduate of the University of Maryland, and had practised in this state for nearly fifty years.

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Dr. and Mrs. W. P. Goff of Clarksburg, are spending the summer at Deer Park, Md., where they have rented a cottage for the season.

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Dr. J. A. Arbuckle of Elkins, spent several days recently at White Sulphur, attending the horse show. The doctor has several fine horses which were entered at the exhibition. Dr. Jas. W. McDonald of Fairmont, was a visitor in Huntington recently.

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Among the physicians who suffered to a greater or lesser extent from the recent cloud-burst in the Cabin Creek district, were Drs. J. W. Ashby, John S. Gibson, G. P. Fisher, L. M. Campbell, Geo. G. Hodges.

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Dr. Wm. H. McLain of Wheeling, who is a member of the U. S. Medical Reserve Corps has spent several weeks with the West Virginia troops at Camp Kanawha.

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Dr. Frank LeMoyne Hupp, Wheeling, is spending some weeks at his summer home in Plattsburg, N. Y.

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Dr. A. A. Wingrove of Scarbro, was a recent visitor at several of the Huntington hospitals.

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Dr. Lewis C. Covington of Charleston, was a Huntington visitor recently.

## Society Proceedings

PUBLIC HEALTH MEETING AT

In the Circuit Court Room on Saturday, August 5, 1916, at 2:30 o'clock p.

PROGRAM

Hon. Saml. V. Woods, chairman.

"The State Department of Health," by Dr. W. W. Golden, President of the State Public Health Council.

"The High Cost of Typhoid Fever," by Dr. S. L. Jepson, State Health Commissioner.

Interesting Demonstrations, by Dr. W. B. Wood, Assistant to State Health Commissioner.

Address, Judge W. B. Kittle.

The court room was filled and all were interested in every part of the meeting. The eampaign of education, the work undertaken and carried to a successful issue by members of the State Board of Health, that the popularizing hygienic knowledge and inculcating sanitary preeepts with a view of the extinction of zymotie and communicable diseases. The principal elements of action in this crusade was infections and eontagious diseases. The instruction received from each speaker contains the definition of the disease, its nature, its principal manifestations and the means of preventing it and of restricting its spread. The offieers of the State Board of Health, gave popular instructions, clear, precise and always in accordance with the most advanced medical knowledge of the day. Favorable opportunity is awaited for their return that we may enjoy another meeting. The hearers were interested and profited by the meeting and the edueation received will be taken in every home.

We need more such meetings.
M. M. Hoff, M. D.,
Barbour County Health Officer.

Weston, W. Va., Aug. 10, 1916. Dr. Jas. R. Bloss, Editor,

Huntington, W. Va. Dear Doctor Bloss:

The Lewis County Medical Society met on the lawn of the Weston State Hospital August 8, 1916, at 2 p. m., with Dr. J. I. Warder, President, in the chair. Those present were, Drs. G. M. Burton, Casey, Bush, Heath, Hall, Green, Gray, Cure, Whelan, King, Snyder, A. J. Kemper of Lost Creek, W. Va., and Dr. S. H. Burton, of Virginia, who is now in active practive with his brother, Dr. G. M. Burton of this place.

Minutes of previous meeting were read

and stood approved.

A committee was appointed by the President, consisting of Drs. Hall, Cure, and Burton to draft resolutions of respect to the late Dr. G. A. Johnson, who died August 2, 1916.

Motion moved and unanimously carried to have Dr. S. II. Burton bring his

transfer eard from his home society in Virginia to the Lewis County Medical Society.

Dr. A. J. Kemper of Lost Creek, W. Va., member of the Harrison County Medical Society, gave us a splendid paper on Pyelitis. It was well prepared, ably delivered and furnished food for thought to the busy, every-day praetitioner.

A thorough discussion soon followed which brought out many points of interest regarding the acute infectious diseases and the urinary tract in general which is often the result of micro-organism precipitating these kidney diseases.

A vote of thanks was extended to Dr. Kemper for his excellent paper and a standing invitation to visit with the society at each meeting predominated.

There being no further business before the society, a motion unanimously carried that we adjourn and meet September 12, 1916, at Dr. E. T. W. Hall's Hospital, Freemansburg, W. Va.

This was a splendid meeting and personally I believe the "best" has hap-

pened yet.

Fraternally yours, P. L. Gray, Secretary.

### Health News

DO YOU KNOW THAT—

Health first is the highest form of safety first?

Tuberculosis and poverty go hand in hand?
——o—

The U. S. Public Health Service will send a booklet on flies and disease, gratis to all applicants?

The breast fed baby has the best chance?

Physical fitness is preparedness against disease?

Pneumonia is a communicable disease?

-0-

Cockroaches may carry disease?

-0-

Rural sanitation is a health protection to the city-dweller?

--0---

It's foolish to educate a boy and then let him die of typhoid fever?

--0---

The U. S. Public Health Service issues a free bulletin on the summer care of infants?

--0---

Exercise in the garden is better than exercise in the gymnasium?

-0-

Clean water, clean food, clean houses make clean, healthy American citizens?

--0---

The State of California has reduced its typhoid rate 70% in the past ten years?

--0-

Rats are the most expensive animals which man maintains?

--0---

It is estimated that the average manure pile will breed 900,000 flies per ton?

-0--

Life is a constant struggle against death?

-0-

Dirty refrigerators may make sickness?

--0--

The U. S. Public Health Service issues free bulletins on rural sanitation?

-0-

The defective citizen of today is ofttimes the unhealthy child of yesterday? Every man is the architect of his own health?

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It's the baby that lives that counts?

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Tuberculosis is contagious, preventable, curable?

-0--

The full dinner pail—the open window—the clean well—make for health?

#### THE U. S. PUBLIC HEALTH SER-VICE ASKS DO YOU—

Think dog muzzling cruel and then marvel at the spread of rabies?

--0---

Carefully select your brand of liquor and then feed your children unpasteurized milk?

-0--

Repeat the Golden Rule, then sneeze in somebody's face?

--0---

Go camping for your health and then place your toilet so that it drains into your water supply?

# PREVENTION OF INFANTILE PARALYSIS.

To control the present epidemic of infantile paralysis, according to a statement issued by the United States Public Health Service today, the chain of infection between persons harboring germs of the disease and the well members of the community should be broken. Infantile paralysis is probably caused by a very minute organism found in the nasal, mouth and bowel discharges of those who have the disease or who are carriers of the germ without themselves suffering from the ailment. All of the steps in the spread of the infection are not known but if this germ can be prevented from passing from the infected to the well person, the disease will cease.

Infantile paralysis is not a disease of recent origin. Sporadic or scattered cases have occurred throughout the country for many years, but it is only during the last decade that the infection has assumed epidemic proportions in the United States. The present epidemic in New York City, on account of its magnitude and virulence, has awakened the residents of many communities to the danger of the importation of the disease into their own midst. This danger is real, but if due precautions are exercised it is believed that the epidemic will subside.

The actual control of the present epidemic must be left to the city, state and Federal health authorities. These organizations will properly quarantine and care for affected persons, prescribe sanitary measures and limit as may be necessary the travel of individuals in order to protect neighboring districts from the infection. Individuals and communities, however, can do much toward their own

protection.

Poliomyelitis is probably spread directly or indirectly, through the medium of infective secretions. Account must therefore be taken by communities of every means by which such secretions are disseminated. Promiscuous expectoration should be controlled. The common drinking cup affords a method for the interchange of material of this nature and should therefore be abolished. Rigid cleanliness of glasses and utensils at soda fountains, in saloons and other public places should be enforced. Flies, roaches and other vermin, by coming in contact with infective secretions, may possibly convey them to our food and thus directly bring about the development of disease. Therefore eliminate in-Street and house dust bear a definite relation to the spread of many infections and it is not unreasonable to presume that they may be a factor in the dissemination of infantile paralysis. Maintain strict cleanliness of streets, vards and alleys in order to prevent the breeding of insects and other vermin.

See that all garbage and waste are properly cared for and collected at regular and frequent intervals. Guard all food supplies, especially milk and other perishable products. Digestive troubles of children arising from the ingestion of food of questionable quality may lower resistance. Assemblies of children in infected localities are to be discouraged, if not actually forbidden. While the above measures are in a sense general, and applicable to many epidemic diseases, their importance should not be overlooked.

Individual preventive measures may be thus summarized:

Summon a physician at once and immediately notify the health officer of the presence of the disease. If the disease is present in the community, medical aid should be sought whenever a child is sick no matter how light the illness; many cases of infantile paralysis begin with a slight indisposition. Should the illness prove to be infantile paralysis isolate the patient, place a competent person in charge, and reduce all communication with the sick room to a minimum. Hospital care is preferable, not only for the child but in order to better safeguard against the spread of the disease. The sick room should be well ventilated and screened. Nasal mouth secretions should be received in cloths, placed in a paper bag, burned. The clothing of the child, the bed linen, and the excretions should be disinfected in the same manner as for typhoid fever, that is by boiling, the long continued application of 5% carbolic, or other well recognized disinfect-The same is true for dishes and drinking vessels. Nurses should exercise the same precautions as regards cleanliness of hands in caring for infantile paralysis patients as for those afflicted with other infectious diseases.

A child may convey the disease to others even after a lapse of several weeks. For this reason quarantine should be maintained for a considerable period, usually from six to eight weeks, and the above precautions should be adhered to during this time. Disinfection of the room following recovery is advisable.

#### CLEAN HANDS

Disease germs lead a hand to month existence. If the human race would

learn to keep the unwashed hand away from the mouth many human diseases would be greatly diminished. We handle infectious matter more or less constantly and we continually carry the hands to the mouth. If the hand has recently been in contact with infectious matter the germs of disease may in this way be introduced into the body. Many persons wet their fingers with saliva before counting money, turning the pages of a book, or performing similar acts. In this case the process is reversed; the infection being carried to the object handled, there to await carriage to mouth of some other careless person. In view of these facts the U.S. Public Health Service has formulated the following simple rules of personal hygiene and recommends their adoption by every person in the United States:

Wash the hands immediately—

Before eating;

Before handling, preparing or serving ood:

After using the toilet; After attending the sick, and, After handling anything dirty.

# Medicine and Surgery

DRS. ENSLOW AND RADER

### **MEDICINE**

### THE INDICATIONS FOR ALCOHOL

The American Journal of Clinical Medicine has long since taken the stand that there is no true indication for alcohol as a medicine, and that its use as such is a mere excuse for indolence or laziness. They assert that there is not a solitary application to which alcoholic preparations can be put for which there are not better remedies at our hand. The one reason for the use of alcohol as a remedy is, that it does so many things fairly well; and the lazy doctor contents himself with this, instead of finding the one remedy that is better in each case.

THE DIAGNOSIS OF CERTAIN SURGICAL LESIONS OF THE KIDNEYS: BASED ON SIX RECENT CASES.

By Ross G. Loop, M. D., F. A. C. S.

The Urologic and Cutaneous Review

In this article Dr. Loop brings out some interesting points in Urological Diagnosis. He points out that the X-ray and wax-tipped Ureteral Catheter are essential in diagnosing kidney stones as this condition may occur without typical symptoms.

Another fact now being well recognized by the profession is that Kidney and Tuberculosis is far more common than has been formerly supposed, and that the most careful urological methods, cystoscopy, ureteral-catheterization, kidney functional tests, careful microscopical examination of the Urine-Guinea-pig inoculation, etc., must be used.

Dr. Loop brings some valuable suggestions in differential diagnosis between chronic appendicitis and right-sided Urological lesions. All the cases were supported by the laboratory and Urological findings.

He concludes his article with the fol-

lowing summary:

1. Renal calculi may exist without symptoms or without the classical colic and without hematuria or other evidence in the urine; they may cause only chronic soreness, often diagnosed as lum-

bar myalgia.

2. Renal tuberculosis may be primary; it may proceed to entire destruction of one kidney and to serious impairment of the other without marked constitutional symptoms; local pain may be entirely wanting or overshadowed by the bladder symptoms, painful and frequent micturition; pyuris and hematuria may be entirely absent owing to the complete occlusion of the ureter; in an easily palpable, movable kidney without symptoms other than those explained by its mobility, serious infection may be present, rather than a simple dilatation of its pelvis from torsion.

3. Chronic appendicitis may closely simulate right-sided renal calculi, rarely even to the extent of hermaturia; chronic appendicitis may be associated with renal disease; the reflection of the symptoms from the diseased to the healthy side must ever be borne in mind.

And,

4. A complete study of these cases before operation is demanded, bringing to bear all the methods of exactness at our disposal, including radiography with or without the injection of the renal pelvis, segregation of the urine by ureteral catheterization and a thorough analysis, with functional tests and animal innoculations, when time permits, if the microscope fails to clear up the diagnosis, and cystoscopic examination of the bladder. These tests are all highly technical in character and are only valuable in the hands of experienced workers. It is therefore desirable that one man in each small community be encouraged to take up this work and follow it out in its entirety, thus putting renal surgery in small medical centers on the scientific basis which the times demand.

# HAY FEVER AND ITS COMPLEXITIES.

Because of the protean manifestations of hay fever and its irregular appearance, either as the early-summer variety or the so-called autumnal catarrh, it is evident that no single therapeutic agent can eliminate, or even modify, the symptoms in all cases. Each individual sufferer presents problems that pertain peculiarly to himself, and other than the vasomotor relaxation of the upper respiratory tract, which is common to all, there are no uniform underlying pathologic changes.

These cases may be divided into three classes: those in which the neurotic element is the predominating feature; those wherein a general systemic condition, as lithemia, seems to stand out conspicuously; and—much the largest class—those in which the affection is intimately associated with the presence of pollen in the atmosphere.

Undoubtedly the suprarenal sub-

stance, in the form of its isolated active principle, Adrenalin, is one of the most reliable agents for the treatment of hay fever. Experienced physicians assert that it successfully controls the symptoms in a large majority of cases. Adrenalin Chloride Solution and Adrenalin Inhalent are the preparations most commonly used, being sprayed into the nares and pharnyx. The former should first be diluted with four to five times its volume of physiologic salt solution. The latter may be administered full strength or diluted with three to four times its volume of olive oil.

#### LIFE INSURANCE AND ALCOHOL

An interesting analysis of the experience of American life insurance societies in respect to the mortality among abstainers from alcohol, temperate users and moderate users is presented in the current bulletin of the city of New York health department. Dividing the policy holders into three classes according to whether they are total abstainers, temperate users or moderate but habitual users of alcohol, it is shown that the mortality of the first class is about 15% less than that of the second, and about 25% less than that of the third. This much diminished mortality among total abstainers as compared with non-abstainers is marked even when the general section of a company's policyholders, that is, the non-abstainers, presents a mortality experience which is favorable as compared with that of other companies. For example, in the case of one such company in 1906-1910, the mortality in the abstainers' section was 40% less than that in the general section, and in the years 1911-1915, 35% less. Results are given of investigations into the subsequent history of those who have at one time drunk to excess and of those who have undergone an alcohol cure. In neither case is the risk a good one from the insurance point of view. The importance of these statistics is derived from the fact that they have not been collected for controversial purposes by parties holding a brief against alcohol, but are the figures by which commercial

organizations, whose interest in the matter is purely financial, are guided in fixing premiums. While there can be no doubt left in the mind of any one who reads this paper that even the moderate use of alcohol shortens life, the writer of it remarks that the relatively low mortality among abstainers is not solely attributable to abstinence from alcohol, but it is due to "temperance in all things and total abstinence from alcohol."

#### URETHRITIS IN WOMEN

W. F. Shallenberger, Atlanta, Ga. (Journal A. M. A., April 1, 1916), says that chronic urethritis in women is much more common than is generally recognized. The symptoms may not be always typical or referred directly to the urethra, but persistent complaints of trouble in the region of the pelvis, especially if no other pathologic condition causing them can be found, should suggest urethritis. The pathologic findings are variable. The congested, puffy, granular picture is the one most frequently seen. Many cases are mistaken for cystitis on the basis of symptoms alone, and treatment instituted relative to the blacder alone, whereas the urethra should be looked after. The most constant symptoms are frequent and painful urination, usually burning, and there may be vesical tenesmus. There may be more or less constant pain, usually of throbbing nature, but sometimes sharp and lancinat-Reflex pains referred elsewhere may occur. The etiologic factor is often obscure. If there has been a previous infection the causation is clear, but this may be absent. Chronic infections elsewhere like tonsilitis, otitis, etc., or intestinal disease may set up the trouble and the female urethra is so situated as to harbor all kinds of organisms. Irritation and trauma may activate them and a very concentrated urine may cause irritation. The best treatment usually is direct application of silver nitrate through a cystoscope or vesical speculum; usually a 5% solution is employed by Shallengerger, but he has used much stronger ones. From four to eight applications of the silver nitrate are needed

to effect a cure, as a rule, and attention to the reflex cause is also called for. In one case the usual method failed in spite of everything, and he finally tried blocking off the urethra by infiltrating the tissues with a 1% novocain solution, which gave the only relief obtained. The pain at the time of injection was severe, and a solution of 0.3% with quinin and urea hydrochlorid 0.5% gave excellent results and the patient has been more or less comfortable ever since. This method of nerve blocking is recommended in intractable cases, not only for the relief that may possibly be given but also for a means of diagnosis. If we can get cessation of pain by block off the urethra we can be reasonably certain that it is the seat of the trouble.

#### MERCURIAL POISONING

A case of mercurial poisoning from acute mercuric chlorid taken five days before reception at the hospital, with thorough laboratory study and with recovery, is reported by Jacob Cohen and Adolph Bernhard, New York (Journal A. M. A., April 1, 1916). The patient was a delicate woman, aged 28, who had swallowed two tablets of mercury chlorid dissolved in a half tumberful of water. The urine had been completely suppressed for twenty-four hours, and was tested repeatedly during the process of the case. During the first five days the condition of the patient somewhat improved under treatment with potassium bitartrate and sucrose and lactose according to the method of Lambert and Patterson. Urine elimination after admission varied from 200 to 700 c. c. daily. All the excretions and stomach washings gave positive tests for mercury. The blood showed marked retention of nonprotein nitrogen substances and low phenolsulphonephthalein elimination. During the next five days she showed general improvement and practically all excretions showed the absence of the mercury which had been present before. The nonprotein nitrogen and urea in the blood were markedly decreased and were less than in other cases reported by Foster, and Myers and Fine.

Steady improvement continued until her discharge, when she eliminated about the normal amount of urine, with only traces of albumin and occasional hyaline casts.

# TREATMENT OF DRY FORMS OF ECZEMA

P. G. Unna, in Berliner klinische Wochenschrift for March 1, 1915, states that in eczema of the callous type, prevalent in the winter season, oxidizing remedies must be used in order to penetrate the thickened horny layer. In the official diachylon ointment, the contained lead oxide manifestly exerts an oxidizing influence. To relieve itching, tar may be added to the ointment, the activity of which may also be reinforced by the introduction of salicylic acid or phenol:

R Unguenti diachylon ži (30 grams); Acidi salicylici.....gr. x (0.6 grams); seu Phenolis......gr. v (0.3 gram). Fiat unguentum.

An important feature in the treatment of this affection is avoidance of the use of soap and water, especially on the face and hands. The affected areas should be frequently anointed and the parts between times kept protected with a cap, glove, or other appropriate covering.

In the dry, seborrheic eczema prevalent in warm weather, the following paste is a specific in mild cases:

B Sulphuris præcipitati, Calcii carbonatis præcipitati, aa 5iiss (10 gr.)

Water may be employed as usual in such cases; but there are other more obstinate forms associated with the formation of hard papules suggestive of psoriasis which do not yield immediately to the use of sulphur. In these a rather weak chrysarobin collodion is useful:

R. Chrysarobini.....gr. xv (1 gram); Collodii......5vi (20 grams). M. Sig.: Shake before applying. This may be applied with cotton wound round a matchstick, and after it has become dry diachylon ointment should be rubbed over it with the finger. If the collodion loosens before the eczema has been cured, it should be reapplied. The ointment super-imposed over the collodion prevents irritation and further progress of the eczematous process. Eczema of the hand can thus be treated, if a glove is worn, without interference with the patient's occupation.

### CHOLECYSTITIS; CHANGES PRO-DUCED BY THE REMOVAL OF GALL BLADDER

Edward Starr Judd discusses the function of the gall bladder and the effects of its removal, and gives the technique of cholecystectomy, which he considers the gall-bladder operation of choice. The conclusions the author draws are as follows: The systemic circulation is probably the most important avenue through which infection reaches the gall-bladder. We are not yet able to recognize all cases of cholecystitis even with the abdomen The clinical history is most important in determining the existence of cholecystitis. Chronic cholecystitis without stones does exist as a definite pathological lesion and produces symptoms that will be relieved by the removal of the gall bladder. The only change in surrounding structures produced by removal is the dilatation of the common and hepatic ducts and possibly the stump of the cystic duct. This dilatation is most marked in the hepatic duct. Eventually this dilatation, with increased pressure, overcomes the action of the sphincter at the intestinal end of the duct, and the bile passes through the duodenum with very little resistance. The author believes that this mechanism explains why the removal of the gall bladder cures symptoms produced by inflammation of the pancreas is caused by bile from the common duct entering the pancreatic ducts. Finally, the changes in the ducts which follow cholecstectomy indicate that the gall bladder has a definite function.—Medical Record, June 24, 1916.

#### CUT THROAT

B. D. Baird, Galesburg, Ill. (Journal A. M. A., April 1, 1916), reports the case of a man, aged 50, weighing only 94 pounds, suffering from chronic nephritis, who attempted suicide by cutting his throat. The case is reported on account of the many steps taken in the management and to point out the advisability of the preliminary gastrostomy and tracheotomy in such cases in which it is necessary to operate to insure nutrition and respiration. The patient was found lying in a pool of blood two hours after attempting suicide and was almost moribund from hemorrhage. The local physician was unable to unite the divided trachea and he was brought in the same condition twenty miles to the hos-The divided trachea was united under ether anesthesia. None of the iniportant vessels were divided. The next morning it was found that the patient was unable to swallow and had taken no food since his wound. This was attributed to a division of the recurrent laryngeal nerve. Nothing was done for six days, when the patient was in an almost completely prostrated condition. Rectal feeding was then started. The wound in the neck had become broken open and infected, and the air passed through it instead of the natural way. A curved probe passed into the wound of the neck and pushed upward appeared in the pharynx. A rubber catheter was inserted into the wound and passed downward to stomach through which feeding was done every eight hours with warm milk, water and brandy. Then under Crile's block method, a Witzel gastrostomy was performed and thirteen days later a tracheotomy made below the wound in the trachea through which the patient could breathe. Thirteen days later the old tracheotomy wound was reopened and the divided ends of the trachea were found to be seperated by two and a half inches. It was necessary to reconstruct a new anterior pharyngeal wall and the divided ends of the trachea were brought together and the overlying structures were sewed up. The patient was kept in a stage of analgesia during the whole operation lasting an hour and a half. For

some days after feeding was continued through the gastrostomy opening and the patient breathed through the trachea tube, the glottis being closed by edema. Nineteen days after the repair of the pharynx and trachea food was taken by the natural route and, for the most part, ever since. The patient has made a good recovery and is in better condition than before his attempted suicide.

# LIVING WITH A BULLET IN THE HEART

Among the many marvelous feats of delicate and skilful surgery achieved in the modern war-hospitals some of the most striking, as the rarest, have been those in which the operator relieved the heart itself of the presence of an intruding body, such as a bullet or a bit of shell. Two such are recorded to the credit of a French surgeon, Dr. Beaussenat. In May, 1915, this physician presented to the French Academy of Medicine a wounded man from whose heart he had removed by cardiotomy a fragment of a grenade which had lodged in the cavity of the right ventricle. The case was considered unique. It demonstrated an unexpected tolerance of the heart for foreign bodies, for a considerable period of time had elapsed between the wound and the operation. It showed too, that other similar cases might be operated on with a chance of success.

By an extraordinary coincidence another almost identical case fell into the hands of the same surgeon. This was presented to the Academy of Sciences on April 10. It is thus described in the June number of the *Bibliotheque Universelle* (Lausanne) by Mr. Henry de Varigny:

"Corporal D., aged thirty-one, infantryman, was wounded in a charge at Eparges, September 7, 1914. He was observed to have a wound in the left side of the thorax. A radiograph showed no missle, and the wounded man was discharged in a fortnight with the strange diagnosis of peritonitis."

But his health failed to return. His breathing was difficult, he could not lie down, and he had other distressing symptoms:

"In consequence of these a new radiograph was made, this time under better conditions. The picture revealed the amazing fact that a shrapnel ball was in the same locality as the heart, probably in the interior of the ventricular cavity. On the 8th of September, 1915, just a year and a day after the entrance of the bullet, Dr. Beaussenat operated to remove it. A large flap was cut and folded back so as to lay bare the heart. By exploration with the fingers the ball was discovered to be in the right ventricle, near the point. The surgeon lifted the heart from the pericardium and seized the point solidly between the middle and index fingers of the left hand, pushing the projectile toward the summit of the organ, where it was held firmly.

"Two silk threads were then passed through the thickness of the ventricle, parallel and nearly half an inch from each other. While an assistant drew these apart, thus lifting and holding the ventricular wall, Dr. Beaussenat made an incision between the two threads at the level of the projectile; on arriving at this he seized it and extracted it. There was a formidable hemorrhage. \* \* \* But the middle and index fingers, aided by the thumb, quickly stopped it, and the two threads, brought toward each other this time, were crossed and tied.

"Five stitches were taken to bring the lips of the incision together, the heart was replaced in the pericardium, this was sewed up, and finally the flap on the thorax was folded back and sutured."

The first symptoms after this wonderful piece of work were very disquieting. There were great pain, agitation, delirium, a rapid and intermittent pulse, "precordial anguish." However, on the fifteenth day, the patient was out of danger, and when he was presented before

the Academy in April, 1916, seven months later, he was perfectly well. He is incommoded only by a slight difficulty in breathing when walking fast. On auscultation the heart appears normal. His case will be kept under observation, however, to see whether the cardiac scar will not trouble him more in the course of time. Similar cases are reported both from England and from Germany.

IMPORTANT JUDGMENT OF A CANADIAN Court.—Some time ago a patient received a burn in the Smith's Falls Hospital by a hot brick, which was placed in the bed to warm it, when the patient was taken from the operating room. When the case came up for trial before Mr. Justice Britton, says the Canada Lancet for January, 1916, he dismissed the action. From this judgment the patient appealed. The appeal was heard before Chief Justice Falconbridge and Justices Kelly, Riddell and Latchford. These four judges came to a unanimous finding in favor of the patient and granted the appeal, awarding damages of \$900.

The court held that when a hospital furnishes beds, foods, and nurses for patients it enters into a contract with them, and becomes liable for acts of negligence on the part of its nurses. This is a most important decision so far as hospitals are concerned. It will have the effect of compelling them to lay down rules for doctors and nurses so as to avoid, as far as possible, the occurrence of accidents for which the hospitals could be held liable.

The judgment will do good, as there has been much doubt in the past regarding the liability of these institutions in this matter. The hospitals will, no doubt, welcome the decision, for the simple reason that they know now their responsibilities, and can take proper measures to protect themselves.

An application for an appeal in this case has been refused, as it is a matter of express contract, and no matter of public interest is involved.—Canada Lancet, January, 1916.

TREATMENT OF CEREBROSPINAL MEN-INGITIS.—Marcel Labbe, Zislin, and Cavaillon, in Bulletin de l'academie de medecine for March 14, 1916, refer to the treatment of cases in which antimeningitis serum fails because of obstruction in the cerebrospinal canal, the serum being thereby prevented from reaching the infected cerebral meninges. In a little girl of eleven years suffering from meningococcic cerebrospinal disease, intraspinal injections of the serum, begun rather late, at first appeared to place the child on the road to recovery. Later, recrudescence took place and resumption of the injections became necessary. The cerebrospinal fluid cleared up, but the general condition became worse and signs of eerebral meningitis, such as intermittent strabismus, delirium and convulsions, appeared. An opening into the skull was made near the frontoparietal suture, a little to the left of the median line. Turbid fluid containing numerous meningocoeci issued through a needle passed into the lateral ventricle. Twenty c. e. of serum was introduced, and the ehild soon began to improve. Four days later, fresh puncture into the ventricle yielded a clear fluid free from meningococci; eight c. c. of serum was introduced. On the succeeding days the rigidity of the neck diminished, consciousness returned, the pulse improved, convulsive attacks ceased, sphincter tone was regained, food was more easily taken and recovery seemed assured. Sudden syncope then took place and the child died.

ACID AUTOINTOXICATION IN INFANCY AND CHILDHOOD. — John Lovett Morse (Boston Medical and Surgical Journal, April 20), says that the cause of the symptoms in acid intoxication being the withdrawal of bases from the organism as the result of an excess of acids in the system, it is evident that the treatment indicated is the introduction of alkalies into the system to neutralize the acids in the body and to allow the reaccumulation of the bases that have been abstracted. The best alkali to use is sodium bicarbonate, which may be given by mouth, by rectum, subcutaneously, or

intravenously. It is preferable to give it by the mouth if it can be retained. It is best given in water, but, if desired, the taste may be disguised by orange juice or grape juice. It is seldom wise to make the concentration of the solution stronger than one to twenty, and usually it is better to make it one to thirty or one to sixty. Stronger solutions are almost certain of themselves to cause vom-The general feeling is that as much soda should be given as possible, but it is probable that excessive amounts of soda may of themselves cause vomiting and diarrhea, perhaps poisoning. The solution may be stronger when given by the reetum, but not usually stronger than one to ten. It is more often retained when given by seepage than by enema. It is useless to try to give soda in this way when there is diarrhea. When sodium biearbonate is given subcutaneously, a two per eent. solution should be used; when given intravenously a four per cent. solution is better. The amount to be given must depend on the age and size of the patient. Practically the usual treatment is the free administration of a five or ten per cent. solution of sodium bicarbonate in a ten per cent. solution of solution of dextrose, both by mouth and rectum. In his experience the immediate and thorough clearing out of the intestinal tract has seemed to have more effeet on the outcome in cases of acid intoxication secondary to infections or to diseases of the intestinal tract, than any other single procedure.

Dr. Yandell Henderson, professor of physiology at Yale University School of Medicine, New Haven, Conn., who has served as consulting physiologist to the Bureau of Mines at Washington for the past three years, has made an exhaustive investigation of the merits of devices for resuscitation from electric shock, drowning and asphyxiation by poisonous gases. His conclusions on the subject, as reported in the Journal of the American Medical Association, are as follows:

"Universal training in the prone pressure manual method of artificial respiration will accomplish more for resuscitation from drowning, electric shock and asphyxia than is possible by providing

any amount of apparatus.

"Artificial respiration with apparatus is superior to the manual method, in that the apparatus is capable of giving a normal volume of pulmonary ventilation while the manual method is not.

"Nevertheless, the immediate application of a poor method is far more important than the application of a perfect method after a delay of even five minutes. The knowledge that apparatus is available is liable to result in a neglect of immediate manual treatment in order to have the apparatus brought from a distance.

"Apparatus should be provided only in places in which it will be immediately

available.

"Since all that any apparatus yet invented affords is artificial respiration with air more or less enriched with oxygen, it should be of a simple type so as not to produce exaggerated ideas of

its efficiency.

Oxygen inhalation should be used immediately in gas and smoke cases, but the apparatus employed should be such as will allow the oxygen to reach the patient's lungs in efficient concentration. Such apparatus should go with every artificial respiration device.

"Investigation of the use of artificial respiration apparatus, in asphyxia neonatorum is needed."—Hosp. Manage-

ment, 7-16.

## Surgery

INEFFECTIVE APPENDICECTO-MIES\*

By Robt. T. Morris, M. D., New York, Professor of Surgery, Post-Graduate School of Medicine

So many ineffective appendicectomies are done upon a basis of incomplete diagnosis, that some of us must call a

halt. The matter is getting to be a scan-During the year a number of cases are sent in to my service in the hospital with a wrong diagnosis of appendicitis. Some of these are believed to be cases of acute infection of the appendix, but a larger number are sent in with a statement that the appendix has given trouble for a considerable time and requires removal. I have not kept notes relating to the proportion of these cases which are not really ones of appendicitis, but it corresponds pretty closely with reports of what I hear of patients operated upon without result, so far as appendix symptoms are concerned.

Let us first consider a group of cases in which the appendix is really a factor in the patient's discomfort, but not the principal one. The two chief irritative lesions of the appendix, not infective, are fibroid degeneration and syncongestive

appendicitis.

Fibroid degeneration scems to occur as a normal involution process, but its symptoms appear to be most marked in that group of patients who present a number of stigmata of arrested development. In neurasthenic patients with relaxation of peritoneal supports and in the patient with a defective chromaffin allowing various abdominal manifestations to appear, fibroid degeneration of the appendix adds a factor. Removal of the fibroid appendix leaves these patients with all of their other defects still present. Attention which has been concentrated upon symptoms in the appendix region, is then transferred to some other organ or structure, and the mental prodding which is given to symptoms gradually increases the symptoms to the point where the patient is quite as ill as before. Fibroid degeneration, however, is a definite pathological entity and sometimes an important precipitating factor for symptoms. The reason appears to depend upon irritation of terminal nerve filaments which remain in contracting hyperplastic connective tissue up to the time when practically all other structures of the appendix have disappeared.

An impulse from irritated nerve filaments is sent to the autonomic centers, to sympathetic centers in general, and to

cerebrospinal centers. A number of re-

ciprocal reactions then appear.

In cases of syncogestive appendicitis (the other common irritative lesion of the appendix) we have a distention of the inner coats of the appendix with interstitial infiltrates, along with similar infiltration of other organs beside the appendix, because of some organic disease, with obstruction to the blood and lymph circulatory systems. The reason why the appendix speaks up is probably because the inner soft coats cannot swell freely within the tight outer sheath of the peritoneum, and an irritation of nerve filaments results in these appendixes. It follows that in these two irritative lesions of the appendix, removal of that organ simply disposes of one unimportant factor in the patient's symptoms, and the cases as a whole must be taken into consideration or the operation will be a failure.

A still larger group of cases in which the appendix is removed ineffectively includes patients who never had appendicitis at all. Concerning the acute cases I have commonly found that the symptoms were due to some infective lesion of the pelvis or some infective lesion of the stomach or gallbladder, with accompanying tenderness of groups of abdominal sympathetic ganglia. Sometimes the cases have been buboncele with pinching of a small area of bowel; sometimes they have been cases of pneumonia with pain referred to the right lower abdomen, and sometimes they have been cases of toxic irritation of spinal cord centers with efferent impulses sent out along the ilioninguinal and iliohypogastric nerves. The reason why these toxic neuroses appear oftenest on the right side is perhaps the fact that the ascending colon is such a fertile focus for enteric toxemia. only are patients of this group sent in frequently for operation at the hospital, but I am sometimes called to a distance and asked to be prepared for immediate operation upon the appendix.

A still larger group of cases with symptoms in the appendix region, but not including the appendix, appears to depend upon a large and complicated variety of irritative lesions of the spinal cord, with efferent impulses sent out, not

only to the cerebrospinal nerves, but also to the sympathetic nervous system, and possibly to the autonomic centers, although Langley and his followers appear to believe that the autonomic system does not send out efferent impulses.

The most important single diagnostic point upon which I depend is one to which I called attention some years ago, and which is now included in a number of text books. If we press about an inch and a half to the right of the navel and a trifle below, and if we press deeply enough to bring out a response from the right group of lumbar sympathetic ganglia, there is definite evidence that we are to look to the appendix for the source of that particular irritation, provided that the left group of sympathetic lumbar ganglia is not hyperesthetic. This point of tenderness situated several inches away from McBurney's point is one which relates to a chronic irritative lesion of the appendix. Having determined that the appendix is a seat of chronic disturbance, we are still left to exercise surgical judgment, and to determine if removal of this factor of disturbance will decapitate the demon of all of the patient's ills. This means that we are to determine if the patient is one with neurasthenic habits and relaxation peritoneal supports; if the patient is one with chronic enteric toxemia; or if the patient is one with syncongestive appendicitis along with important organic lesions at a distance.

If the right group of sympathetic lumbar ganglia is not hypersensitive on pressure we may practically rule out the appendix altogether. This may be done in perhaps the larger number of cases which are sent in with the diagnosis of chronic appendicitis, but in which symptoms are dependent upon impulses from various cerebrospinal or sympathetic centers.—New York Medical Journal, May 20, 1916.

THE END-RESULTS IN SEVENTY CONSECUTIVE CASES OF UMBILICAL HERNIA OPERATED UPON AT THE MASSACHUSETTS GENERAL HOSPITAL. C. C. Simmons, Boston. Boston Medical and Surgical Journal, March 9, 1916.

Small umbilical in thin adults, and umbilical hernia in children, may be cured by any operation which removes the sac and closes the defect in the abdominal wall.

Cases of umbilical hernia in stout adults are difficult to cure. The Mayo operation, of transverse closure of the ring, with an overlap of the aponeurosis, gives the best results.

In adults, closure of the ring by any other method than the Mayo, in a general hospital, is followed by 46.4 per cent. of recurrence.

Recurrence, if it is to take place, usually does so in less than one year.

The suture material employed has no relation to the liability of recurrence.

Skin sepsis is very likely to occur, but, apparently has no relation to recurrence.

Intra-cranial Hemorrhage from Traumatic Rupture of the Middle Meningeal Artery.—The injury in the cranial vault itself, when this exists, is an unmistakable guide to the seat of hemorrhage. The majority of the cases are associated with marked fracture. It is only when there is no external lesion of the vault itself that Kronlein's and other guides to the pterion are really necessary for the localization of the artery. However, a previous training in the exact localization of the pterion is quite valuable, and it is so simple it should be easily remembered.

Capillary trephining is of little or no value, and should not be resorted to.

In concluding, I would like to add my voice to the cry for immediate exploration and decompression in all doubtful cases. The latter-day technic of cranial surgery is such that a decompression operation will positively add no more risk to life, and, in most instances, will bring to a happy termination what would have otherwise have been a fatality.—Lucian H. Landy in the Southern Medical Journal.

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 easily be divided. The omental adhesions can be readily anæsthetized 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. 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. manipulation should be as gentle as possible. As soon as the cecum with the appendix is exposed some novocain is injected into the mescnteriolum 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 postoperative 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.

# THE CONNOTATIONS OF PSYCHANALYSIS

In a letter to the Lancet for February 19, 1916, David Forsyth, of London, draws attention to a remarkable phenomenon, a survival of the mid-Victorian fear of words. He writes: "It is becoming more than a little amusing to notice how you have only to whisper the word, psychanalysis, and certain people at once see red. How strange is it that those who still reprobate psychanalysis and the sexual ctiology of the neurosis can remain blind to what must long have been recognized by every thoughtful reader of your paper—namely, that the

sexual instinct is clean and pure. It will not do nowadays to dress it up in mid-Victorian prejudices as a repulsive and disreputable bogie to affright our intelligence."—N. Y. Med. Jour., 4-18-16.

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. (Journal 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 resistant to the action of proteologic enzymes, dead 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 Gastric ulcer is due to the the area. 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."

RADIUM. By Douglas C. Moriarta. The physiological action of radium is remarkable. It often increases the red blood count 250,000 in forty-eight hours with rapid increase also of the hemoglobin. It stimulates all cell life, increases elimination of carbon dioxide, urea and uric acid. It diminishes the viscosity of the blood and increases the sccretion of urine, stimulates the appetite, aids digestion, dilates the bloodvessels and invariably lowers blood pres-Cardiovascular cases small doses, while arthritis cases require large ones. It may be given intraven-ously or internally and in radioactive waters. Nephritis is greatly benefited by its use, while both in malignant and benign growths the results are startling. -Medical Record, March 4, 1916.

## Book Reviews

Skin Cancer, by Henry H. Hazen, A. B., M. D., Professor of Dermatology in the Medical Department of Georgetown University, Professor of Dermatology in the Medical Department of Howard University; Sometime Assistant in Dermatology in the Johns Hopkins University; Member of the American Dermatological Association. With 97 text illustrations, and one colored frontispiece. St. Louis. C. V. Mosby Co., 1916.

In the author's preface is the statement that the aim of the book is to be both scientific and practical; to give the correct pathology of the cutaneous neoplasms, and to point out how this guides treatment. A careful perusal will show how near the book justifies his claims. He further states that an effort has been made to gather under one cover the latest views on malignant tumors of the

skin, and to give the personal experience of the author as gained in Dr. Bloodgood's surgical-pathological department of the Johns Hopkins Hospital; in Dr. Gilchrist's dermatological clinic at the institution and other sources of information. The book is nicely illustrated and well printed on good paper. After description of the various forms the author proceeds to deal with the treatment along the following lines:

Surgical: Knife, actual or electric cautery, curette with or without the use

of a caustic.

Electrical: Electrolysis. Fulguration.

Actinic: X-rays. Radium.

Caustic: Nitric acid. Sulphuric acid nitrate of mercury, Chromic acid. Caustic Potash. Arsenic. Silver Nitrate. Zinc Chloride.

Congealation: Liquid Air. Carbon

Dioxide Snow.

Medication: Arsenic. Methylene Blue. Colloidal Copper Salts. Cancer Vaccine. Immune Sera. Supportive Treatment. Analgesics.

Treatment of Complications: Infection, Hemorrhage. Invasion of Special

Organs.

Repair of Deformities: Plastic Operations. Artificial Organs.

Treatment of Inoperable Cases. The book is well worth reading.

Vol. III, Practical Medicine Series ON THE EYE, EAR, NOSE AND THROAT. Edited by Casey A. Wood, C. M., M. D., D. C. L.; Albert H. Andrews, M. D., and Gco. H. Shambaugh, M. D., is off the press. This is one of a series of ten issued at about monthly intervals, covering the entire field of medicine and surgery. The issues have been so arranged that each volume is complete on the subject of which it treats for the year prior to its publication. It is up to the scientific level of the previous numbers and is published at the price of \$2 per volume, for which amount any one of the previously published volumes may be purchased. Price of the ten volumes is \$10. The Year Book Publishers, 327 S. LaSalle St., Chicago, Ill.

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SOME EXPERIENCES I HAVE HAD WITH FRACTURES AND CONCLUSIONS DRAWN THEREFROM.

By C. S. Hoffman, M. D., F. A. C. S., Keyser, W. Va.

Read at Annual Meeting, Wheeling, W. Va., May, 1916.

The treatment of fractures has and always will be a matter of discussion and, until we arrive at perfection, it should be. For some years past the open method of treatment has been suggested and while this method has its advocates, it also has its opponents. In surgery we have radicalists and conservatists; too much of either is often bad. Surgery is a fascinating work and with a few brilliant results in a certain line, one is often led to advocate this course of treatment in all future cases. In an extensive practice of forty years, I have learned that there is no treatment suited to all cases; every case has an individuality of its own.

To advocate the open method of treating all cases of fractures, in my opinion, is bad. To advocate it universally in all cases of a certain kind of fracture is

bad, as I question if the open treatment of fractures is suited to the general practitioner or to any one not surrounded with ample hospital advantages. I care not what method is adopted, there will be failures. In this paper I am not referring to compound fractures where the bone is already exposed, and yet in this line of fractures I have often seen the most brilliant results by applying at once an antiseptic compress and treating the case as one of simple fracture. This treatment is especially applicable to fractures between the knee and an-In the result of the treatment of fractures I beg to insist on the indulgent criticism of the general practitioner. The union of fractures which are not directly in line or may have a bump at the seat of fracture are often just as serviceable as the perfectly straight ones. The timidity of the patient in not using the fractured member or the pain connected with its first use is often the cause of permanent lameness and not the fault of the physician. It is not my purpose to go over the long list of fractures I have treated, but to select only a few cases as illustrative of my conclusions.

In injuries about the head when in doubt as to the existence of a fracture, give ether and cut down to the bone and see; if there is no fracture the cut will soon heal with the patient no worse, but the doctor is wonderfully relieved of anxiety as is also the patient if he ap-

preciates your interest.

Case 1: This man was sent to our hospital with his head nicely bandaged. The physician sending him called up by phone, stating that there was a small cut over the right eye, but he did not think there was a fracture of the bone and that it would not be necessary to dress the head before the next day. The history of the patient was, that he had fallen fourteen fect, striking on his head on a concrete floor; he had indications of concussion of the brain of only a slight degree, and apparently was not much hurt. I could not see how as heavy a man as he was could fall fourteen feet, landing on his head on a concrete floor and not receive more injury than he apparently did. Being of a rather inquisitive nature, I removed the bandage and passed a sterilized probe into the wound and found that it went through the bone into the brain. Under ether the skin wound was enlarged, revealing an extensive compound comminuted fracture of the right frontal bone which required the removal of the greater part of this bone, including the larger part of the supra-orbital plate, exposing a large surface of the brain which was lacerated, with the loss of some brain matter. At the time, I happened to have in the hospital a sheet of dentist's gold foil which I sterilized and laid as neatly as I could as a covering over the brain and over this I closed the Dura Mater as best I This man made a nice recovery and in less than two months was back at his work with no ill effects from his injury. I have often wondered what became of that gold foil.

Case 2: Was that of a passenger engineer, who, while coming into the Keyser yards with his head out of the cab window, was struck by a projection of iron from an old broken steel car on the opposite track. This man walked from the depot to my office, which was about two squares. With the exception of his mind being a little dazed he was apparently not much hurt. There was a very small cut, not over one-half inch

long, through the skin over the right eve. A sterilized probe was used and revealed a punctured fracture of the skull. Under ether and with an enlargement of the skin wound, a compound comminuted fracture was found with projecting splinters of the internal table, with brain membrances lacerated and some laceration of the brain tissue. I have selected these two cases as illustrative; both were apparently very simple cases, the gravity of which was liable to be overlooked. The only indication of any special head lesion was the very slight external wound and a very slight transitory, dazed condition of the mind, this latter, however, was not more marked than often occurs to people who receive slight contusions of the head, and yet both parties would have died if treated on the "watchful waiting" plan. I could adduce many more almost similar cases, but these are sufficient to make plain the importance of thorough examination in seemingly slight head injuries. Years ago I used to approach head injuries with much timidity, later experience has not justified me in this. My practice now is, when in doubt to enlarge wounds already present, or make incisions to determine the conditions present.

Case 3: Was that of a young man who had his arm caught in a belt while working in a saw mill. His arm went clear round the pulley under the belt. He was brought seventeen miles to our hospital in an automobile without scarcely any previous dressing whatever. The conditions present when he reached us were extensive contusions and lacerations of the tissues on the inner part of the arm from the shoulder to the elbow. To be more specific; there was a circular tear of the skin and cellular tissue in the axillary region which extended more than two thirds around the arm, exposing all the main blood vessels and nerves of these parts. There was another tear of skin and cellular tissue close to the elbow which extended, at least, three-fourths around the arm; between these upper and lower circular tears the skin and cellular tissue was torn loose from the muscles and nerves and blood vessels, and all the soft parts were badly contused and lacerated; one-

half of the biceps muscle was torn loose near the elbow and stripped up from the other half and was dangling by the patient's side, having been pulled clear loose except for the upper attachment, and dropped out of the circular tear in axilla. The Humerus was fractured about three inches below its head. The brunt of the injury to the soft parts was on the inside of the arm, mangling and tearing the tissues at least two-thirds around the arm. The posterior part of the arm was not much injured. I cut away the piece of biceps muscle dangling by his side, connected the circular tear at axilla with the circular tear at elbow, cut away all pieces of lacerated tissue, ligated all bleeding vessels, applied Tr. Iodine freely and closed up this wound. I then made a cut on the posterior part of the arm, exposing the fractured humerus and applied a Lane Plate. Union of the soft parts took place by first intention. The fracture also healed nicely. The patient now has a good arm, no shortening and does as much work with it as he did before he was injured. He were the plate for about six months when he thought it was giving him some pain and came to me to have it removed. I had some little difficulty in finding the plate as it was completely covered with a calloused or bony tissue, requiring the use of a chiscl to cut away this cover-One screw in the plate was loose and the bone about it was becoming slightly necrosed.

Case 4: Was that of a man who was struck by an engine and had his toes of one foot crushed off and his right Humerus broken a little below the middle. This man had his arm in temporary splints when he came to us, but the deformity was not corrected. While under ether for the amputation of his tocs, reduction of his arm was attempted and while we could pull it out its full length we could not get it just right. During the next ten or twelve days I made three or four attempts to correct the existing deformity but could not. I then gave him ether and cut down to the bone and found that a large piece of muscle had gotten between the two edges of the bone in such a manner as to preclude all possibility of a reduction by the closed

method. In fact, after I got the muscle from between the bones so much muscular contraction had taken place that it would have been impossible to have reduced this fracture by the closed method, as I had to flex the arm almost to a right angle, bringing the elbow almost up to the shoulder before I could get the two ends of the bones together, making them act as a pry. After getting the bones in a position a Lane Plate was applied. The resulting union was perfect and although a year has now gone by the party is still wearing the plate without any inconvenience whatever. Without the open method of treatment in this case this man would have been a hopeless cripple.

Case 5: Was that of a young man with just a common fracture of the Femur at the junction of the middle and upper third. With my best effort this man got well with about one and one-half inches of shortening and with some deformity. I believe a Lane Plate, or a band, or a wire in this case, would have made the deformity less and if not avoid it altogether, would have prevent-

ed the shortening.

The conclusions I have drawn from my experience is that in fractures of the Femur and Humerus, where I could not get the apposition of bone as accurate as I would like and where I can get the consent of the patient, I shall in the future urge the open method treatment. I would not, however, advocate the universal open method treatment under all circumstances, and by every practitioner, as I believe the results would be disastrous, but where a patient can be surrounded by modern advantages, I believe that the open method in the treatment of fractures of the long bones will give the most satisfactory results, and in some cases is positively required.

TETANUS, WITH SPECIAL REFERENCE TO TREATMENT WITH ANTI-TETANIC SERUM, WITH A REPORT OF CASES.

By W. J. Judy, M. D., Belleville, W. Va. Read at Annual Meeting, Wheeling, W. Va., May, 1916.

In rendering this paper to the pro-

fession, I have no new material to offer, nor apologies to make; my main object being to urge the use of anti-tetanic serum as a curative agent and stimulate clinical research, because we as general practitioners are in the habit of leaving too much to the bacteriologist and pathologist, to work out in his restricted and narrow field; we should be co-workers with them in the great fight to combat the deadly pathogenic bacteria which beset life from its inception to the end.

Tetanus is a dangerous and rapidly fatal disease, the suffering being intense and excruciating, presenting a picture long to be remembered; a heroic disease, requiring heroic measures of combatting. If I can be instrumental in influencing you to use measures that would save only one more life from this agonizing malady, I shall feel that my time and effort in preparing this paper has not been in vain and can say with the sacred writer of old, "He that shall save a soul from death, and shall hide a multitude of sins," and I, too, like such an one, shall receive my reward.

Tetanus is an acute infectious disease, due to the entrance into the body and the multiplication of the B. Tetanus, and the entrance of the toxins of this bacteria into and combining chemically with the cells of the central nervous system, for which it has a strong affinity. The tetanus bacillus in spore stage is

strongly resistant to chemical agents and

heat, resisting for two hours a 1:1000

Bichloride; 1:20 Phenol; or boiling water for a short time.

Nature of the Toxins It is true toxin of the albumen class, as it is decomposed and rendered harmless when heated to 65 deg. Cent. for five minutes; one of the most poisonous substances known; harmless when given by the mouth; not absorbed from the intestinal canal and destroyed by the digestive juices, but a minute amount was fatal when injected into a guinea pig, weighing 350 grams. It travels along the axis cylinders of the nerve trunks to the central nervous system where it combines with the protoplasm of the nerve cells and produces the characteristic painful tonic muscular spasms of certain groups of muscles. We know that when these symptoms have

developed that the toxins have combined with the motor nerve cells and that this union is very strong and difficult for the anti-toxin to break up; this affinity exists also for the anti-toxin. To illustrate, the toxins represent the licentious reprobate, the anti-toxins, a gentleman of culture, the living cell the fair lady, seeking the first opportunity for union; if the reprobate has the first chance, the union is formed, then when the man worth while comes along he finds her united to the reprobate and begins his fight to win her from her first love, and if he is successful in his battle and wins her, dispatching and vanquishing his deadly foe, the patient lives; while on the other hand, if the amiable gentleman is the first to win the fair lady, when the libertine comes along and tries to win her, he finds the task an impossibility, the union indissoluble and the patient will not develop the disease although the toxins are present. Behring and Kitasato immunized a rabbit to such a high degree, that it was able to withstand 10 CC of a virulent culture containing the T. Bacillus; 0.50 C. C. of which was sufficient to kill a normal rabbit. Tetanus Anti-toxin is standardized by the Public Health and Marine-Hospital Service; the unit is ten times the least amount of serum necessary to save the life of a 350-gram guinea pig for 96 hours against the official test dose of the standard toxin; it is manufactured under government supervision.

Etiology: The predisposing causative factor is an abrasion of the skin or mucous membrane; injuries of the hands and feet and those of a penetrating or lacerated nature are more liable to be followed by Tetanus. The more virulent the poison, the shorter the period of incubation and the higher the mortality, which is as high as 80% in the acute form and 50% in the chronic. shortest period of incubation being eight hours. It is more rapidly fatal in hot climate; a case is reported of a sea captain who received an abrasion on the hand while loading guano in South America, from which tetanus developed and terminated fatally in 24 hours. a patient survives ten days, his chances of recovery gradually increase each day

to the 15th, when they increase rapidly.

Treatment: Prophylactic. very important and the most effective weapon at our command in combatting this horrible disease. Every penetrating, punctured or lacerated wound should be cleaned and all penetrating wounds laid open with a free incision, better give nine patients a wound longer in healing than to have tetanus in the tenth. Apply Tr. Iodine or better, pure phenol, which allow to remain one minute and wash off with alcohol; the immediate administration of 1500 units of anti-tetanic serum, repeated in 7 and 12 hours. In 1903 there were 56 cases of fourth of July wounds treated with 16 deaths from Tetanus resulting; in 1904, 37 accident cases were given prophylactic doses of serum with the result that not a case of tetanus developed.

The French soldiers in the present great war are equipped with a hermetically sealed tube of Tr. Iodine with an applicator for the immediate treatment

of wounds.

The treatment of a fully developed attack of tetanus may be divided into general and special or symptomatic. General treatment, the first and most important single measure, is the immediate and continuous administration of antitetanic serum, repeating every four, six, or eight hours as the symptoms may require, beginning with three thousand units and rapidly increasing the dose until five or ten thousand units are given, being regulated by the degree of muscular rigidity.

Laboratory experiments demonstrate that the serum has an enormous power of destroying poison. McFarland gave enormous doses to eleven cases in Philadelphia Hospital, all recovered. Copley recommends massive doses every six hours until improvement is noted. have learned indirectly that my colleague, Dr. J. W. Corder of Clarksburg, gave a patient 100,000 units with recovery. The cases which I shall report in conclusion were given large doses, case No. 1, a child of 11 years, was given 118,500 units with recovery, the other case, No. 2, a man of 40 years, was given 137,500, death resulting the sixth day of the disease.

A 25% Sol. of Magnesium Sulphate is being used with a marked degree of success, by European physicians, in conjunction with anti-tetanic serum, for the purpose of relaxing the patient, tiding him along until enough antibodies are formed to neutralize the toxins; it is given subcutaneously, intramuscularly and intra-spinally in some cases where a rapid action is desired.

The next most important measure is the service of a competent nurse. Absolute quiet in a dark, well-ventilated room, since any external impression, a slight sound or a light will increase the severity and frequency of the spasms.

The Dict: Should be liquid and nutritious and given at frequent intervals; the patient can not take solid food on account of the inability to masticate and

difficult deglutition.

For the Convulsions: If violent as they often are, the patient biting the tongue, chloroform by inhalation may be used, but this can not be kept up too long. Bromides and chloral in combination. I had good results with a combination of Pot. Bromide and Pascarnata. Morphine Sulph. must be used with caution and it is of doubtful value, probably doing more harm than good, on account of its paralyzing effect on the respiratory center.

Stimulation: Strychnine Sulph. for a weak and failing pulse, if rapid and it usually is, running 120 to 140, the best remedy is Digitalis. I merely mention alcohol to condemn it, as we all know it is not a stimulant, but a depressant.

Edimination: Keep the bowels open freely, preferably with a saline purgative, Magnesium Sulph. being the best, besides having a sedative effect; also cleansing enemas, this prevents the accumulation of gas in the intestines. Retention and suppression of urine must not be overlooked.

Report of Cases: Case No. 1: A.—V.— A strong healthy girl of 11 fell with her knee on the head of a rusty, dirty nail, which was in a board that formerly was a part of a trough that was used in the pig sty, inflicting a lacerated and penetrating wound; it was treated by a neighbor, who told me he used a bichloride dressing, nevertheless

a staphylococus infection developed with

a copious discharge of pus.

The primary injury was on October 19, and I first saw her professionally on October 21. I dressed the wound on October 28, and discharged her. The next day, October 29, ten days after the wound was inflicted, her relatives came after medicine for her, saying she had Tonsilitis.

I saw her on October 31, tried to inspect the throat, but could not do so on account of the trismus; was suspicious that I had a case of tetanus, but did not make a diagnosis until the next day.

The muscular rigidity and spasms gradually extended to the muscles of the neck, back, abdomen and legs, until on the fifth day of the disease when she had several violent convulsions, marked opisthotonus and a board-like rigidity of the abdominal muscles, the convulsions were violent, requiring inhalations of chloroform to relieve them. She complained of feeling tired and worn out, was very restless and nervous. Two very annoying symptoms were the accumulation of gas in the intestines and a tough mucous in the throat which the patient was unable to dispose of, its presence simulating the death rales.

On November 1 we began the administration of anti-tetanic serum subcutaneously, giving 1,500 units the first dose; gradually increasing the amount and at shorter intervals, until on the tenth day when she was given 8,000 units every six hours, the last dose being given on the fourteenth day, giving her a total of 118,500 units.

It is very essential to give enough serum to neutralize the toxins, if you do not do so, you had just as well give none; on the eleventh day in this case, after giving about 90,000 units we lengthened the period between doses and the muscular spasms increased in severity and I believe the case would have terminated fatally after giving this enormous amount, if we had not given 18.500 units more.

The maximum temp. was 101.2 Fahr. (Axillary) which was on the seventh day. The pulse rate rising to 140 on the eighth and ninth days, remaining

rapid to the time patient was discharged when it was 100.

The muscular rigidity gradually diminished to such a degree that she was able to open her mouth about half inch on the fifteenth day. Her tongue presented a saw blade appearance from the indentations made by the teeth. She had headache when exposed to a bright light or when using her eyes for close work, for several days, but is now in perfect health.

Case No. 2: J. K., Male, aged 42, laborer, of neurotic temperament and impaired vitality, received a lacerated wound, severing the fourth finger of the right hand, inflicted by a rope and pulley. I saw him three hours later, on December 4. cleaned the wound with bichloride solution and made the necessary repair, securing a flap from the palmar surface, which became necrotic. On the tenth of December, I called a surgeon in consultation with a view to amputating it, the surgeon advised against it and we adopted the favorite policy of "watchful waiting." On December 15 he complained of severe pains in his back and right side of chest, on the sixteenth the characteristic symptoms of tetanus were well developed and a diagnosis of tetanus made.

Three thousand units of serum was given and in five hours 5,000 units, the latter dose being repeated every four hours until 137,500 units were given, to the time of death, December 21, the sixth day of the disease, from exhaustion and collapse of the circulation. The muscular rigidity was not as severe in this case as in case No. 1; he did not have convulsions, but was intensely nervous, restless and sleepless, was always able to open his mouth and take nourishment. Complained of pains in head, neck and abdomen, his face was drawn; presenting the typical "Risus Sardonicus," a picture of intense suffering, pitiable to behold. His temperature was never over 102% Fahr. the day before his death. The pulse varying from 90 to 150, reaching the high rate a few hours previous to death.

From the locality in which those persons were injured, I believe that the alluvial deposits from the overflowing

Ohio river was a common source of infection. The B. Tetanus is anærobic and will not thrive in the presence of oxygen and in view of this faet we used a continuous application of Hydrogen Peroxide and I believe with good results.

## THE ESSENTIAL PURPOSE OF A HOSPITAL

By Chas. Wingerter, M. D., LL. D.

Read before W. Va. Hospital Association, Wheeling, W. Va., May, 1916.

"The world grows terrible and white, And blinding white the breaking day, We walk bewildered in the light, For something is too large for sight, And something much too plain to say."

The essential purpose of a hospital is the care and treatment of the sick and suffering. The end result aimed at should be the cure of the patient and his restoration to the fullest efficiency that his present disability will permit.

To obtain this desired end-result, the hospital should make use of all that modern knowledge, invention and skill can provide in any given community.

The patient must ever remain the prime consideration. One of the most eminent of living medical teachers has said: "On the walls of every hospital in the land these words should be written in letters of gold: "Do not allow your zeal for science make you forget the welfare of the patient."

The essential purpose of a hospital is to promote that welfare. Every hospital should have as its slogan: "The welfare of the patient first, last and always."

The essential purpose of a hospital cannot be carried out rightly without a thorough appreciation of the human character of the patient. The stuff that comes to the hospital as its raw material is human stuff—nen and women and children. Moreover, these human beings come to the hospital sick and suffering. That means that they come with all their weaknesses exaggerated. They may exhibit unwonted petulenee, impatience, irascibility, unreasonableness, ev-

en insanity. They must therefore be met at the hospital with a spirit of broadmindedness and tolerance and compassion and patience on the part of all the attendants.

Thoughtful sympathy, kindly consideration and tolerant courtesy should mark the reception of the patient into the hospital, and should characterize the attitude and conduct of physicians, nurses, attendants and officials throughout the patient's stay.

Such humane reception and treatment should be accorded to all, to poor as well as to rich; to strange alien as well as to influential neighbor, to charity patient as well as to wealthy benefactor. We should ever keep glowing within us the spirit of the great Hebrew physician, Maimonedes, who prayed to God that he might ever "see in the patient nothing but a fellow creature in pain."

There may be hospitals in the world in which individual patients are thought of as eases or numbers. Such hospitals have lost sight of the essential purpose of a true hospital. They have lost sight of the personality of the patient. In them the patient's body may be healed while at the same time his personality is degraded.

Dr. Richard C. Cabot tells us that one morning, on his arrival at the hospital he asked his assistant: "What is there in the waiting room?" The assistant said briskly: "There's a couple of good hearts, a big liver with jaundice, a floating kidney, three pernicious anæmias, and a flatfoot." We may be sure that Dr. Cabot reminded his assistant not to overlook the eight personalities that were likewise present in the waiting room. The patient's personality is the higher part of him. If that higher part is traumatized his best welfare has not been eonserved even though his material body may have been healed.

If a hospital is more concerned about its mortality rate than of the relief of the moribund it has lost sight of the essential purpose of a hospital. There was a time in New York City, in my student days when the public witnessed often the scandal of a dying human being turned away from hospital to hospital because

the hospital desired to keep down its

mortality rate.

If a hospital prides itself most on the number of patients it has treated in a year it has lost sight of the essential purpose of its existence. A hospital with fifty beds might have them all filled with cases that each needed six months of treatment to secure the thorough welfare of the patient. Its record would show but a hundred cases cared for in the year. But a hundred patients made well are better than a thousand passed through hurriedly and cared for inefficiently and inadequately.

If a hospital have as its chief aim the keeping down of the per capita cost of maintenance it has lost sight of the essential purpose of a hospital. Two classes of hospitals, widely different in their mode of support are in danger of falling

into this mistake.

The privately owned hospital, undertaken as a commercial venture, is especially apt to have undue regard to the per capita cost of maintenance. No hospital can be maintained properly as a purely commercial enterprise. The hospital must keep careful accounts and watch its per capita expense. The reason for doing this is that the management may know whether or not the hospital is receiving all the money necessary to meet its demands. If the means at its disposal do not permit it properly to care for its patients, then it must have more money or more gratuitous service. The last thing it must ever think of doing is to curtail the things that minister to the proper welfare of the sick and suffering.

Hospitals supported by public charity are the second type that are tempted to keep down expenditures to the detriment of the patients. The contributing public are only too prone to be thoughtless or ignorant about the essential principles underlying a hospital's function. The public feels that the hospital shauld "cut its coat according to its cloth." The hospital management will be told: "If your funds are not sufficient to care for patients properly, then do the best you can, but cut down expenses so that you may keep going in some fashion." Such advice is nearly always bad advice.

The truth is that hospitals should ever keep in mind their essential purpose and should live up to it. The whole hospital ideal is worth keeping alive and in good repute. It is better for a hospital to do its whole duty while it may, even if it has to close its doors when its funds are exhausted. It can with honor and fitness re-organize on a lower plane. may be re-opened merely as a first aid station or as a temporary and makeshift refuge for sick and suffering people. Such institutions are not without honor in their own place, but they are not hospitals in the modern acceptation of the They should be called first aid stations or temporary refuges, but not hospitals.

Wheeling has had a recent example of a hospital honorably closing its doors. The hospital in question kept its doors open and was conducted at a loss until the generous owner found that he had come, at least for the time being, to the end of the sacrifices he could afford to make. While his institution was in existence it maintained the hospital ideal. When it ceased to function as a hospital it left the flag of the hospital ideal still

floating in honor on high.

The very closing of the doors of a hospital for lack of funds is an object lesson for the public. It may do more to touch their hearts and open their purses than a score of written appeals

might effect.

If a hospital aims to keep down the average length of stay of a patient it has lost sight of the essential purpose of a hospital. If the greater number of cases cared for are acute the average length of stay naturally will be shorter. If the greater number of cases are chronic the average length of stay will be longer. The welfare of the patient still remains the important thing. The average length of stay is secondary at least. The patient must not be discharged too soon. The final results of treatment must not be jeopardized by sending him away before the proper time. The average length of stay cannot be controlled if the welfare of the patient is to be paramount. And it should be always. The records of average lengths of stay must be secondary even as the per capita cost and the mortality rate and the surplus or

deficit are secondary.

A hospital that should put the interests of science above the welfare of the patient has lost sight of the essential purpose of a hospital. I have preserved in my files, as a horrible example, the address of a German professor to his students. He told them that the advance of science should be their first consideration. He told them that if they could advance science by sacrificing the lives of some or all of the patients in the hospital they should not hesitate to do Such a speech is barbaric. Civilization is even now armed and fighting to discipline a kultur built upon such faults and savage principles. We must ever be alert and on our guard to avoid any taint of false philosophy.

It is well for us if we may have internes in our hospitals and training schools. It is desirable to attach to the institution a training school for nurses. But internes and training schools must be secondary and subordinate and auxiliary things. The welfare of the patient is first. If the advancement of scientific knowledge, if the training of young men in medicine and of young women in nursing can be made to harmonize with the essential purpose of a given hospital, well and good. But if the day comes in the case of any hospital when these secondary things are considered primary and essential then that hospital has taken its first step towards degradation and

final failure.

Our country is cursed by several selfappointed Foundations or Committees which have insolently assumed to pass judgment on our hospitals. Their standards of judgment are evolved from the materialistic and false philosophy of Germany. These critics deem the essential purpose of a hospital to be the advancement of medical science. Their approval or disapproval is determined by the material "plant" of any given hospital. Operating-rooms, laboratories, X-ray apparatus, arrangements for interneships, and the like, are to them the important things. The essential purpose of a hospital is lost sight of. We must be on our guard against these insidious foes of the true hospital ideal. We must

set our influence against their evil pur-

pose.

There are many more points of danger that invite consideration. The occasion and the time do not permit that consideration here and now. Hospital managements are brought face to face with these points of danger at various They arise when we face the questions of more or less rigid discipline, of routine and system, of importation of nurses from other hospitals, of the precedence of staff members, of the status of outside physicians, and the like. The sword of clear-thinking is the weapon with which to defend ourselves when these dangers confront. We must keep in our minds the thought of the essential purpose for which the hospital exists. We must never forget that the hospital is intended primarily to promote the proper treatment and cure of the patient. That principle is the touchstone by which we can test all things. That principle is the standard by which we can measure the relative importance of all age and means. That principle is the key which will unlock all difficulties that may arise. Science, profit, discipline, system, personnel, precedence, reputation, pride, are all alike to be subordinated to the welfare of the patient and to be made to harmonize. They must be made to harmonize in sub-serving that welfare.

### BACKACHE AMONG RAILWAY EMPLOYES

Walter E. Vest, M. D., Physician in Charge, Chesapeake & Ohio Hospital, Huntington, W. Va.

Read at Annual Meeting of Association of C. & O. Surgeons, Old Point Comfort, Va., August, 1916.

Of all the pains and aches to which the anatomy of man is heir, by far the majority of them are in one of three regions, the head, the abdomen, or the back. In fact, backache has been so frequently a presenting symptom with our patients that we decided to analyze our series of cases for the first six months

of the present calendar year, and see if we could reach a conclusion as to why railroad employes are more prone to this particular symptom than are men of other occupations and what could be done towards eradicating these causes. The running of a railroad system is at best a complex problem, and whatever keeps men from work necessarily increases the friction and adds to the complexity of detail for the management. Whatever tends to keeping the employes in better physical condition also tends to making the whole railway system more efficient.

Between January 1 and July 1, there appeared at the C. & O. Hospital for treatment ninety-five men who suffered from backache either alone or as one of the chief symptoms. Exactly how much time these men lost from work, I do not know, but one man alone lost more than four months. All things considered, the total time loss was probably between two and five years, quite a financial item to the employes affected and the insurance men, and a matter of considerable money, labor and trouble to the company.

The necessity for a careful examination was impressed on us by a few of these cases: for instance, a man for eight months had believed himself to be a victim of rheumatism, when a relaxed sacro-iliac ligament was responsible for his trouble. Another had been treated eleven years for indigestion and had been assured that his kidneys could not be at fault because his urine did not contain albumin. His urine did not contain albumin, but it did contain pus and the X-ray showed a kidney stone.

Under the term backache, we are including pain in the region between the inferior angles of the scapulæ and the inferior extremity of the sacrum. A classification of causes in our series is as follows:

Trauma	-	-	-	-	-	-	43	
Lumbag	0 -	-	-	-	-	-	30	
Phospha	turia		-	-	-	-	12	
Renal st	tone	-	-	-	-	-	3	
Append	icitis	-	-	-	-	-	3	
Relaxed		ili	iac	lig.	-	-	2	
Unclassi		-	-	-	-	-	2	

In the forty-three traumatic cases,

there was, with few exceptions, no visible pathology. In the majority of them the injury could be traced to some definite incident in the work of the patient, most often lifting. Physical examination is usually negative except that bending forward increases the pain and bending backward beyond the erect posture usually affords marked relief. The preponderance of traumatic cases we attribute to the fact that such a large percentage of our patients are engaged in the construction and repair of cars, work necessarily entailing hard labor. Moreover, man is not so constructed anatomically as to be, when in a squatting or a stooping posture, a lifting animal. Under such conditions the principal part of the strain falls on the erector spinæ muscles whose function is chiefly to maintain the erect body posture, or on the abdominal rings. The lifting of an overload thus results in either strained back muscles or in a hernia.

Lumbago, the diagnosis made in thirty instances, we have to confess is more or less of a wastebasket into which we have tossed the backaches which were probably of a rheumatic origin. The chief differential point between these and the foregoing is that pain is elicited by bending the body both forward backward. If the urinalysis and physical examinations were negative, there was no history of an injury, and bending the body backward past the erect posture caused pain, we classified the condition as lumbago. Another reason for thinking these are probably rheumatic is the fact that the vast majority of them were observed in the winter months. As with the traumatic cases, the majority was among car-repairers men who do piece work in the open and are exposed to all conditions of weather. In these cases carelessness probably plays a part, less it is true than in the traumatic cases. If the men would only practice "safety first" in every way, both these classes could be appreciably diminished. Whether the piece work system is a contributing factor, I do not

We have been struck especially with the fact that phosphaturia may give a severe backache. In approximately

twelve and one-half per cent. of the series, this imperfectly understood metabolic disturbance appears to have been the underlying factor. The urine is usually neutral or alkaline. The phosphates are in excess, and in some cases a moderate number of pus cells were observed—in some even an occasional red blood cell. This type of backache is not very much influenced by motion, if at all, and the pain often radiates along the ureters and to the penis. In all cases showing pus and blood under the microscope, renal stone was excluded by the X-ray. Microscopical examination of the urine is a necessity in these cases. The custom, widely practiced, of making a micro on only those specimens showing albumin should be discontinued for urine may contain casts, pus in fairly large quantities, and even a considerable number of red blood cells and still be negative to the ordinary chemical tests for albumin.

Our cases of stone and sacro-iliac slip gave the usual findings and do not call

for special comment.

In the cases listed under appendicitis we are not sure that the backache was not due to an excessive phosphatic excretion, as we have noticed that phosphaturia is often a finding in chronic

appendicitis.

Of our two unclassified cases, one was not sufficiently observed to determine accurately the underly pathology. other was either a neurasthenic or a malingerer. He came under my personal observation January 2, although Drs. Wilkinson and Young had been treating him for a month previously. His only complaint was backache. Physical examination of his back was negative, except that he complained of increased pain on bending the back in any direction. Urinary, blood, stool, leutin and X-ray examinations were negative. The man was a confirmed neurasthenic, a tobacco habitue, was rather below the normal in intelligence, and had a reputation among his fellow workmen for industry and strict honesty. Physically he was a perfect man except for an error of refraction, a deflected nasal septum, and a unilateral hernia of several years standing. He wore a truss and declined

operation. About the middle of Febru ary, he astounded us by announcing that his trouble was due to an injury—a strain of his back—received November 27, 1915, and that he was insured against accident but not against sickness. We tried all the backache therapeutics we ever heard or read of, all to no purpose. During this time he had been in the out-patient clinic and had declined to enter the hospital. He admitted excessive venery, and we decided to put him at absolute rest. After repeated urging he entered the hospital on March 21, and was put at rest in bed for fifteen Upon entrance we blistered his back with cantharides which procedure failed to relieve him. Later while at rest we tried morphine without his knowledge, but his back still ached. On April 5, we had a very frank talk with him, assuring him that he was well and that he should return to work at once. He decided to take our advice and has been working regularly since, although he told me a few days ago that his back had not yet become entirely well. About the time of his discharge from the hospital, the insurance company, which had been contesting his claim, effected a settlement and this probably distracted his attention somewhat from his back.

As to treatment, we have found adhesive strapping very effective for the traumatic cases and of great value in lumbago. Tincture of belladonna, or atropine, internally, is sometimes effective. Acetylsalicylic acid is very efficient in lumbago. Occasionally we have resorted to a liniment composed of camphor, turpentine, ammonia and cotton seed oil, to which at times we have added chloroform. In the phosphatic cases, dilute HC1 internally promptly clears up the phosphaturia and relieves the pain incident thereto.

In diagnosing the cause of backache, these are the essential points:

- A careful history, especially as to trauma, rheumatism and urinary symptoms.
- (2) A painstaking physical examination, noting especially points of tenderness and the effect of body motion, both lateral and antero-posterior, on the pain.

(3) Urinalysis, chemical and microscopical.

(4) X-ray.

In closing I wish to thank Dr. Robert J. Wilkinson for permission to report his series of injured backs and for suggestions in the preparation of this paper.

## THE DEMONSTRATION METHOD OF TEACHING NURSES

Harriet M. Phalen, Principal School for Nurses, Ohio Valley General Hospital, Wheeling, W. Va.

The preliminary course in Practical Nursing, in which the demonstration method is used, is by far the most satisfactory for the probationer, school, and patient, because the student is perfectly familiar with all treatments and the general routine work before she takes the responsibility of caring for the sick. The subjects and conditions are brought more forcibly to the minds of the students than it would be from a text-book because they can actually see what is being done and are therefore able to grasp this knowledge with greater ease. interest in the work is excited early if there is to be much interest shown. The student does not have to come in contact with the embarrassment of being obliged to give treatments to or care for patients in any way until she is perfectly familiar with the methods.

The class is brought to a class room to take notes and observe the methods of Practical Nursing. The "Chase Hospital Doll" is used as a subject instead of a fellow class-mate or a patient. The demonstration is given first by the Instructor with each detail carefully described and explained as she goes along. The best method as well as the one which is comfortable to the patient and can be accomplished in the shortest time is adopted. The pupils are given a sufficient length of time to go over their notes carefully and to plan each step as they go along, then each student demonstrates before the class and Instructor the work previously done by the teacher. The student is never allowed to give any treatment or do any general routine work until after she has demonstrated that particular procedure for the Instructor. Even after this she is watched very carefully by the Head Nurse.

The method of taking a new probationer and placing her on a ward to be instructed in the art of nursing by a pupil nurse has been most unsatisfactory for several reasons. It is not fair to the pupil nurse who has had the responsibility of teaching the probationer thrust upon her when she has not reached the stage in her career to be burdened with such responsibility, neither is it fair to the probationer who has given herself up to the work and wants to learn the right way to do it. She does not place full confidence in the undergraduate whom she perhaps knows has only been in training a comparatively short time. It is hardly fair to the patient either who feels that he or she is more or less a subject for experiment. It is very hard to find a standard method for doing the work when the nursing is taught in this way because each pupil teaches a little bit differently.

The Head Nurse usually has duties enough to perform when she sees that orders are carried out promptly and in following up the case and condition of each patient. She does not have the time to spend teaching the probationers, but she can be of great service and assistance to them while under her charge. It is most important that the Head Nurses know what the Instructor is teaching and her standard methods. She should be ready and willing to help in every possible way to have everything done promptly and properly on her ward. Cooperation between Head Nurses and Instructor is very necessary to carry on this particular line of teaching

successfully.

The Demonstration Method has been adopted for the past six or seven years in many of the larger hospitals and has proven its success many, many times.

Perhaps it would be impossible for small hospitals to adopt this, but there is a method which they can adopt. Three or four small hospitals can make arrangements to employ an instructor and she go and do the teaching at each one. In this way the financial end is easily met and the nurses get in turn the best of training.

## The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR C. R. ENSLOW, M. D. ASSISTANT EDITORS J. E. RADER, M. D. HARRY W. KEATLEY, M. D., BUSINESS MANAGER

#### Huntington, W. Va., Oct., 1916

THE JOURNAL issued on the first of each month

\$1.50 per year 20 Cents Subscription Single Copies

All original articles for this Journal must be made All original articles for this Journal must be made to it exclusively. Communications and items of general interest to the profession arc 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 about the given

should be given.

#### CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if nuthors will have their contributions typewritten be-fore 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 Chemistry and Pharmacy of the A. M. A.

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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.

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

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## Editorial

Attention is called to the announcement that the West Virginia Hospital Association will hold its semi-annual meeting in Huntington on October 11. Those associated with hospitals throughout the state are urged to be present, since some very important matters are to come up regarding desired legislation, which will be requested of the next legislature.

Some months ago the attention of the County Secretaries and of the members of the State Association was ealled to the fact that the postal regulations required that this publication should not be sent to members who had not paid their dues by April 1. It was necessary for us to remove from the mailing list the names of those physicians who had not been reported to us by the Seeretary of the State Association.

Recently we have been in receipt of complaints from quite a number of men, located in various portions of the state, that they were not receiving their Journals. Upon investigating the list of paid up members submitted to the Editor by Dr. Anderson, we discover that their names do not appear.

We would insist that the Secretaries of the various local societies make an extra effort to seeure the dues of those of their members who may be in arrears and immediately send them to Dr. Anderson.

There is another reason besides the maintenance of our membership at its maximum. A number of very large eoncerns that are extensive advertisers will only give a contract provided the number of copies of each issue is maintained at the figure sworn to by the Editor every six months.

It is readily seen that if our County Secretaries are not alive and make special efforts to not only maintain, but increase our membership, that the income from advertising in your State Journal will suffer.

Please, Brother Secretaries, put your shoulders to the wheel and assist the Editor in making the Journal a better and larger publication.

At the coming meeting of the State Legislature it is more than likely that there will be introduced one or more bills relating to compulsory health insurance. This is a very vital question to our profession, and attention should be called to it in order that the County Societies may thresh the matter out and make such recommendations to the members of the Committee of the State Association on Medical Legislation as may seem best to their members.

The Editor is in receipt of a pamphlet dealing with this question, and also containing a proposed law upon it, from the American Association for Labor Legislation, New York, N. Y. Any of our members interested in this question, and we feel sure that every member of the profession in the state is interested, may secure a copy of this pamphlet by writing to the above address.

It is suggested that all do so, as it is a pressing problem, which we will have to meet in the near future.

Owing to the illness of the Editor, due to an attack of appendicitis, it was impossible for him to review all of the final proof for the September issue. He discovers that there have been made quite a number of errors in the arrangement of the reading matter contained in the Journal, as well as mistakes in the dating and numbering of the issue on the cover page. He asks that the members will be as indulgent as possible in their criticisms because of an unavoidable circumstances, which brought these errors about.

Owing to the fact that the cuts illustrating Dr. Mathews' address did not reach us in time to be inserted in the issue for September, they were omitted. A set of these illustrations is enclosed with each Journal mailed for October. Just touch the edges with a little mucilage and tip it in the September Journal so that the article will have the illustrations accompanying it.

These are a few of the reasons why physicians should patronize advertisers in their own State Journal, together with some editorial comments from the Journals of other State Associations.

The reasons why physicians in other states should patronize the advertisers in their Journals apply as well to you and your Journal. It's perfectly simple: If you will buy goods from the advertisers, you will have a better Journal. Read the "reasons why":

Arizona: Business firms in other states spend their money in the advertisements to bring the market to us. Ought we not appreciate this and buy goods from them?

Arkansas: These advertisers would not be here if they were not reliable. Your support protects you, helps us, and pleases them.

California: The firm that does not advertise its goods to you, does not feel under obligation to sell you what you order. It pays to buy the advertised article.

Colorado: This is your Journal. The advertisers help support it. Tell them you saw their announcements in your Journal.

Florida: We urge our readers to look carefully over our advertising pages, and let it be known we are a live profession and have needs to be filled.

Georgia: Every member of the State Association has an interest in the advertising columns. If one firm advertises and another does not, patronize the one that does. It is money in your pocket.

Indiana: It costs you only a 2-cent stamp to write any one of our advertisers, all of whom are anxious to get in touch with you by sending you either samples or catalogs.

Iowa: Quite a good deal of our advertising is on trial, and unless our readers demonstrate their interest in it, we will lose it.

Kansas: Every advertiser in this Journal is paying you for the privilege of telling you about the things he has to

Kentucky: You may depend on our advertisements as a safe and sound business directory.

Maine: Look through the advertising pages each month. Place orders with these concerns. Specify their products on your prescriptions.

Maryland: Our readers may depend on the integrity of our advertisers. Reciprocity is not only desirable, it is a good business principle.

Michigan: Answer the advertisements. This is important. If you are busy, have

your wife do it.

Missouri: Anything in the line of physicians' supplies or equipment, can be obtained from firms advertising in the Journal.

Nebraska: The Journal desires to introduce you to the merchants whose goods are advertised, and ask that you

become their patrons.

New Jersey: If the goods advertised in this publication are equal in quality (and we hold they are superior in many respects) you should purchase them in preference to those not advertised with

New Mexico: Write: "I saw it in the New Mexico Medical Journal" whenever opportunity offers. Let us all pull

together.

New York: Any Medical Journal printing the fraudulent claims contained in the advertisements of the nostrums condemned by the Council on Pharmacy and Chemistry is an accessory to this act of thievery and the subscriber to such journals voluntarily assumes the position of an accomplice.

Northwest: Prove to our advertisers that advertising in Northwest Medicine is a paying investment. Don't forget to state that the business is sent their way because they advertise in your Journal.

Ohio: Every dollar spent with our advertisers is a dollar contributed directly to the betterment of your Journal.

Oklahoma: Many of us no doubt are spending in the aggregate large sums of money with houses and companies who never spend anything with us. It is not good business policy to follow such a shortsighted plan.

Pennsylvania: Most of our members throw circulars in the waste basket and refer to the advertising pages of the

Journal for needed information.

South Carolina: We should not run a Journal without the advertisers, and our constant effort has been to accept only the highest class of business.

Tennessee: The advertisers of the Journal are dependable concerns, who offer the best that is to be had. You are protected when you buy from them.

Texas: Our advertisers are guaranteed to us, and we in turn guarantee them to our readers. Is that worth anything to the prospective buyer?

Vermont: If any advertiser is not absolutely honest in his practice, his bus-

iness is not acceptable.

West Virginia: When writing advertisers, please be sure to mention the fact that you are writing them because you have felt that they deserve support since they are carrying space in our advertising pages.

Wisconsin: Goods and institutions advertised in this publication are absolutely reliable, and every dollar spent with your advertisers is a dollar contributed directly toward the maintenance of your

Journal.

We urge every physician who reads this to adopt these excellent recommendations in his own practice. Do it for the advancement of ethical medicine; for the immediate benefit it will be to you personally in securing reputable goods, and just prices; to encourage reputable firms to patronize your Journal and for the satisfaction and pride you will have as a joint owner in the success of your own Journal.

## Hospital News

On the evening of Tuesday, September 5, Mount Hope Hospital, at Huntington, was reopened for the reception of patients. For some three months this

popular hospital was closed for the purpose of re-arranging and re-decorating the entire interior of the building. large amount of new apparatus has been added, particularly that designed for the electro - hydro - therapeutic department, which is in charge of Mr. J. C. Bates.

A departure from the usual wall finish has been made in that practically all of the walls are now green in color, which will certainly be of more comfort to the eyes of the patients than the usual glare

from dead white walls.

Dr. R. E. Vickers, who is the head of this institution, is to be highly complimented upon the improvements made at Mount Hope.

Dr. A. K. Kessler, of Huntington, announces that it has become necessary for him to build an addition to his hospital on Sixth Avenue. In all there will be quarters provided for about one hundred patients, with a large number of rooms for private cases. It is his intention to make the ward rooms more commodious than those usually found in hospitals. Provisions will be made for rest rooms and sun parlors for the use of patients and nurses. It is planned to have an extensive culinary department in charge of a trained dietitian.

Bulefield, W. Va., Sept. 16, 1916.

Dear Dr. Bloss:

Please announce in the October issue of the State Journal that there will be a meeting of the State Hospital Association in Huntington October 11. It is earnestly requested that all persons interested in hospital management in the state, both professional and laymen, make an especial effort to attend this meeting.

The program has not been completely arranged as yet; if possible I shall send you a copy of the program in time to publish it in the October issue.

Fraternally yours,

W. H. ST. CLAIR. Sec.-Treas.

-0-

Dr. L. V. Guthrie, Superintendent of the Huntington State Hospital in his

biennial report brings out many interesting facts in connection with that institution. Among the numerous improvements which have taken place during the period is the new hydrotherapeutic department which is now in full operation and is proving of great benefit to many of the patients under treatment at the hospital. A diversional occupation department has also been added in which the patients are taught various occupations, such as rug weaving, raffia work, etc. This department has been fully equipped with looms, knitting machines and other necessary apparatus.

A new examining room, together with a modern bacteriological and pathological laboratory and dispensary have been added to the hospital as well as a modern office building, which has just been

completed.

The entire hospital has been renovated and many of the wards have been repainted. Several new continuous flow baths have been installed on the different wards and drinking fountains replace the old drinking cup. A modern brick stable has been erected and is now in use, as has an addition to the laundry. Several new covered walks have been built that the weather conditions will not interfere with the outdoor exercise of the patients. A cannery has also been added to the hospital equipment and nearly ten thousand gallons of canned vegetables, fruits, etc., were prepared for the institution during the last season. A large motor truck is another acquisition to the institution and has replaced horses for general hauling. A very essential improvement has recently been completed by surrounding the entire hospital grounds with a modern "unclimable" fence and it is now possible to give ground privileges to many patients who were formerly held on closed wards for fear that they might wander away. Among the recommendations of Dr. Guthrie for the near future is a pschycopathic building for the reception and treatment of the acute insane, as well as a farm colony within a short distance of the hospital where many of the harmless and incurable male patients may be employed. The movement of the population is given in brief as follows:

From July, 1, 1914, to June 30, 1916: Admitted on commitment: First year, 228; second year, 173.

Voluntary patients: First year, 15; second year, 54.

Returned from bond: First year, 40;

second year, 41.

Highest number under treatment, 724. Daily average: First year, 633; second year, 657.

Whole number under treatment, 1914-

Whole number under treatment, 1915-

16, 959.

Discharged as recovered: First year, 100; second year, 88.

Mortality: First year, 5.65 per cent.;

second year, 5.94 per cent.

Elopements: First year, 8; second year, 11. --0---

#### MAKE CHANGES AT WHEELING HOSPITAL

For some weeks past great improvements have been made in and about the North Wheeling Hospital building. Almost the entire institution is being painted in a brick-red with gray trimmings. Two small porches in the rear have replaced the old ones, these porches replaced by large windows.

The spacious airy porches too have been overhauled and new awnings have replaced the old ones, these porches are a source of enjoyment to the convalescent as they command a wonderful view of the Ohio River and the picturesque hills beyond. The river breezes, too, are invigorating especially during these warm

The grounds have been beautified this summer with shrubs and plants. The mound, which has been graced with a life-size metal statue of St. Joseph, is a veritable flower garden. The patients who can get out in wheel chairs spend many hours under the trees and about

the splendid walks.

On three different floors a double door has been arranged in such a way that the halls of the three buildings are connected forming one continuous corridor. When this work is finished it will not only be more convenient but will add much to the appearance of the interior.

A goodly number of patients have been treated during the month of July, on an average of 100.—Wheeling Intelligencer.

### WHEELING SANITARIUM

A meeting of the directors of the recently re-organized Anti-tuberculosis society in charge of the View Point Sanitarium will be held at the Dollar Savings and Trust Company's office on Market Street, to discuss plans for re-opening the institution. The call was issued by Robert Hazlett, president of the society, and he said he expected that patients could be received by the end of next month. The county commissioners have appropriated \$8,000 per year for the care of patients who are unable to defray their own expenses.— Wheeling Intelligencer.

## Health News

### THE UNITED STATES PUBLIC HEALTH SERVICE ASKS—

Do you believe in national preparedness and then fail to keep yourself physically fit?

Do you wash your face carefully and

then use a common roller towel?

Do you go to the drug store to buy a tooth brush and then handle the entire stock to see if the bristles are right?

Do you clean your teeth and then ex-

pectorate in the wash bowl?

Do you omit lunch to reduce weight and then overeat at dinner?

Do you go to the country for health and then sleep with your windows shut

Do you wonder why you have earache and then blow your nose with your mouth

shut?

### ---0---DO YOU KNOW THAT-

One million two hundred thousand Americans die each year, it is estimated? Heart disease, pneumonia and tuberculosis cause more than 30% of deaths?

Sickness lowers earning capacity? The U.S. Public Health Service is the nation's first line of defense against dis-

ease?

Disease is the nation's greatest burden?

Sunlight and sanitation, not silks and satins, make better babies?

Low wages favor high disease rates? Intelligent motherhood conserves the nation's best crop?

Heavy eating, like heavy drinking,

shortens life?

The registration of sickness is even more important than the registration of deaths?

The U. S. Public Health Service cooperates with state and local authorities to improve rural sanitation?

Many a severe cold ends in tuberculo-

sis?

Sedentary habits shorten life?

Neglected adenoids and defective teeth in childhood menace adult health?

A low infant mortality rate indicates high community intelligence?

What profiteth a man that he gain the whole world, yet lose his health?

Naturalists say that long ago the prehistoric waters were infested with a species of enormous shark which finally became extinct by reason of the workings of its voracious appetite. Thus Nature eliminates the over-fed.

In the race for power and place, for ease of circumstance and relief from the stimulus of hunger, the modern man is apt to forget that unless he is careful of his body he will soon be made to suffer for the infraction of Nature's inexorable physical law. With the loss in body tone comes an equal loss in mental acuity and the brain which for a time was able to operate despite the complaints of an overfed, under-exercised, self-poisoned body, stops working.

Statisticians have discovered that the mortality rate of persons in the United States over 45 years of age is increasing. Lack of health-giving exercise, superfluity of dict, lack of restoring sleep, overstimulation, the high pressure of the race for power, wealth and position, plus physical neglect, these bring early decay. The goal is reached, wealth is amassed, honor, position and power are just being grasped when the apple of accomplishment turns to the ashes of dissolution.

The brilliant mind becomes clouded, the steady hand is no longer accurate, the eye which once gazed fearlessly on the whole world is dimmed and it is not long before the final breakup occurs. All of

this was entirely preventable.
Other things being equal, it is the man who leads the well-balanced life who lasts longest, whose work to the end is uniformly the best, he who neither overworks nor over-plays, neither over-eats, over, drinks, nor over-sleeps, he who maintains a standard of simple healthy diet in moderation, who offsets mental work with physical recreation, who is as honest with his own body as he is with his own business. When success comes to such an one his physical and mental condition is such that he can enjoy in peace of mind and contentment of body the fruits of his labors.

The regulations of U.S. Public Health Service state: "It is the duty of officers to maintain their physical as well as their professional fitness. To this end they shall be allowed time for recreation and study whenever their official duties will permit." If the government regards it as essential that its sanitary experts shall be safeguarded in this way, is it not equally important to every citizen that he similarly maintain a high

standard of physical integrity?

The Trachoma Hospital at Welch, where free treatment is given by the Public Health Service to trachoma cases, received 116 new cases applying for treatment in August.

Doctor, have you reported all those typhoid cases?

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This state needs the Model Vital Statistics bill passed by the next legislature.

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Typhoid has appeared in the Cabin Creek flood district, but not among the five thousand who were vaccinated.

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The State Department of Health is submitting monthly reports to the Federal government and is required to forward them by the 20th of the month.

Counties not submitting their reports before the 20th will be recorded absent. In September only 39 counties reported on time.

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Trachoma has been reported in Barbour, Clay, McDowell, Marshall, Marion, Mingo, Preston, Raleigh, and Ritchie counties during the past month. Are you certain it is not in your county?

Middlebourne had a Health Day at her Annual Home Coming.

The American Public Health Association meets in Cincinnati, October 24 to 27. The program gives promise of great interests and value to West Virginia. Among subjects to be discussed include a program for public health of cities and rural communities; management of charlatans and fakirs; the necessity of morbidity and mortality reports; sociologic problems; industrial poisonings; methods of obtaining pure water supplies; preventable blindness, etc.

A sanitary survey of Pennsboro was made by the State Health Department in August.

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The State Health Exhibit was seen by 6,880 persons during August.

Wheeling has agreed to install a chlorination plant to make the water supply safe.

Montgomery has begun school medical inspection, Dr. H. C. Scaggs being appointed examiner.

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What is your community doing to improve the public health? The Assistant State Commissioner of Health asks you to inform him of your work so that you may be given due credit.

The West Virginia Graduate Nursing Association meets at Martinsburg September 26 to 28.

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The doctors of only 17 counties make satisfactory reports of their cases of contagious disease to the County Health officers. Do you?

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When the reporting of deaths is left to the undertakers, assessors or family members, the apparent death rate of the locality is enormously increased and the causes of death which are recorded mean nothing and have no legal standing.

Every doctor should protect himself by filling out the death certificates of his fatal cases, giving the correct cause of death.

Thirteen cases of poliomyelitis were reported from the entire state during August. Between the first and nineteenth of September, nine more cases were reported. The State Department of Health requires these cases to be reported immediately to the department as it is necessary to submit weekly reports to the U. S. Public Health Service.

The city health officers of Beckley, Bluefield, Clarksburg, East Bank, Elkins, Hundred, Littleton, Morgantown, New Martinsville, Ravenswood, Romney, Wellsburg, Weston, and Wheeling send weekly reports regularly to the State Department of Health.

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## Propaganda for Reform

ANOTHER TRAGEDY OF UNPRE-PAREDNESS

In a football gave at St. Louis several weeks ago, one of the players received an injury to the cervical spine and was taken to the City Hospital. After careful examination it was determined that surgical interference was not indicated, in that fragements of the vertebrae were not then pressing on the cord; that the character of the injury made the patient's condition practically hopeless, and that the treatment indicated was absolute quiet and immobilization. The parents of the boy were frankly told the seriousness of the injury. In the face of

these conditions, according to the Journal of the Missouri State Medical Association, an osteopath who had been engaged by the father, wanted to treat the patient immediately. The surgeon in charge, fearing injudicious handling which would deprive the patient of any existing chance for recovery, refused to permit the osteopath's treatment. osteopath, accompanied by the boy's father, then obtained an order from the mayor to the hospital commissioner, relieving the hospital physicians from further responsibility and permitting the osteopath to "try to save the patient as the doctors had 'given him up'.'' Says the Missouri journal: "For five days the patient had been resting quietly with a gradual lessening of the effects of the frightful shock from the hemorrhage into the cord. Then the osteopath applied a jury-mast to the victim's head, which resulted in renewed shock, scream and a plea from the patient to remove the apparatus. The patient became cyanotic. The extension was removed on account of the patient's bad condition. Death followed about two hours later."

The necropsy report showed that death was due to "hemorrhage into the cord and fracture of the cervical vertebrae," thus supporting the diagnosis of the physicians and proving that their treatment had been correct. The *Journal* continues:

"Now it seems clear that the mayor and the director of public welfare actually took charge of a poor unfortunate who was receiving the best possible care which could be provided in a metropolis and noted medical center. They dismissed the skilled attendants who were honest and had informed the relatives of the actual state of affairs and turned the patient over to the distracted and deluded father and mother and an arrogant, boastful osteopath."

Here, it seems, is another instance in which the delicate watch was given over for repairs, not to a skilled watchmaker, but to a blacksmith. The change of the patient from a condition of quiet restfulness, with its possible chance for recovery, to one of sudden pain, shock and speedy death was too prompt to be inter-

preted otherwise than as due to the use of methods entirely unwarranted by the condition of the patient. The safety of the patient demands that whoever assumes the role of the physician must have had sufficient medical training to know when such treatment is best and when it is bound to do more harm than good.—Jour. Am. Med. Assn.

## THE LAW AND "CHRISTIAN SCIENCE"

In spite of the great interest commanded by the war situation, the law suit in Berlin against two female Christian Scientists has commanded a considerable share of public attention. These two women were charged with having contributed through negligence to the death of two well-known actresses, one of whom was suffering from diabetes and the other from mycosis fungoides. Both patients were doing very well under medical care, but, acting on the advice of relatives and friends they turned to Christian Science, and while being treated by the two Christian Science practitioners mentioned above their condition became progressively and continnously worse until it was too late to render medical assistance. After several days of discussion in the courts, the two women were sentenced to six months imprisonment. The basis for this sentence imposed by the judge will probably be of interest to the readers of The Journal. As was shown repeatedly during the course of the trial, "Christian Science" had its origin in America. The cult claims a large number of followers, and our American colleagues therefore probably come in contact with "Christian Science" more often than we do over here. The ruling of the court was as follows: The court holds that this teaching, so far as it applies to treatment of disease in general, is a mistaken one (Irrlehre). Opposed to this belief is the testimony of witnesses who claim to have been healed from a variety of diseases. The statements of these witnesses, however, are based not on facts but on opinions. Further, these opinions are based on wrong conclusions, or the conclusions are not interpreted cor-

rectly. It must be admitted that under certain conditions this teaching and its promulgation is productive of favorable results, but only in cases in which there is needed strengthening of energy or self-confidence as, for instance, in the case of those who are suffering from imaginary ills, in hypochondriasis, nervousness, hysteria and similar mental states; perhaps, too, in the early stages of organic lesions but not in the case of a severe organic lesion. The question arises, therefore, whether the two defendants are directly responsible for the death of their patients by having shortened their term of life. Expert opinion has shown that if these patients had remained under the care of physicians, the first one could have lived for years. and the death of the second could have been postponed. The question is: Can a verdict be rendered against the defendants? It is the opinion of this court that the defendants are guilty of grave negligence because of having undertaken the treatment of such serious diseases when they were wholly ignorant of the subject from a medical standpoint. Furthermore, they also committed a breach against the teachings of Christian Science which says that practitioners should withdraw from the treatment of any patients when it is evident that the disease is taking an unfavorable course and they are warned to observe closely whether or not the disease is growing worse. testimony in these cases has shown that the condition of both patients had become so much worse that it was noted by other persons. Therefore, the defendants surely should have noted it. The rapidly increasing severity must have shown the defendants that death might take place if the patients remained in their care. They were not asked to secure a physician, but it was undoubtedly their duty to inform their patients that they were unable to do anything more for them, and further actions would depend upon the patients themselves. If this had been done, these patients would undoubtedly have sought medical advice and had such been secured, would have had their lives prolonged. The case, then, is one of involuntary homicide. With regard to the punishment there

enter into consideration these circumstances: that this is a form of treatment that is not based on any actual knowledge, that it is a treatment which has nothing in common with the German spirit, German ways and German feelings; it is based on an assumption and is not in unison with the justice of God and far removed from real Christianity as well as from science. Furthermore, the victims were two highly gifted artists, favorites of the public and of the royal stage.—Berlin correspondent of J. A. M. A.

#### MILITARY PREPAREDNESS FROM THE MEDICAL STANDPOINT

Dr. E. L. Munson, Lieut.-Col., Medical Corps, United States Army: The efficiency of a medical service depends on the work done in advance of actual fight-An army medical department is not an independent scheme, but is subservient to the general plans of the army, and whether these plans work out to victory or defeat depends largely on the efficiency of the medical corps. The medical officer of the army is not engaged in curing disease, but in looking after sanitary conditions in advance of a campaign and in bringing together the various relief agencies so that the sick and wounded can be cared for properly. The sanitary plans form a part of the general plan of a campaign. Every possible precaution must be taken to avoid illness and save life. As soon as tentative sanitary plans have been prepared, they must be submitted to the officer having charge of the tactical plans. The medical officer consults all available statistics with reference to the health of the locality in question and the incidence of transmissible diseases. Attention is given to clothing, climate, and a study of the race living in the locality under consideration. All the climatic conditions, temperature. humidity, rainfall and seasonal influences are taken into consideration in the medical plan for the campaign. Based on these, all the sanitary details for the military community are worked out. Estimates are made showing how many men might be counted on as in fighting condition and what provision

might have to be made for reinforcements to make up for those not ready for duty. Arrangements have also to be perfected for caring for the wounded near the line of battle and for transportation facilities for removing the wounded to base hospitals. The medical man must also be informed of the means of transportation in the vicinity that can be depended on and of all existing hospitals and also with reference to all lines of transportation carrying the men home and their medical equipment. A study must be made of the requirements in the way of drugs and dressings and of the amount that probably would be needed. All these things should be done in advance of actual hostilities, and should be adequate to meet all exigencies.

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Dr. W. C. Gorgas, surgeon general of the United States army, famous for his work in cleaning up Cuba and Panama, while speaking before the annual Congress on Medical Education in Chicago, urged a medical reserve corps of 10,000 members. In a few years, said Dr. Gorgas, the United States will have an army of a million men, and will need at least 10,000 surgeons to take care of it. plan is for a national congress of medical examiners, composed of representatives of state medical examining boards throughout the country. Candidates who passed this standardized examination would be eligible for the United States medical reserve corps, and would not be required to pass any other examination for license to practice. Each surgeon would be instructed in field duties, camp sanitation and the proper foods to be used in different climates. The surgeon would keep his own private practice in time of peace, but at a moment's notice he would be ready to go into the field and perform his duties without wasting time in special instruction, as is usually the case. Dr. Gorgas' plan aims to eliminate the muddling which was responsible for the fever camps in the Spanish war.—???

#### INCONSISTENCY OF THE ANTI-VIVISECTIONIST

Of course there are all sorts of men among physicians and surgeons as in all other professions. Abuses and outrages do occur, no doubt. There have been wicked doctors who have abused their trust; and there have been clergymen with whom the virtue of a young lady boarder was not safe; but we need not say for this reason that all surgeons are arch torturers and that all preachers are arch-lechers. Just as you do not need to pass a special law against adultery by ministers of the gospel, but that if you did so you would put an imputation on the character of a large body of earnest, sincere and unselfish men, so you should not pass laws which would put on men in biological research the imputation of bad faith and cruelty. Make the general laws against cruelty to animals as strict and far-reaching as may seem necessary for the good of the human race; but do not single out the men who are devoting their lives to the search after that knowledge which is for the best good of the human race, and make them the special objects of unnecessary restrictive limitations. If experiments on animals must be prohibited let the same law prohibit castration of animals and the dehorning of cattle. If the English law required all operations by a scientific man to be done under anæsthesia be adopted, then require that operations on the farm be performed in the same way.—Maxwell, Science.

## Miscellaneous Announcements

In honor of the fiftieth anniversary of its founding, the Battle Creek Sanitarium will have a notable celebration on October 3, 4, and 5. The program is rich in varied features, among which are a great banquet, receptions, athletic contests, industrial pageant, outdoor spectacle, re-union of former patients, and a series of conferences on sociological, eugenic, sanitary and medical subjects in which prominent speakers from all parts of the country will take part. A con-

siderable attendance of physicians is ex-

pected.

Following are some brief facts about the Battle Creek Sanitarium, opened in September, 1866.

The largest institution of its kind in

the world.

Always a leader in health movements, including prohibition, race betterment, anti-tuberculosis crusade, pure food agitation, etc.

It stands for the simple life in food,

dress and habits.

A great university, teaching the principles of right living which not only aid in curing disease, but prevent it.

A pioneer and always in the forefront of the movement for the natural, physi-

ologic system of cure.

Diet system originated and followed here, the most scientifie in use today palatable as well as beneficial.

Attendance always includes many physicians and members of physicians'

families.

A strong representation constantly, among the patients of men and women prominent in business, literary, scientific and religious circles.

Present number of patients about 850; number of guests not taking regular medical treatment, about 150; grand to-

tal, about 1,000.

Total number of patients, over 104,000. Last year there were 185 patients from sixteen foreign countries.

Total sum spent in charity up to Jan-

uary 1 ,last, \$1,325,679.46.

The staff includes about forty physicians, four hundred nurses, thirteen dietitians, about 300 kitchen employes, about 50 dining room employes, with a grand total of over 1700.

Amount spent in wages in 1915, over

\$700,000.

New main building finished in 1903, 550 feet long, six stories high. Entirely fire proof, thoroughly ventilated, cost, with equipment, nearly \$2,000,000.

Property consists of seven large build-

ings and scores of smaller ones.

Equipment comprises all the newest and most complete electrical and other apparatus for diagnosing and treating disease, including adequate supply of radium, large X-ray department.

New hospital, containing all latest ideas for sanitation and most up-to-date surgical equipment.

Large and completely equipped chemical and bacteriological laboratories.

Numerous lectures, concerts, banquets, receptions, walking parties, and other social entertainments.

Eleven greenhouses covering an acre of ground, in which are grown flowers and plants for free distribution among patients, as well as vegetables.

Big farm on which are grown many of the vegetables and fruits used on the

tables.

Big dairy supplying certified milk used exclusively for patients.

Beautiful grounds containing many rare shrubs and trees.

Two big outdoor gymnasiums, one for men and one for women.

Four swimming pools, two outdoors and two indoors.

Big athletic field, running track, numerous tennis courts, with nine hole golf links in easy distance.

Large indoor gymnasium, elaborately equipped, in which numerous classes, drills and marches are held daily.

Situated in Michigan, famous for its cool refreshing climate in summer, and bracing winter weather.

Located in Battle Creek, one of the most attractive, prosperous and progressive small cities in the United States.

Situated in beautiful country, with several hundred lovely lakes within an hour's automobile ride on excellent roads.

Three allied educational institutions— Training School for Nurses, School of Home Economics, and Normal School of Physical Education.

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The American Association for Labor Legislation, New York City, issues the following brief for Health Insurance:

A death rate for American wage carners twice that of professional men; the prevalency of high sickness rates; the need among workers of better medical care and of a systematic method of meeting the wage loss incident to sickness; and the necessity for more active work in the prevention of disease are the

corner stones of the case for compulsory health insurance presented in the brief just published in New York by the American Association for Labor Legislation. This situation, it is pointed out, cannot be met fully by existing agencies, and can only be properly remedied by a system of health insurance embracing all wage earners and dividing the cost among employee, employer and the state.

The great amount of sickness in the homes of the poor causes an average loss by each wage-earner of nine days a year, and involves annually a national wage loss of approximately \$500,000,000. Notwithstanding the greater prevalency of tuberculosis among wage earners, their early susceptibility to the degenerative diseases of middle life, and the excessive death rate among the industrial population, workers often are unable to secure the medical attention they require. In Rochester, New York, it was found that 39 per cent. of the sickness cases were not under a doctor's supervision; in a city like Boston, Mass., one-fourth of the population, it is estimated, are unable to pay the fees of a private physician.

The lowered vitality and the poverty created by present day conditions it is claimed can only be checked by a system of health insurance, which for a small sum divided among employer, worker and state, will bring medical care to the wage carner and his family, will assure for a maximum of 26 weeks in a year a weekly payment of two-thirds of the wages during the breadwinner's illness and in addition a small funeral benefit should he die. "Compulsory health insurance," concludes the brief, "is an economical means of providing adequately for the sick wage-earner, and will prove a mighty force for the inauguration of a comprehensive campaign for health conservation.

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The National Association for the Study and Prevention of Tuberculosis, 105 East Twenty-second Street, New York City, announces that December 3 to 10 will be tuberculosis week. Special days planned for incdical examination, children's organization and churches.

December 3 to December 10, inclusive,

has been set aside as Tuberculosis Week in the United States, according to an announcement today by The National Association for the Study and Prevention of Tuberculosis.

During this week an effort will be made to enlist the cooperation of every church, school, anti-tuberculosis and public health organization, lodge, and working men's organization in the United States in an active effort to bring tuberculosis to the attention of the people.

Three special feature days will be held during the week. December 6 will be National Medical Examination Day. On that day an effort will be made to get everybody, men, women and children, whether sick or well, to be examined in order to find out if they have any defects or impairments of their bodics that need attention. If examination is not possible on December 6, appointments will be made then for later examination.

December 8 will be Children's Health Crusade Day. It is hoped at that time to launch a national organization of Modern Health Crusaders, an association of the children of the United States in the public schools, for fighting against tuberculosis and for better health.

December 3 or 10 will be observed, according to the convenience of the churches, as Tuberculosis Day. A special sermon and a series of talking points for ministers and others have been prepared and will be ready for distribution in the near future.

Last year over 150,000 organizations and institutions took part in the Tuberculosis Week celebration. It is expected that this year this number will be greatly increased.

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The Seventh Annual Meeting of the American Association for the Study and Prevention of Infant Mortality will be held in Milwaukee October 19-21, 1916. The subjects to be discussed include:

Government activities—Federal, state and municipal—in relation to infant welfare.

Care available for mothers and babies in rural communities.

Standards for infant welfare nursing.

Morbidity and mortality in infancy from Measles and Pertussis.

The session on Mcasles and Pertussis will be a joint one with the Milwaukee County Medical Society.

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### HALF A CENTURY'S PROGRESS

October, 1916, points an epoch in the history of Parke, Davis & Co. The house was founded in 1866—just fifty years ago this month-largely upon the optimism of three or four determined men, backed by a capital that would seem insignificant today. There was nothing in its unpretentious origin to forctell the success of after years. And by success we mean not merely material prosperity, but also that broader and more enduring success that is based upon good will and confidence.

Manufacturing pharmacy was then a crude, imperfect art. Bacteriology, pharmacology and biological pharmacy were as yet unborn. There were no curative sera or vaccines in those days. Prophylaxis was in its infancy. Standardization was unknown.

Fifty years have wrought marvelous changes in means and methods for the treatment of human ills. The materia medica has been amplified beyond the dreams of the earlier investigators. Knowledge of pathology has immensely broadened. The empiricism of the past has given way to rational therapeutics, and medicine is taking its rightful place among the sciences.

In all these forward movements aPrke, Davis & Co. have had some part—notably as discoverers of new vegetable drugs, as inventors of new chemical ably as discoverers of compounds, as pathfinders and producers in the field of biological manufacture, as investigators in original research, as pioneers in both chemical and physio-

logical standardization.

The past half century, as we have intimated, has been remarkable in its contributions to the newer materia medica. What will the next fifty years bring for-Time alone can write the answer. Ours is a progressive age. science of medicine has not reached its highest development. The physicians' armamentarium will be further enlarged and fortified. New remedial agents will come into being. Many existing products will be improved. And with the fulfillment of these conditions, Parke, Davis & Co. (if we may judge the future by the past) are certain to be identified.

### Communications

Fairmont, W. Va., Sept. 16, 1916.

Dr. J. R. Bloss,

Ed. W. Va. Med. Jour.,

Huntington, W. Va.

Dear Mr. Editor:-

I have read with a good deal of interest the draft of the revised constitution as submitted by the committee appointed by the Association. In looking over the transactions of the Association I noticed there was a minority report, saying we did not need a revision of the constitution. In the revised draft I noticed some changes that have been made, and as you have invited a free discussion pro and con, of the merits of the revised constitution, I avail myself of this opportunity to express my views of some portions of the old that have been left out of the new.

1. I see no reason why the committee saw fit to abolish the council, and put the same work the councilors did in the hands of an advisory committee.

2. No provision is made for indigent members out of the surplus defense

funds.

The clause in the old constitution making the sccretaries of the component societies, and all ex-presidents members of the House of Delegates has been cut out.

It might have been an oversight in not providing aid out of the defense funds for indigent members, but to abolish the council, was a direct slap at some of the best and most zealous members of the Association, and it is not hard to see the fine Italian hand in this move. I have a delicacy in saying anything about the expresidents being left out of the House of Delegates (being one of the ex-presidents), for that clause was put in with the hope that all who had been honored by the Association would appreciate the

honor sufficiently to attend the meetings and give the members the benefit of their experience. I have no ax to grind, no friend to favor or enemy to punish, and can say truthfully that everything I ever did for the Association was, as I thought, for its best interest. I can say what a lot of ex-presidents can not say, attend the meetings with the hope of being honored with the highest office in the gift of the members, then quit. I have not missed a meeting since and as long as the Lord lets me live and I have the money, and am in the state, I expect to be there, and I want to say to the members, if you want to see a "scrap" that is worth while, be at the fiftieth anniversary to be held in Fairmont next October, 1917. The tail ought never to wag the dog, neighher ought a small section of the state, because some of their pet schemes failed, control the larger body.

C. O. HENRY.

### Society Proceedings

CABELL COUNTY SOCIETY

September 14, 1916.

Regular semi-monthly meetings of the Cabell County Medical Society were resumed on this date. The meeting was called to order by President Keatley, at 8:45 p. m. in room 216 of Hotel Frederick.

Members present: Drs. Mathews, Meek, Yost, E. B. and H. P. Gerlach, Hume, Hunter, Watts, Fitch, Goff, Cronin, Bobbitt, and A. K. Kessler. Owing to the absence of the Secretary reading of the minutes of the last meeting was dispensed with.

Dr. E. B. Gerlach reported a case of Infantile Paralysis; discussion was opened by Dr. Hunter, who reported a case of this discase in his own family.

Bills amounting to \$13.30 were al-

lowed and ordered paid.

A letter from the authorities of the American Rcd Cross Society was presented and a motion was made by Dr. E. B. Gerlach, seconded and carried that the president appoint a committee from this society for the Red Cross, as asked for in letter. The President appointed

Dr. K. C. Prichard, F. A. Fitch and W. E. Neal on this committee.

On motion of Dr. Yost, seconded and carried members of this society were designated to serve during the evening hours at the Fall Festival building to take care of any emergencies which might arise during the Huntington Fall Festival.

On motion of Dr. Hunter, seconded and carried, a committee was appointed by the President to investigate into and report to the society at the next meeting upon the feasibility of founding a medical club and securing rooms for same. The President appointed on this committee Drs. Hunter, Yost and Hume.

On motion of Dr. A. K. Kessler, seconded and carried, the following committee was appointed by the President to arrange for entertaining the State Hospital Association during the meeting to be held in Huntington October 11. Drs. A. K. Kessler, Yost, J. A. Guthrie, Steenbergen and Hunter.

Society adjourned to meet September 28 in Hotel Frederick at 8:30 p. m.

F. A. FITCH, Sec. Pro Tem.

—o— LEWIS COUNTY SOCIETY

Weston, W. Va., Sept. 19, 1916.

Dr. Jas. R. Bloss, Editor, Huntington, W. Va.

Dear Dr. Bloss:—

The Lewis County Medical Society met at Dr. E. T. W. Hall's Hospital, Freemansburg, W. Va., Sept. 12, 1916, at 1 p. m., with Dr. J. I. Warder, President, in the chair. Those present were: Drs. S. H. and G. M. Burton, Halterman, Gray, Cure, Green, Warder, Hall, Snyder, Heath, King, Bush and Chapman.

Dr. Hall reported several cases and displayed some very interesting speci-

mens as follows:

1. Case: Man about 35 years old was injured in the back with the end of wagon tongue due to runaway, and ruptured his liver which caused considerable hemorrhage and for a time what looked to be sure death. He operated as soon as possible and after a week's suffering his case looks very favorable.

2. Case: Girl, age 13. Appendicitis,

pus case, five days since operation and prognosis looks favorable.

1. Specimen: Mixed tumors of Parotid gland, complete extirpation result-

ing in recovery.

2. Specimen: Multiple fibroids of Uterus, single lady, complete hysterec-

tomy and recovery.

3. Specimen: Four months pregnancy with multiple fibroids in case of woman 33 years old. She has one child six years old. Dr. Hall diagnosed the case correctly, operated and did a complete hysterectomy and the tumor contained all three varieties and fifteen fibroids. Complete recovery.

All members present were accompanied by their wives and reported one of the most pleasant trips they ever en-

joyed.

Motion carried to extend our thanks to Dr. and Mrs. Hall for their excellent dinner, preparation thereof and entertainment of the Lewis County Medical Society and their wives.

Fraternally yours, P. L. Gray, Secretary.

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### MERCER COUNTY SOCIETY

The Mercer County Medical Society held its regular monthly meeting in Bluefield, W. Va., August 17, 1916.

A surgical and medical clinic was held at the St. Luke's Hospital, by the hospital staff, beginning at 12:15 and continuing throughout the afternoon and until 6 o'clock p. m., as follows:

Operations: Two T. & A. cases, by

Dr. T. E. Peery.

Two simple goiters, by Drs. Scott,

Hoge, and Vass.

Two abdominal sections, by Drs. Scott, Hoge, and Vass.

One vaginal hysterectomy, by Drs.

Scott, Hoge, and Vass.

The anæsthetists were: Drs. Thompson and Morton.

Exhibition of cases:

A blood cyst of the neck, by Dr. Scott. A neoplasm in the right lower quadrant of the abdomen, by Dr. Hoge.

A case of tertiary syphilis resembling

pellagra.

Exhibition of eight cataracts, post operative, by Dr. Peery.

Exhibition of a bone cyst, post operative, by Dr. McSparran.

The Society convened in the Chamber of Commerce at 6:30, with Dr. E. E.

Vermillion presiding.

The Secretary, in a few words, introduced Dr. R. II. Pepper, of Huntington, who showed us quite a number of lantern slides of the following:

1. Ulceration of the stomach.

2. Lane's kinks.

3. Ulceration of the duodenum.

4. Hour glass contraction of the stomach.

5. New growths of the stomach and intestines.

6. Normal position of the stomach and transverse colon.

He showed that the position of the stomach is often lower than the anatomists have pictured it to us, and that the normal position of the transverse colon is just above the umbilicus with a slight curve in it.

Under discussion Dr. Morton congratulated Dr. Pepper very highly on the clear outline of his pictures. Said his points were well taken and that Dr. Pepper showed better pictures of the stomach than he (Dr. Morton) had been able to get.

Dr. Thompson made a motion which was duly seconded and carried, that we extend to the visiting doctors the privilege of the floor.

In closing the discussion Dr. Pepper said that if Dr. Morton keeps on trying he will get the proper picture of the stomach.

A unanimous vote of thanks was extended Dr. Pepper for his instructive lecture and exhibition of these Rocntgen slides, which we all appreciated very much and hope that Dr. Pepper will soon come again.

Next on the program was Dr. A. H. Hoge, of Bluefield, W. Va., who read us an excellent paper on "Acute Articular Rheumatism." Dr. Hoge showed that he had given this subject considerable careful thought, and told us of his gratifying experience in the use of rheumatic phylacogen when positive of his diagnosis, and he proved to us that it was worthless in gonorrhoa rheumatism and oftentimes aided him in making a diagnosis.

nosis of articulosis of rheumatic origin.
Under the head of discussion Dr. C.
C. Peters asked if Dr. Hoge recommended the removal of the tonsils in patients suffering with acute articular rheumatism.

The Secretary said he enjoyed very good paper read by Dr. Hoge and that Dr. Hoge was supposed to have read a similar paper on this subject three or four months ago, but as he requested that he have a few months longer time to complete his experiments, the Secretary was only too glad to allow him the necessary time to make the paper complete, and said he wished he could encourage other members of this society to make some such experiments along other lines, and that he would be only too glad to reserve a place on the program for such person at any time, so long as he remained Secretary.

Dr. Kirk said that he was glad to know that old rheumatism was dead and that the real cause of rheumatism has

been found.

In closing the discussion Dr. Hoge thanked those present for the discussion and the many points they brought out. In answering Dr. Peters' question, he said, "the time to remove the tonsils or focus of infection is so soon as you can control the rheumatic symptoms."

At this period of the meeting we went to the Matz Hotel, where we enjoyed an eight-course dinner given by the St.

Luke's Hospital staff.

The following doctors were present: Drs. Wallingford, Peters, Vass, Morton, J. R. Vermillion, Scott, McElrath, Kirk, E. E. Vermillion, S. R. Hoyroyd, Thompson, Becker, C. T. St. Clair, H. G. Steele, Ridley, Cecil, Todd, Horton, Fairfax,

B. W. Bird, Easley and Peery.

Visitors: Dr. R. H. Pepper of Huntington, W. Va.; S. S. Gale, Roanoke, Va.; Dr. Pyott, Tip Top, Va.; Dr. Hicks, Cove Creek, Va.; I. T. Peters, Princeton; Dr. McSparran, Graham, Va.; Dr. C. C. Watson, Salem, Va.; Wm. Hearn, Bluefield, W. Va.; F. S. Givens, Newport, Va.; E. L. Caudill, Narrows, Va.; W. C. Caudill, Pearisburg, Va.; P. G. Hundley, Pembroke, Va., and P. II. Killey, Vivian, W. Va.

The Secretary announced that Dr.

Wm. J. Kerr of Massachusetts General Hospital, Boston, Mass., had agreed to hold a clinic and deliver lectures on Physical Diagnosis, six days for \$100, and expenses, or ten days for \$150 and expenses, the second or third week in November.

A motion was made by Dr. Thompson, seconded by Dr. Steele and carried that a membership and arrangement committee be appointed to see how many physicians care to take this course, collect the required amount of money from each, and if justifiable to go ahead and make the necessary arrangements with Dr. Kerr to come here in November. The committee appointed by the President was as follows: Drs. Steele, Hoge and Peters.

Dr. Pyott of Tip Top extended to the Society an invitation to meet with the Tazewell County Medical Society at the annual meeting at the Iron Lithia Springs at 2:30 p. m., Wednesday, August 30, and this was enthusiastically accepted by many members present.

Announcement was made that the next clinic would be given at the Princeton General Hospital some time in September, the time and program to be announced later.

All the visiting doctors were called upon by the toastmaster, Dr. E. H. Thompson, and each responded with a few kind remarks about the clinic given and the members of the Mercer County Medical Society in general.

The doctors from Giles County Medical Society were compelled to leave before the dinner was fully served in order to catch No. 16, to get home that night, but before they left they gave us a warm invitation to meet with them at any of their meetings, which is the first Wednesday after the tenth of each month.

Dr. Pepper also gave us, one and all, a very hearty invitation to come to Huntington to any of their Society meetings.

The Secretary announced that the following persons would be on the program for September: Dr. B. W. Bird, Dr. F. T. Ridley and Dr. P. J. McElrath.

The following bill was allowed: Daily Telegraph Printing Co., for 300 circular

letters, \$3.00.
Dr. Thompson made a motion which was duly seconded and carried that a committee be appointed by the President to draw up suitable resolutions and present them to one of our members, Dr. Wood, in regard to the death of his little child. The following doctors were appointed on this committee: Drs. C. T. St. Clair, J. B. Kirk and T. E. Peery.

A motion was made by Dr. Wallingford and seconded by Dr. J. R. Vermillion that a vote of thanks be extended to the St. Luke's Hospital Staff for the profitable and instructive clinic given that afternoon and the delightful dinner we had just enjoyed, and this was car-

ried unanimously.

Adjourned at 9:45 p. m.

H. G. Steele, Secretary.

### RALEIGH COUNTY SOCIETY

The Raleigh County Medical Society met in regular session on Saturday, September 9, 1916, at 2 p. m., in the parlor of the New Beckley Hotel, and the following papers were read and discussed:

Dr. J. E. Cannaday of Charleston, read a paper on "The Use of Bone Transplants in Fractures," which was discussed by Drs. J. Ross Hunter of Huntington, and J. E. Coleman of Beckley. Dr. Cannaday is a pioneer in this line of surgery. Dr. Cannaday exhibited several X-ray plates showing the results of this treatment in his cases.

Dr. E. O. Smith of Cincinnati, read a paper on "The Prostate" and was discussed by Drs. Cannaday, Campbell,

Hunter and Coleman.

Dr. Smith gave us an excellent paper which was thoroughly enjoyed by all.

Dr. J. Ross Hunter of Huntington, read a paper on "Infantile Paralysis," and was discussed by Drs. Jarrell and Grigg.

Dr. Hunter's paper was very thorough; giving us also a brief sketch of his recent study of the disease in the hospitals of New oYrk.

Dr. Wells of Hinton was also with us and read a paper on "The Tonsils." His paper was discussed by Dr. W. W. Hume.

Dr. Wells gave us an excellent paper, both from a scientific and practical point of view.

The papers were all first class, and those who had the pleasure of hearing them read were given renewed faith in the many seemingly impossible things that are being accomplished by the medical profession.

In the morning at 9 a.m., there was a clinic at the Beckley Hospital, by Dr.

E. O. Smith, Cincinnati.

In the evening a banquet was given by the society at the New Beckley Hotel

to about forty guests.

The following visiting physicians were present: Dr. J. Ross Hunter, Huntington; Dr. Ben Hume, Huntington; Dr. J. E. Cannaday, Charleston; Dr. E. O. Smith, Cincinnati; Dr. Ed. Wells, Hinton; Dr. Hopkins, Fayetteville, and Dr. Akin, Carlisle.

The following Society members were present: Drs. J. E. Coleman, Robert Wriston, E. S. Dupuy, J. A. Campbell, K. M. Jarrell, W. W. Koiner, U. G. Cook, A. H. Grigg, Ira Fisher, M. C. Banks, W. H. Cunningham, F. S. Richmond, B. B. Richmond, J. H. Bell, Geo. Fordham, Geo. W. Johnson, F. S. Mc-Chesney, G. T. Thornhill, R. E. Jarrell, W. W. Hume.

Dr. A. H. Grigg presided as toastmaster at the banquet, and after a few opening remarks called on several of the physicians who responded with toasts, and at the hour of eleven the adjournment was ordered that the visiting physicians might get the late train for their respective homes.

K. M. Jarrell, Secretary.

### State News

Dr. B. S. Preston of Charleston, has returned from New York, where he took some special work in obstetrics.

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Drs. Atlee Mairs, M. I. Mendeloff and G. II. Karksdale of Charleston, have returned from Boston, where they took the Cabot course.

Dr. J. W. Moore is spending his vacation in Lexington, Va.

Dr. James Purney of Charleston, has returned from Old Point Comfort, where he attended the C. & O. Surgeon's Convention.

Dr. A. M. Reid has returned from a motor trip in Ohio.

Dr. J. E. Cannaday is back from an automobile trip through southwest Virginia.

Dr. A. L. Parsons is convalescing from an attack of typhoid fever.

Drs. Ivy Shirkey and O. Poling have opened offices in West Charleston.

The floods on Cabin Creek and Coal River in addition to the great loss of life and destruction of property have caused great loss to several physicians who have their horses drowned and stock of drugs washed away, etc.

Gov. H. D. Hatfield and Dr. S. L. Jepson have both taken an active part in regard to the restoration of sanitary conditions in the flooded area.

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The Kanawha Medical Society held a special meeting last night (August 15) and offered their services to the doctors and people of the flood district in the Cabin Creek and Coal River sections. Dr. Fisher of Leewood, was present and discussed present sanitary conditions on Cabin Creek.

Dr. Norman R. Price of Marlinton has received notice that he has successfully passed the examination for the Medical Reserve Corps of the United States Army and that he has been recommended to the Adjutant General for a commission as First Lieutenant.

Dr. E. E. Rose of Hinton, has decided to locate in Huntington and will be associated with Dr. Karl C. Prichard and Dr. J. E. Rader. Dr. Rose will occupy the office formerly occupied by the late Dr. W. R. Hudson.

Dr. L. V. Guthrie of Huntington, recently returned from a week's motor trip through the northern part of the state and Ohio and Pennsylvania.

Dr. J. E. Rader, president-elect, has recently returned from a several weeks' trip to eastern cities where he attended clinics.

The Legislative Committee of the State Hospital Association met in Charleston Wednesday, August 30, for the transaction of routine business. A luncheon was tendered the visiting members by the Charleston General Hospital. Among the out-of-town members were: Dr. J. E. Coleman of Beckley, Dr. J. R. Hunter and Dr. A. K. Kessler of Huntington, Mr. Pliny Clark of Wheeling, and Miss Learned of the Sheltering Arms Hospital, Hansford.

Dr. J. Ross Hunter of Huntington, and Drs. J. E. Cannaday and L. C. Covington of Charleston, attended the meeting of the Raleigh County Medical Society at Beckley, Saturday, Sept. 9.

Blanford, the son of Dr. Thomas Tompkins of Griffithsville, has been operated on for appendicitis and is convalescing.

Dr. and Mrs. K. M. Jarrell of Beckley, have recently announced the birth of a daughter.

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Drs. Hunter of Huntington, Hume of Barboursville, E. O. Smith of Cincinnati and Cannaday of Charleston, attended the meeting of the Raleigh County Medical Society at Beckley Saturday. A clinic was given at the Beckley Hospital. This was followed by a scientific program in the afternoon and a banquet in the evening.

Dr. W. M. Harless of Clothier, is now spending several days in Huntington.

The physicians of Fairmont who signed the agreement to hold no evening office hours during the summer months, have resumed their evening hours again.

-0-Dr. J. C. Jett of Bluefield, has recently been acting as surgeon for a coal company at Coalwood, W. Va.

--0--Dr. H. B. Woods, of the State Department of Health, has recently made a sanitary survey of Pennsboro, W. Va.

Dr. W. C. Hall of Welch, has returned from a visit to Richmond, Va.

-0-Dr. C. M. Hawes of Huntington, is spending several weeks in the east doing post-graduate work.

Dr. David P. Crockett, formerly located at Leet, W. Va., has recently removed to near Logan, W. Va.

The property of the Huntington Hospital, consisting of the present hospital and grounds, has recently been offered for sale.

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The following doctors from the Mcrcer County Medical Society attended the annual meeting of the Tazewell County Medical Society at the Iron Lithia Springs near Tip Top, Va., the afternoon of August 30, 1916. And all report having had a very delightful and profitable time: O. S. Hare, Sam Holroyd, C. M. Scott, T. E. Pecry, Thurmon Vass, J. B. Kirk, A. H. Hoge, H. G. Steele, E. E. Vermillion, W. H. St. Clair, T. H. Becker and Wm. Hearne.

They had a nice attendance of their own members. The warmest relations exist among the members of our neighboring societies, Tazewell and McDowell, and we enjoy very much visiting their meetings, and we are delighted in having them with us at ours. The exchanging of ideas and telling our different experiences helps us all. H. G. S.

We learn that during the month of August the pastor Rev. G. G. Martin, of the M. E. Church South of Keyser, W. Va., requested Dr. C. S. Hoffman and Dr. M. H. Maxwell each on different oceasions to deliver one public address before his Sunday evening congregation on medical subjects of public interest. The audiences were large and attentive and evidenced much appreciation. Would this not be a good innovation if adopted by more of the pastors?

Dr. A. J. Woofter, prominent business man of Weston, was killed by a Baltimore & Ohio train at the Bendale fair grounds in Weston yesterday afternoon, according to the story told by Clarksburg people returning from the Lewis County Fair. Dr. Woofter is said to have stepped in front of the train as it was pulling into the fair grounds station, thinking he could cross the track in time.

The train caught him, however, and he was run over. One leg was crushed beneath the wheels and other injuries, including the shock, caused him to die almost instantly. Hundreds of people at the station witnessed the accident.

Dr. Woofter was a prominent physician and vice-president of the First National Bank in Weston. He was 68 years old and is survived by his widow and one daughter, Mrs. George Kitson, wife of Mayor Kitson of Weston. No arrangements were made last night for the funeral.

## Medicine and Surgery

DRS. ENSLOW AND RADER

### **MEDICINE**

TREATMENT OF CORNS. The surface of the corn should be removed daily with a suitable instrument, after soaking the foot in hot water for fifteen minutes. External applications will do the rest. Of these the following have been found most efficacious, according to a writer in Journal des praticiens for October 9, 1915:

1. Painting with a solution of ferric chloride, or tineture of iodine. Neither causes pain, but both stain. Cover the corn carefully and in from eight to ten days it can be detached by scratching. Soft soap mixed with alcohol and spread on a piece of soft flannel may be used as a dressing to be kept on all night, or a slice of lemon may be bandaged in place every night.

2.	Salicylic	collodion,	one	part	in
ten, s	should be a	pplied dai	ly.	Either	of
the f	ollowing ma	ay be used	l:		

R	Acidi salicylici
′	Extracti cannabis indice5ij
	Etheris
	Collodii
M	Fiat pigmentum.
111.	The pignicipality
R	Acidi salicylicigr. xlv;
-7	Acidi lactici)
	Resorcini )aa gr. xx;
	Colloidii
3.1	
	Fiat pigmentum.
-	Cupri subacetatis
Ŗ	Cupri subacetatis
	Olei terebintninæ
	Ceræ flavæ5vi.
M.	Fiat emplastrum.
	•
R	Cupri subacetatis3i;
,	Olei terebinthine3ij;
	Picis5ss;
	Ceræ flavæ
	010 110 10

These plasters should applied every night. The corn softens and may be removed by scratching. If bleeding should occur the point must be touched with tineture of iodine.

M. Fiat emplastrum.

Soft corns may be treated in the same way, but a better plan is to apply plenty of the following powder:

Ŗ	Aluminis )
	Acidi tanici )aa gr. xlv;
	Zinci oxidi
	Talci
M.	Fiat pulvis.
	-N. Y. Med. Jour. 2-5-16

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For skin affections which may be benefited by ointments the official pastes and unguents should be kept in mind.

Needless to say these are as effective as the proprietary products and have the added advantage of being of known and more uniform composition. Among the pastes may be mentioned:

Lassar's Naphthol Paste (Pasta Naththoli, Lassar)

gm. or c.	С
Precipitated sulphur	
in very fine powder 10	gr. xlviij
Betanaphthol (U. S. P.),	· ·
(U. S. P.) 50	3 iv
Petrolatum (U. S. P.) 20	3 iss
Soft soap (U. S. P.)	
sufficient to make 100	5 j

Triturate the betanaphthol and sulphur with the petrolatum and then incorporate the soft soap with the mixture.

Lassar's Mild Resorcin Paste (Pasta Resorcini Mitis, Lassar)

gm. or c.o	
Resorcinol (U. S. P.) 10	gr. xlviij
Zine oxid	5 ij
Starch	3 ij
Liquid petrolatum (U. S.	
P.) sufficient to make100	3 j

Thoroughly levigate the zinc oxid with sufficient of the liquid petrolatum to make a thin paste. Reduce the resorcin to a very fine powder, mix with the starch and add the mixture to the zinc oxid paste, triturating until a uniformly smooth mixture is obtained. Then add the remainder of the liquid petrolatum, and incorporate it thoroughly.

# Lassar's Zinc-Salicyl Paste (Pasta Zinci, Lassar)

gm. or c.	gm. or c.c		
Salicylic acid, in fine			
powder 2	gr. x		
Zine oxid 24	5 ij		
Starch 24	5 ij		
White petrolatum (U. S.			
P.) sufficient to make100	5 j		

Thoroughly levigate the zinc oxid with a portion of the petrolatum; then add the salicylic acid, the starch and the remaining petrolatum, and triturate until a perfectly smooth mixture is obtainew.

### Unna's Soft Zinc Paste (Pasta Zinci Mollis, Unna)

gm. c	)1 C.C
Zine oxid	
Calcium carbonate	20 3 ij
Linseed oil	20 5 ij
Lime water suf. to make I	100 3 i

Thoroughly levigate the zinc oxid and the calcium carbonate with the linseed oil, gradually added, so as to form a perfectly smooth mixture, then incorporate the lime water by trituration.

### Unna's Sulphurated Zinc Paste (Pasta Zinci Sulphurata, Unna)

gm. or e	.c
Zine oxid 15	gr. lxxij
Precip. sul. (U. S. P) 10	gr. xlviij
Silicic acid	gr. xxiv
Benzoited lard (U. S. P.)	Ü
sufficient to make100	5 j

Thoroughly levigate the zinc oxid with a small portion of the benzoinated lard; the silicic acid with another, and the precipitated sulphur with a third portion. Mix the three portions until a uniformly smooth mixture results, and thoroughly incorporate the remainder of the benzoinated lard.

## Compound Resorcin Ointment (Unguentum Resorcini Compositum)

gm. or		
Resorcinol (U. S. P)	6	gr. xxx
Zine oxid		
Bismuth subnitrate		
Oil of cade 1	2	5 j
Paraffin 1	0	5 j
Petrolatum2	5[	5 ij
Hydrous wool fat, suf-		
ficient to make10	0	5 j

Triturate the resorcinol, zinc oxid, and bismuth subnitrate with a small quantity of the hydrous wool fat, until a perfectly smooth mixture is obtained. Incorporate this with the remainder of the wool fat, add the paraffin and petrolatum, previously melted together, and lastly, the oil of cade. Mix intimately, and preserve the ointment in containers protected from the light.

### COMPOUND SULPHUR OINTMENT (Unguentum Sulphuris Compositum)

gm. o	r c.c	,
Precip. calcium carbonate	10	gr. xlviij
Sublimed sulphur	15	gr. lxxij
Oil of cade		
Soft soap (U. S. P)	30	5 ij
Lard, suf. to make	100	$\tilde{\mathbf{j}}$ j

Mix the lard with the soft soap and oil of cade. Then gradually incorporate the sublimed sulphur and precipitated calcium carbonate.

## COMPOUND TAR OINTMENT (Unguentum Picis Compositum)

gm. 0	r c.c	
Oil of tar	4	gr. xx
Tinc. of benzoin (U.S.P.)	2	gr. x
Zinc oxid	3	gr. xv
Yellow wax	25	$\bar{3}$ ij
Lard	32	5 iiss
Cot. seed oil, suf. to make 1	00	5 j

Melt the yellow wax and lard with the cotton seed oil at a gentle heat. Add the tincture of benzoin and continue heating until all the alcohol has evaporated. Then withdraw the heat, add the oil of tar, and finally the zinc oxid, incorporating the latter thoroughly, so that on cooling, a smooth homogeneus ointment may result.—J. A. M. A.

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Infantile Paralysis. The presence in New York City of an epidemic of poliomyelitis with an unusually high mortality rate, and the appearance in other cities of cases of Heine-Medin's disease, have aroused widespread and justifiable apprehension. Since the first great epidemic in this country, in 1907, which is thought to have come from Sweden, and which spread rapidly to every state in the Union, there have not been so many cases nor so many deaths as at the present time.

The statistics of New York City for July 14, 1916, showed a total number of 1,557 cases during this epidemic, with 311 deaths, or an apparent mortality of a fraction less than 20%. But if one considers the vast number of cases which are not reported because of negligence, faulty diagnosis, or that are unrecognized because of the mildness of the attacks and the absence of paralysis, it will readily be seen that the real mortality is much lower than that stated.

The Secretary of the Treasury, Mc-Adoo, has offered the services of the U. S. P. II. officers for the study of the epidemic. This has been accepted by the city. Likewise Congress has been asked for \$135,000 for the prevention of

the spread of infantile paralysis, and also for its study with a view to learning its chief means of transmission.

Although poliomyelitis is known have existed prior to that time, it is to J. Heine\* of Cannstadt, Wittenberg, Germany, to whom credit is due for the first comprehensive study of this disease, which he published in 1840. lowing that, no great advance was made in the knowledge of infantile paralysis till 1890, when O. Medin, of Sweden, published his observations. Wickman, Charcot, and in our own country, Simon Flexner, Landsteiner, Popper, Lewis, Noguchi and others, have added materially to our knowledge of the subject.

It has long been noted that the disease flourishes during the warm summer months only to disappear at the approach of winter. Yet its virus is not killed by freezing for eleven days, but is destroyed by 50° C. for a short while.

Since it is a filterable virus, being capable of passing through an unglazed porcelain filter, it was thought to be an ultra-microscopic organism. However, it has been demonstrated with a Romanowsky stain to exist as "minute, violet, rounded-oval bodies, singly, in pairs, and in chains." They are 0.2 micron in diameter (one thirty-fifth the size of a red blood corpusele), non-motile, and are Gram-positive.

An authoritative paper on poliomyelitis was recently read by Dr. Simon Flexner, Director of Laboratories of the Rockefeller Institute for Medical Research, New York, under the auspices of the New York Academy of Medicine, and copies were furnished the daily

press.\*

He mentions the facts that the virus escapes from the body in the secretions of the nose and throat, and in the intestinal discharges; that it enters the system by way of the mucous membranes of the nose and throat, and possibly at times through the medium of the house fly; that sneezing, kissing, contaminated clothing, etc., may convey the disease; that there are healthy carriers of the infection; that it spreads by routes of travel; that the incubation period is from two days to two weeks or more;

that one attack seems to confer absolute and lasting immunity, no matter how mild the illness may have been; and that some success has been obtained in the use of blood scrum from recovered monkeys and human beings, but that the amount of available material is too searce to be of practical value.

Furthermore, Flexner tells us that children are not near so susceptible to the disease as they are to diphtheria,

measles, or scarlet fever.

Throughout the south there are a number of cases being reported; but it is to be hoped that they are sporadic, that they are no more than the usual number, and that they are not caused by the virulent strain of organism which is now epidemic in the east.

\*Printed in full in New York Tribune, July 14, 1916, pp. 1 and 6.—So. Med.

Jour., Aug. 1916.

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REED'S BACILLUS OF EPILEPSY. By A. J. Hinkelmann, Galesburg, Ill., Di-

rector, Galesburg Laboratory.

Through the work of Reed, the question of a specific organism as the exciting cause of the seiznres of Epilepsy has been set forth. Having previously worked from a different basis with an organism I believe is the same as the one isolated by Reed, and having since the appearance of his articles, succeeded in finding the organism in the blood of an isolated case of epilepsy, I am in position to add a few facts to what Reed has already said. I am sure this will be of further aid to the profession in the direction of reaching final conclusions as to the significance of the organism.

### METHOD OF INVASION OF THE HUMAN SYSTEM

Under this head, Reed has made very clear the point that the organism is evidently taken into the intestinal tract by way of the mouth, and enters the blood through a cecal or an appendiceal focus, and leaves the question open as to the danger of communication. What would be the consequence in case the organism was ingested by a normal individual, and to what extent may those with pre-

### LEGEND



Bacillus epilepticus directly in blood smear from an epileptic patient five hours after seizure.



disposing lesions expect to escape infec-

tion ?

From a basis of experiments I conducted during the summer of 1915, and before I had any knowledge of the pathology of the organism, it may be stated that it is a very frequent inhabitant of the intestinal tract of probably the majority of people. My conclusions at the time of my experiments were that it is one of the regular members of the so-called intestinal bacteria.

\*Reed, Chas. A. L. Journal of the American Medical Association, January

29 and May 20, 1916.

My interest in the organism was its high resistance to germicidal agents, and through this fact it becomes an easy matter to demonstrate its presence in the intestinal flora and also that it is commonly present. It will live in phenol solutions of from 5 to 10 per cent. for many hours and a much higher strength is necessary to kill it instantly. Among the very large number of different species of commonly the only one that will survive a thorough treatment of the stool with a 5 or 10 per cent. phenol solution.

My method of isolation was as follows: From 25 to 30 grams of solid faces were made into an emulsion with 50 ec of a 5 per cent. solution of phenol and allowed to stand for 30 minutes or an hour; cultures were made on agar slants and incubated. I have never made such cultures from the stools of epileptics with the view of noting how numerously the organism is present, but in normal individuals, a loopful of the above emulsion spread over an agar slant will yield from 1 to 6 colonies after twenty-four hours of incubation.

The organism is highly hamolytic, and to this last fact may be due a part of the pathological conditions present in epileptics. Cultures made on blood agar plates will show a hamolytic spot at the point of a growing colony long before the colony itself becomes visible. In the case that came under my observation, I found it abundantly present in the capillaries, and both the spores and the organism could easily be demonstrated in smears from the blood directly.

#### CONCLUSION

In view of the fact that the organism does enter the circulation and there multiplies into great numbers and is so generally found in the blood of epileptics, the conclusions of Reed as to its specific nature become at least very plausible. It would be hard to conceive that an organism with such a high hæmolytic property could enter the circulation and multiply to such numbers as smear preparations from the blood indicate without producing diseased conditions within and resulting in corresponding clinical manifestations without.

At any rate, what has already been established in regard to the organism makes the question one most worthy of serious consideration and extensive investigation. The universal presence of the organism in the intestinal flora is no argument against its probable pathology, but simply adds to the importance of the gateway through which it enters the blood stream in consideration of the question of treatment.

If further investigation should finally establish that the bacillus epilepticus is the exciting cause of the seizures of this disease, little probably can be hoped for in the way of prophylaxis or cure through efforts to prevent the organism from entering the intestinal tract or to eradicate it when present. The best attention probably will have to be directed toward those lesions which open the way for it from the intestines into the circulation.—N. Y. Med. Jour.

### Surgery

THE BONE-PLATING PROBLEM: REPORT OF 200 CASES. Wm. O'Neill Sherman, Pittsburgh. Interstate Med. Jour., Jan. 1916.

During the past six years, with a fracture service of 3,100 cases, Sherman found it necessary to resort to the use of steel plates and screws in two hundred cases. The Lane plate and wood screws, used in the early cases, were mechanically and structurally faulty and have been discarded for the vanadium plates and tap screws. These have corrected many

of the difficulties encountered with Lane

plates and screws.

That the majority of plated fractures become infected and that in many cases it is necessary to remove the plates, is no indictment against the sane use of the steel plates and screws. The majority of failures can be attributed to faulty judgment in the selection of cases and gross errors of technic. If one's technic is perfect, we can confidently expect healing by first intention in the majority of cases. The infections, to a great extent, are due to the failure to exclude the skin from the field of operation.

Much has been said about the retarding of bone repair and the prevention of callous formation where steel plates and screws were used. While it is sometimes true that repair is delayed to a certain extent, this contention has been exag-

gerated.

An elaborate equipment, i. e., extension apparatus, Hawley fracture table, and a large instrument armamentarium, is absolutely necessary if the operation is to be thoroughly and dextrously performed. There are few surgeons equipped with the necessary instruments to carry out in detail the technic which is so necessary if successful results are to be obtained. The average hospital does not have a sufficient number of these cases to justify the outlay of money necessary to purchase the instruments.

If non-union is more frequent today than formerly, it is due to the indiscriminate plating of fractures where operation was not indicated and where conditions were not favorable for rigid asepsis. Ward patients who are anemic, leutic, alcoholic, obese, and those having a low resisting power, are poor subjects for the bone-plating operation. It requires a maximum of resistance, both local and general, if the best results are to be secured.

Notwithstanding the various warnings repeatedly given, that the operation should be deferred from ten to twelve days from the time of injury, the majority of surgeons are operating immediately, apparently disregarding the undeniable danger of infection.

The autogenous inlay operation is the

one of choice in non-union cases. It remains to be demonstrated whether or not it is preferable to use steel plates in recent fractures; one serious objection is the difficulty of the operation. The vast majority of fractures that Sherman has plated have been rather difficult to hold in position with steel plates and screws. If a muscular spasm has been strong enough to break steel plates and screws, it is not reasonable to assume that bonegrafts would withstand the strain.

There were two hundred operations in Sherman's hospital service where steel plates and screws were used, with no deaths or amputations as a result of the operation. In no case was there sufficient pain or discomfort to necessitate the administration of a sedative. There is usually little or no pain where accurate anatomical alignment has been se-Approximately one cases were compound fractures. In this series, there were four infections; firm union taking place in all four after the infection subsided. There were cases of non-union in the compound group.

In the simple fractures (105 cases), there was but one infection; this occurred in the upper third of the femur and at a time when a series of infections seemed to be arising from a common source in the operation room, which, however, was not discovered. There was no cases of non-union in the simple frac-

tures.

In the first fifty-five cases where Lane plates and screws were used, seventeen plates and screws were removed, eleven compound and six simple fractures. In the last one hundred and fifty cases, including simple and compound fractures, where the vanadium plates and tap screws were used, seven plates have been removed; all of these, with one exception were compound cases.

These results were secured by having absolute control of the patient from the time of receipt of the injury until his arrival at the hospital. While a great majority of the patients sustained extensive trauma to the bones, soft parts and skin, it must be remembered that the foreign material in the wounds of the cases reported is practically sterile.

Cowe, iron-ore or coal is usually sterile.

The end-results of the operative treatment have been far superior to those of the conservative formerly employed. There have been many cases in which two or more plates have been satisfactorily used which formerly would have been amputations. Permanent disability has been markedly reduced; the majority of the injured have resumed their former occupations in the steel mills and mines. The fact that these patients are able to resume their former positions is sufficient evidence of the practical advantages of the steel bone plates and screws over former conservative methods.

With few exceptions, all patients operated upon were favorable subjects from a physical standpoint, each having passed a medical examination before being employed. To this and general surgical supervision must be given much

credit for the results secured.

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A SIGN IN FRACTURE OF THE PELVIS. G. P. COPPERNAIL, Belford, New York. *Medical Record*.

The sign that Coppernail refrs to is ecchymosis of the perineum and scrotum in men, and of the perineum and labia in women. It is invariable in fractures of the pubis (the most common form of fracture of the pelvis), but may be absent in small fractures of the crests of the ilium.—A. J. of Surg.

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Sodium Hypochlorite in the Treatment of Septic Wounds. F. J. A. Dalton. *British Med. Jour*.

The results obtained by the use of sodium hypochlorite in the present war have been so remarkably satisfactory that Dalton believes it should be the method of choice. He concludes as follows:

The advantages observed in the employment of the sodium hypochlorite solution in the treatment of septic wounds may be briefly stated as follows:

1. The simplicity and cheapness of

preparation of the antiseptic.

2. Being non-toxic and non-irritating to the tissues when properly prepared according to Dakin's formula, the

hypochlorite solution may be safely used in large quantities over long periods of time without ill effects.

3. The deodorant action of the solution is remarkable. The fetor from gangrenous tissues usually disappears in 24 hours.

4. The rapidity with which sloughs separate and clean granulation tissue is formed in a wound under its influence.

5. The infrequency of re-dressing required by cases treated as described with hypochlorite, compared with the constant change of dressings required in large wounds with other forms of antiseptic.

6. The fact that injections of the hypochlorite solution into the rubber tubes used in the dressings may with safety be entrusted to very imperfectly trained orderlies without fear of ill results, once the case has been adequately dealt with by the surgeon.

The facts referred to under (5) and (6) are very important considerations in war surgery, as cases frequently arrive in large numbers at varying inter-

vals.—A.  $\bar{J}$ . of Surg.

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THE TEACHING OF SURGERY. J. A. Wyeth, New York. Jour. A. M. A., August 19, 1916.

Says that the surgeon stands in need of qualifications greater than those of a successful general, for while each must be quick to appreciate the kaliedoscopic changes in their respective field, the commander relies on others to carry out his orders, but the hands of the surgeon must meet the issue before him. The most inexplicable thing to him is the common failure to appreciate the value of ambidexterity. Physically, mentally and morally qualified, the embryo surgeon enters the laboratory, for on this foundation must rest the hope of efficiency. A thorough knowledge of normal tissues alone renders possible the recognition of the morbid changes of disease. By laboratory is implied not only microscopy and organic chemistry but also abnormal, normal or morbid anatomy and animal experimentation. Regional anatomy requires the employment of frozen sections, and modern photography preserves accurate pictures

of the sections, but nothing serves so well to fix the relations of the tissues in the mind as hand tracings on frosted glass, laid directly on the sections. Some general idea of technic may be obtained from points more or less removed in the ordinary ampitheater, but practical knowledge is only gained by immediate personal contact as an intern.

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THE TECHNIQUE OF SUPRAPUBIC CYST-OTOMY IN BADLY INFECTED CASES. Hadley Williams, London, Canada. *Annals* of Surgery, June, 1916.

Williams dissects down to the bladder wall proper, passes two traction sutures through the muscular coat on each side elose to the median line and then packs the wound from four to seven days before actually opening the bladder. This allows the formation of granulations which prevent any contamination of the paravesical cellular tissue. This, according to Williams' method, for vesical calculus a two-stage operation is done, and for a prostatectomy, a three-stage operation is performed.

DUODENAL ULCER, MISTAKEN FOR CHRONIC APPENDICITIS. R. Lewisohn, New York. *Medical Record*, June 17, 1916.

Lewisohn reports four cases upon whom appendicectomy had been performed and in whom subsequent examination and operation revealed a duodenal uleer. Lewisohn admits that the differential diagnosis is sometimes very difficult, especially when we know that a chronically inflamed appendix cause pylorospasm, pain in the right hypochondrium, vomiting and sometimes even hematemesis. Before operating upon gastric and duodenal uleers Lewisoln is guided by the history, the chemical findings and X-ray examination. Two of these factors must be positive. All four cases were relieved by a gastro-enterostomy with pyloric exclusion—two entirely, one almost entirely, and the last developed a gastrojejunal ulcer.

Paralysis of the Intestine After Resection for Gunshot Injuries. O. Richards and J. Fraser, *British Medical* Journal, July 1, 1916.

The authors report three cases. In all resection of a wounded fraction of small intestine was followed by obstruction, the segments of intestine above the union becoming distended, while the segment below was contracted. They believe the cause is a nervous one, arising from the injury itself and the resultant shock, and increased, perhaps by the local peritonitis. A case in which this complication is noted may be saved by subsequent short-circuiting of the affected coil. This was attempted in two patients, one of whom recovered.

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Perforated Ulcers of the Stomach and Duodenum. R. P. Sullivan, Brooklyn. Jour. A. M. A., July 29, 1916.

Sullivan says that perforating gastric or duodenal ulcer is a most serious condition, with a very grave prognosis unless early recognized and heroically treated. The treatment is purely surgical. We occasionally hear of deaths from acute indigestion, but proper investigation would prove in most of these cases that it was from perforating ulcer. The etiology of perforation is that of ulcer in general, plus its acute termination. He describes the symptoms, which are well known and severe. Vomiting and abdominal rigidity are most significant, and when a patient is met with these and the history of previous indigestion of ulcer type, uleer should be suspected and looked for and operation is the rational treatment. Between September, 1910, and March, 1916, Sullivan operated in twenty eases of perforated ulcer, with one death; the average duration of symptoms before operation was about six hours. The tabulation of the case is given and fuller details in the text in regard to some of them. Gastroenterostomy was added to the elosure of the perforation in ten eases. "In one it followed pyloreetomy, making eleven instances. The factors that were taken into consideration as indication for the operation were: 1. The general condition of the patient would permit it.

2. The duration of symptoms was not over ten hours. 3. The site of the perforation was close to the pylorus, and closure of it seemed to narrow the lumen to a marked degree. 4. It was assumed that by its performance the period of convalescence would be materially shortened, a factor always worthy of consideration, especially among the class of patients we meet in the wards of our city hospitals. 5. We assumed that if there were multiple ulcers, gastro-enterostomy would diminish the possibility of a second perforation. We never started out with an idea of speed; in fact, our work in each case was deliberate and careful. The average length of time taken to do the gastro-enterostomy was between twenty-five and fifty minutes. In all cases in which this operation was done, we did not encounter any increase in infection. Neither did we have any reason to regret our procedure. The patients all made satisfactory recoveries and enjoyed their semi-solid food with more relish than those on whom we did the simpler operation of suture closure." Sullivan believes that there is a place for gastro-enterostomy, and in the treatment of these cases as to drainage, soft rubber tubes draining through the abdominal wall are his preference. Post-operative care is important; the Fowler position and saline by rectum should be instituted immediately. Where enterostomy was done water was given by mouth from ten to twelve hours after operating, and forty-six hours later when the stomach was quiet, milk or other fluids in increasing amounts. cases of simple closure of perforation nothing was given by mouth for from thirty to thirty-six hours, then small quantities of water at frequent intervals of from six to ten hours were allowed, and later, with a quiet stomach, other fluids. In all cases the patients received an enema at the end of thirty hours and then daily for five days. At this time a cathartic, usually castor oil, was given. Soft solids were given the gastro-enterostomy patients on the fifth or sixth day on the average, but to the simple closure patients till the eighth or ninth day. Sullivan sums up his paper as follows: "1. The diagnosis of perforation of a gastric

or duodenal ulcer should be made in the majority of cases, and the imperative indication is early operation. 2. In the treatment of cases of duodenal or prepyloric perforations, gastro-enterostomy can safely be added if patients come to operation within ten hours after the onset of symptoms. 3. Simple closure of the perforation without gastro-enterostomy is a safe routine, but later stenosis is more apt to occur. 4. Drainage can be discarded in early cases, especially if operation is performed within six hours after the onset of symptoms. 5. Early use of a liberal diet should be practiced. 6. A complete study of end-results is a necessity before any definite routine can be laid down.

THE IMMEDIATE AND AFTER-TREAT-MENT OF RAILWAY INJURIES. W. W. Grant. South. M. J., 1916, ix, 357.

The circumstances, conditions and environment of railway injuries are unfavorable to the best treatment so that tentative measures only should be used until the patient is in more favorable surroundings. The immediate application of hydrogen peroxide and iodine with dry sterile gauze is recommended for wounds. Fractures should be temporarily immobilized.

Hemorrhage is a common condition in railway injuries and many times is incorrectly treated. Pressure to stop the hemorrhage should be used for a short a time as possible, as tissue neerosis and subsequent sloughing may result from prolonged anæmia of the parts.

Shock is frequently unscientifically treated and its presence many times disregarded. No serious operation should be performed in the presence of shock. To combat shock dry heat applied to the body, hypodermoelysis, rectal saline, and sugar solutions are recognized agents.

Fractures should be treated if possible without the open method; especially should all compound fractures be left alone as regards surgical approximation of the fragments, for at least ten days or two weeks following the accident.

Conservative surgery as regards feet and hands is very important. Ragged wounds should be left open to allow free drainage. Muscles, tendons, and nerves should be carefully sutured. Skull fractures should be carefully explored and all fragments and bone debris should be removed.

### Book Reviews

VENESECTION. A brief summary of The Practical Value of Venescction in Disease. For students and practicians of medicine. By Walton Forest Sutton, M. D. Price \$2.50 net. F. A. Davis Company, publishers, Philadelphia, Pa.

This little book will be found of very practical help in guiding physicians in the application of this, one of the oldest, of the therapeutic measures in our armamentarium. In the opinion of the reviewer, the author has permitted his enthusiasm and optimism to lead him to make somewhat extravagant claims as to the value of this procedure in the treatment of disease. However, it is recommended as being a very useful guide to those who have had but little experience with venesection and will be found of great assistance at times, for reference.

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MEDICAL AND SURGICAL REPORTS OF THE EPISCOPAL HOSPITAL OF THE PROTESTANT EPISCOPAL CHURCH IN PHILADELPHIA. Press of Wm. I. Dornan, Philadelphia. This report contains a wealth of very valuable information upon both medical and surgical matters and will make a reference book of worth in the physicians' library.

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The Sanitary Phogress and Vital Statistics of Hawaii. An address delivered before the Medical Society of Honolulu, by Frederick L. Hoffman, statistician, The Prudential Insurance Company. Prudential Press, Newark, N. J.

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THE CLINICS OF JOHN B. MURPHY, M. D., at Mercy Hospital Chicago. Edited by P. G. Skillerin, Jr., M. D., of Philadelphia. August, 1916. Publishel bi-

monthly. W. B. Saunders Co., Philadelphia and London. Price \$8 per year.

This number comes to us as usual, full of interest, information and instruction. If we may be allowed to particularize, we would suggest to the reader special attention to the two cases of spinal injury pages 593 and 601. The case of subluxation of the fourth lumbar vertebra not the result of disease, but of traumatic origin, being most extraordinary and of exceptional interest. The result obtained being a signal victory for the brilliant surgeon and careful technician whose successful career has been so recently and suddenly terminated by the hand of death.

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DISEASES OF THE DIGESTIVE TRACT AND THEIR TREATMENT. By Everett Austin, A. M., M. D., former Professor of Physiological Chemistry at Tufts College, University of Virginia and University of Texas; present Assistant Professor of Clinical Medicine, in charge of Doetetics and Gastro-Intestinal Diseases, College; member of the American Gastroenterological Association and American Society of Biological Chemists; physician to Mt. Sinai Hospital and Berkeley Infirmary, and assistant to Boston Dispensary; author of "Manual of Clinical Chemistry," etc. The C. V. Mosby Co., St. Louis. Eighty-five illustrations, ten color plates. Price \$5.50.

This work is not an encyclopedia of knowledge of the subject treated of, but it does contain in convenient uscful form much that is already known as well as the personal views of the author. The anatomy, physiology and pathology of the digestion tract is given in the opening chapters. Then a detailed method of examination of the patient, together with the physical methods of examination of the digestive tract follows. It details the author's methods much reference to other authorities on the subject. There is a ten page article on Gastric Cancer. The chapter on dietetics is probably the best written and most valuable one in the book. The work is clear and concise and is a valuable guide in diagnosing and treating the dis-

eases referred to.

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ADVANCES IN THE STUDY OF SYPHILIS AND THE RECOGNI-TION OF OBSCURE FORMS OF THE DISEASE.

By Lewellys F. Barker, M. D., Professor of Clinical Medicine, Johns Hopkins University, Baltimore.

Read by invitation before the West Virginia State Medical Association,
May 18, 1916.

Students in the medical schools are often told that if they know syphilis thoroughly they will know internal medicine. Though every aphorism of this sort is only a half truth, there can be no doubt that in studying obscure disease of any part of the body it is wise to keep syphilis always in mind as a possible cause. We have always known that syphilis is a common disease, but since the newer diagnostic methods have been available it has been found to be commoner than even the older clinicians had suspected.

When the president of your association invited me to read a paper at this meeting, it occurred to me that perhaps as interesting a topic as any would be the one I have chosen, namely, Advances in the Study of Syphilis and the Recog-

nition of Obscure Forms of the Disease. I shall therefore speak briefly about (1) the *Treponema pallidum* that causes the disease, (2) the experiments that have been made upon the artificial production of syphilis in animals, (3) the present status of the Wassermann reaction, (4) immunity, cure, and reinfection in syphilis, (5) the more obscure forms of syphilitic disease, and (6) current ideas regarding the treatment of syphilis.

#### THE TREPONEMA PALLIDUM

On March 3, 1905, Schaudinn, studying microscopically the juice from a papular syphilid, saw, for the first time, the parasite that causes syphilis.

This extremely delicate, motile, corkscrew-like thread with minute flagellumlike extensions at the ends, is present in the lesions of syphilis at all stages. It is demonstrable in the fresh juices derived from primary and secondary syphilitic lesions perhaps most easily by means of the simple Chinese ink smear of Burri, though where the dark field illumination method can be employed the living parasites may be easily seen.

In histological sections, this *Treponema* pallidum has now been demonstrated in infected tissues in every stage of syphilis, not only in the primary Hunterian

chancre, in the eruptions of secondary syphilis, and in the typical gummata of tertiary syphilis, but also in the organs in obscure visceral syphilis. Thus it has been found in the walls of aortic aneurysms and in the lesions of syphilitic cirrhosis of the liver. One of the most important of recent discoveries was its demonstration in the brain substance in general paresis by Noguchi and Moore and in the lesions of tabes dorsalis by Marinesco.

The organs in congenital syphilis often show great numbers of the parasites. The spirochaetes have even been demonstrated in the germs of developing teeth in syphilitic babies and they have been found in the placentas of mothers of syphilitic children. The introduction by Levaditi of his silver-impregnation method has made the demonstration of the treponema in diseased tissues relatively easy.

A great step forward was made in 1911 when Noguchi at the Rockefeller Institute devised a method for the pure cultivation of the *Treponema pallidum* in serum media containing a little sterile rabbit's kidney.

### THE EXPERIMENTAL PRODUCTION OF SYPHILIS IN ANIMALS

In Paris, in 1903, Metchnikoff and Roux first successfully transmitted syphilis to animals. Since then a large amount of experimental work has been done by these authors, by Neisser, Behrmann, and Hauberstatter and by numerous other investigators. It has been found that apes, monkeys, rabbits, dogs, guinea pigs, rats and other animals are more or less susceptible to syphilitic infection. The first experiments were made by introducing juices, or tissues, from known syphilitic lesions in man, into animals. After the cultivation of the treponema in pure culture by Noguchi it became possible to use the isolated organism as the infectious agent and the production of the disease in animals by pure cultures of the treponema confirmed the pathogenic and specific nature of this parasite.

As an outcome of the work on experimental lues may be mentioned the important fact that the treponema becomes widely distributed through the body before the initial lesion of syphilis develops. This demonstrates by experimental workers that syphilis has become generalized throughout the body for at least some time before the Hunterian chancre appears and explains why excision of a chancre will not prevent generalization of the disease.

Another important outcome of experimental work on syphilis was the discovery that the development of the disease can be prevented after inoculation by application within a few hours either of a solution of bichloride of mercury in salt solution or by Neisser's paste containing bichloride of mercury Metchnikoff's calomel salve. covery may prove to be of fundamental importance in the prophylaxis of syphil-Though as medical men we should do all we can to discourage people from exposing themselves to syphilis, know that, while human nature is as it is now, a certain number of men and women will continue to run the risks of exposure and for many reasons it seems to me desirable that the method of preventing infection after exposure should be made widely known. For leaving out of account the persons directly cerned, the economic saving to society and the protection of innocent persons alone would suffice to compel a decision in favor of the prophylactic campaign mentioned.

### THE PRESENT STATUS OF THE WASSERMANN REACTION

Even more important for the diagnosis of syphilis than the discovery of the etiological agent has been the working out by Wassermann in 1906, of the diagnostic sero-reaction applicable blood serum, cerebrospinal fluid, and other fluids of the body. This investigator, using the principle of complement fixation that was discovered earlier by Bordet and Gengou, devised a very ingenious method that has proven to be of incalculable value in the diagnosis of syphilis in almost all stages. Various modifications of the original mann reaction have been introduced,

the most important of which being, probably, the use of cholesterinized antigens. I shall not go into the details either of the original test or of its modifications, for these interest only the special laboratory worker, but I may mention that in doubtful cases, it is probably wise to have the test made with two or three different antigens before deciding that

it is negative.

You have probably heard reports that some investigators are denying the importance of a positive Wassermann reaction. Though it is true that one must be sure that the technique employed has not been faulty, I want to assure you that I feel that the criticisms that have been made of the Wassermann reaction are, for the most part, wholly unwarranted. For, if we rule out scarlet fever, sleeping sickness, leprosy, frambesia and perhaps a few other conditions, a well marked positive reaction is pathognomonic of the existence of syphilitic infection. It should be remembered that single negative reactions do not rule out lues and that the reaction may be negative in the blood and yet be found positive in the cerebrospinal fluid. Shortly after antiluetic treatment with mercury. iodide of potassium or salvarsan, a serum that has formerly yielded a positive Wassermann reaction may become negative; later on, after treatment has been stopped for a time, it usually becomes positive again. A negative reaction during the first three weeks after antiluetic treatment is therefore of no especial im-Sometimes a few doses of mercury or a single small salvarsan injection will lead to the appearance of a positive Wassermann reaction in a serum that formerly yielded a negative reaction, the change resulting from socalled "provocative stimulation."

In the primary stage of syphilis, 60 to 90% of the cases will yield a positive Wassermann reaction when first seen by the physician. By the end of the fourth week after the appearance of the chancre, practically every case will yield a positive reaction. In secondary syphilis, the Wassermann reaction will be found to be positive in from 75% to 95% of all cases, and in hereditary lues in from 90% to 100%. In cerebrospinal

lues, about 90% of the patients show a positive reaction in the blood serum. In general paresis, the Wassermann reaction is positive in both the blood serum and the cerebrospinal fluid, and in tabes dorsalis half or three-quarters of the patients will yield a positive reaction either in the blood or in the cerebro-

spinal fluid.

We can never be sure that a syphilis once acquired has been cured unless we obtain negative Wassermann reactions at intervals of three months for at least one year after treatment has ceased. It is not possible, however, to get a permanently negative Wassermann reaction in all cases treated. The longer standing the infection, as a rule, the less casy is it to make the Wassermann reaction permanently negative. It seems fairly clear however, that patients who are thoroughly treated and are still Wassermann-fast run but little risk of serious sequelæ. It should be our aim, however, to make the Wassermann reaction permanently negative in every case in which it is possible to do so, and it is surprising how frequently this can be done if the treatment be thoroughly carried out. A great many cases of syphilis have been completely cured and in some instances reinfection has occurred as a result of new exposure after cure.

If syphilis be found to exist in a married man, it is desirable to make the Wassermann test on his wife and children for it is surprising how often the other members of the family will yield a positive Wassermann reaction even when no symptoms have been shown. Studies with the Wassermann reaction have explained Colles' law and Profeta's law. Thus the reason why the syphilitic child of a syphilitic father can be nursed by its mother without the mother acquiring the disease (Colles' law) is due to the fact that the mother is already infected. It seems probable that in nearly every case of congenital syphilis the infection is not derived directly from the father through germinal infection, but is due to placental transmission from the mother infected by the father.

Again the reason why an apparently healthy child of luetic parents seems to be immune from infection, say from an

infected wet-nurse (Profeta's law) is due to the fact that the child is already infected as shown by the Wassermann reaction.

Now and then a positive Wassermann reaction is reported where no sympilis exists. As a rule I believe this is due to faulty technique. I have recently had under observation a middle-aged woman who suffered from paraplegia and anæstlesia below the waist with sphincter disturbance. Though luetic infection was denied, there had been a history of a local genital trouble rather suggestive of lues and the blood serum examined in a reputable laboratory had yielded a strongly positive Wassermann reaction. The physician in charge naturally concluded that he was dealing with a syphilitic lesion responsible for the plegia and undertook thorough antiluctic treatment. To his disappointment there was no improvement in the symptoms. The patient was sent on to me for study. On examination in the laboratory connected with the hospital the Wassermann reaction in both the blood and cerebrospinal fluid was found to be entirely negative. On account of root pain on the right side and the general neurological features of the case an exploratory operation was decided upon. The operation was done by one of my colleagues, Dr. Heuer, who found a small tumor on the root of one of the thoracic nerves compressing the cord. This tumor was removed and the patient is now making a good recovery. The case illustrates the importance of a faultless technique in the making of the Wassermann reaction. In doubtful cases, several tests should be made before concluding that the reaction is definitely positive.

#### IMMUNITY IN SYPHILIS

It turns out that syphilis is a disease that does not set up an immunizing process that will protect the patient if he be cured of his first attack. The occurrence of reinfection after cure is proof of this conclusion. Though it is likely that some antibodies are produced in the struggle between the organism and the invading treponema, it now seems certain that any immunizing process

that occurs is too slight to be of any considerable protective value to the patient. It does not seem likely, therefore, that any method of protective inoculation will be worked out.

#### OBSCURE CASES OF SYPHILIS

In a symposium on syphilis at the New York Academy of Medicine in January of this year, I reported a list of conditions in which it seemed to me especially important not to overlook the possibility of an existing lues. This list included:

- 1. Long continued fever otherwise unexplained.
- 2. Obscure nervous cases both functional and organic, the latter especially when the symptoms "come and go."
- 3. Chronic laryngitis, tracheal and bronchial stenosis, bronchiectasis, and unexplained infiltration of, or masses in, the lungs and pleuræ.
  - 4. Aneurysms.
- 5. Aortic insufficiencies, especially when unaccompanied by other valvular lesions.
- 6. Heart block and other cardiac arrhythmias.
  - 7. Arterial and venous thromboses.
- 8. Certain grave anemias, resembling the Addison-Biermer type.
  - 9. Paroxysmal hemoglobinurias.
- 10. Indolent nodules in the tongue and tonsils.
- 11. Enlargements of the liver and of the spleen.
  - 12. Strictures of the rectum.
- 13. Atypical joint diseases, and especially when accompanied by nocturnal pain.
  - 15. Unusual forms of renal disease.
- 16. Chronic orchitis, or nodules in the testes.
- 17. Repeated miscarriages without apparent cause.
  - 18. Stillborn children.
- 19. In disorders of metabolism and of internal secretion, especially in bizarre cases.

#### THE TREATMENT OF LUES

This portion of the subject might be treated at great length, but I shall

briefly summarize my own views on the

subject.

If a person applies to a physician within a few hours after exposure to infection, vigorous prophylactic measnres should be instituted at once including the thorough rubbing of Neisser's paste over the external genitalia. If applied within five or six hours this will probably prevent the disease in nearly every instance.

In the primary stage of the disease, after the Hunterian chancre has peared, arsenical therapy is most officacious. One may use salvarsan, neosalvarsan or the French preparation known as galyl or some one of the diarseno-benzol preparations now available. The salvarsan therapy, if vigorously carried out in the early stages of syphilis, will nearly always produce a complete and permanent cure. I would advise, however, always using thorough mercurial treatment in addition to the salvarsan therapy, using the mercury either in the form of inunctions or of intramuscular injections. Iodides are not necessary in the treatment of early lues.

In the secondary stage of syphilis the treatment should be carried out in the same way as advised for the primary stage, though here salvarsan alone is not so likely to bring about a complete cure as in the primary stage. Certainly mercury should always be used in addition to salvarsan and the treatment should be kept up until the Wassermann reaction is permanently negative.

In tertiary lues the gummata can be most rapidly made to disappear by the use of iodides in large doses, but, to cure the disease, arsenic and mercury are essential. In these tertiary cases it may not be possible to get a permanently negative Wassermann reaction, but cvcry effort should be made to do so.

In tabes and in dementia paralytica much can be done by antiluetic therapy, especially if the disease be treated in the early stage. I believe, however, that often as much can be accomplished by thorough intravenous therapy and intramuscular therapy as by intraspinous therapy. When one considers the torture of the intraspinous therapy, it is satisfactory to know that the majority of patients seem to do just as well by other methods as with the use of intraspinous injections. If beneficial results are not obtained however, by intravenous injections, intraspinous therapy may be resorted to, and one may use cither the Swift-Ellis method, the salvarsanized serum method, or the mercurial-

ized serum method of Byrnes.

Recently, some very good results have been reported from the intracranial methods of treating dementia paralytica. My own experience with dementia paralytica has not been very favorable. Though there may be improvement for a time, most of the cases ultimately die of the disease. I am hopeful, however, that with our newer knowledge of syphilis, the disease will be so thoroughly treated in its earlier stages that but very few people will ever go on to dementia paralytica or to tabes dorsalis. the general practitioner has a great responsibility, for it is he who most often has the opportunity to see to it that thorough antiluetic therapy is carried out in the primary and secondary stages.

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### PROFESSIONAL EFFICIENCY $V_{S}$ . PROFESSIONAL INERTIA.

By C. O. Henry, M. D., Fairmont, W. Va.

Read at Annual Meeting, Wheeling, W. Va., May, 1916

It is hoped that the title of this paper will serve to indicate the trend of thought which is to follow, and to bring to your minds a vivid conception of the many truly wonderful achievements which have been made in our profession during the last quarter of a century. When the writer hied himself to a great city to enter a Medical College, poor in spirit, and poorer in purse, he had but a very vague idea of the magnitude of the work before him, or of the greatness of the responsibilities he was assuming.

The young men of the country districts form their conception of the profession entirely from their social and professional relations with the physicians of their respective communities, many of whom have never attended a Medical College, and, who, perhaps have never seen a clinical thermometer, a stethoscope or a hypodermic syringe. This extreme condition, however, did not obtain in all sections of the country, for there were exceptions, and I am proud to say (using a Bible quotation) "There

were Giants in that day."

The object of this paper is to elucidate some of the phenomenal advancements which have found their way into the profession since I made my debut into the practice thirty-four years ago, and which are easily within the recollection of many who are here today. The young men of the south and the middlewest came north and east to enter Medical Colleges which, through a system of advertising, offered great inducements in the way of educational and financial concessions. Most of these schools were very elementary in their teaching. None of the laboratory facilities had been established at that time. The teaching consisted almost entirely of didactic lectures and text-book reading; some gross dis-section.

Medical and surgical clinics were given, but given in such a manner as to serve only as an advertisement for the clinician.

These so-called clinics, especially the surgical, were eagerly sought by the entire student body. The students of the first term as well as those of the second, would crowd into the ampitheater in droves, each wildly seeking a seat which would give him a good view of the demonstrator and the patient, but with no idea, or even desire, of being in a position to make a single personal observation of the condition of the patient under treatment or examination.

The obstetric clinic represented even a worse waste of the student's time and energy. Here a body of fifteen, or more, students stood around the bed of a woman in the travail of child-birth, while the house physician attended her under cover. The only actual demonstration given was in tieing the cord and dressing the stump.

Students were not even permitted to visit the patient during their puerper-The instructors were earnest and conscientious in their endeavor to impart knowledge, and represented the leading lights of the profession at that period of development, and employed all of the teaching facilities which, up to that time, had been devised. Much greater stress was placed on the administration of internal remedies than on developing surgical technique and dexterity. The Johns Hopkins and other schools of the higher class had not been established at that time, but schools of very inferior grades were springing up all over the country, with an ever-increasing influx of students quite as inferior as the schools themselves, until it became necessary for states to take measures by which to safeguard the public against the injustice perpetrated by incompetent and poorly-trained doctors.

Pennsylvania, perhaps, took the initiative in this protective measure by enacting a state law (as I remember in the year 1881) requiring all diplomas from Medical Schools located in other states to be officially endorsed by some legally chartered medical school located in the state of Pennsylvania before such diploma would be recognized as a legal qualification to practice medicine in that state. This plan, I learn, was commercialized by low grade schools operating in the state, to such an extent as to require the establishment of Three State Boards in 1894.

This awakening was not limited to a single state, as it will be remembered that our own little Mountain State assumed the supervision of medical prac-

tiee and created a State Board of Health almost thirty-four years ago, which from that time on has kept the standard of the profession well up to the demands of medical progress, and to The West Virginia State Medical Association belongs the credit for our state, to day, having an exemplary Medical Practice Law and an efficient State Board of Health, as well as a highly qualified Commissioner of Health whose zeal and honesty of purpose in protecting the people of our commonwealth against the onslaught quacks, charlatans and poorly trained doctors knows no superior. Many of us can, no doubt, look back to the time when we were railroaded onto the credulous and unsuspecting public, and feel that had we been compelled to measure up to the standard of the present day requirements there would be fewer doctors; but more teamsters and section bosses.

These remarks are in no way intended to disparage the old time family physican. To him we must concede many virtues.

His extreme versitality, his self-control and his wonderful resourcefulness are distinguishing attributes seldom observed at this age of the world.

He was like the early settlers on our bleak New England shores who were compelled to withstand hardship and privation and to depend solely on their own resources to meet the conditions there, upon them. Just so it was with the old time practitioner, who so often found himself miles away from counsel or assistance, with a human life depending entirely upon the ways and means devised and put into action by his unaided hands and brain.

Granting the popular plea, that the people of a generation or two ago enjoyed greater immunity and personal resistance to disease and infection than the present generation, does not supply convincing argument that the old time doctor is down and out and is no longer a valuable asset to his community and can not still serve an excellent purpose in the world.

The contention that our profession is crowded falls to the ground when we stop to consider our rapidly increasing population and that (practically unrestrieted) line of immigration from every nation in the world—infesting our country with many diseases heretofore unknown except as text-book entities, and a better knowledge of coping with conditions and diseases which only a few years ago were believed to be incurable or self limited, has created an ever widening field for the highly trained specialist in every department of medicine and surgery, as well as in that boundless field of preventive medicine and public health.

Much has been written and said regarding the passing of the old time family physician, and by many it is urged that he should go and make room for the modern and scientifically trained man.

I desire to dismiss this contention with the modest suggestion that the moral and physical welfare of any community is of vastly more importance than reverence, tradition or sentiment.

This brings us to the point at which it becomes our imperative duty to adopt the plan or system which will best serve the moral and physical requirements of all classes of society regardless of our own prejudices or personal interests.

We have searchingly reviewed the career of the old time family physician, and while we realize that the spirit of cooperation has never dawned upon his mental horizon, we found in his methods and customs many features to be admired, and were, as yet, unwilling to relegate him to the realms of "innocuous desuetude."

To the casual observer, it would seem that the greatly extended and highly systematized eurriculum of the Modern Medical School, which has been in active operation for more than ten years should have, long ere this, created a generation of practitioners whose superior methods would be so obvious that the old didactic disciple, as well as his traditions and empiricisms, would be looked upon as worthless relics of antiquity.

As a plausible excuse for my reluctancy in retiring from the field of medicine, and in bold resentment to the Osler plan of ridding the world of its unfit, I shall attempt to contrast the relative value, to the community, of the average

old time practitioner with that of the recent graduate. All of the facilities which it is possible to utilize in a routine general practice, are as common to the one as the other, and consist of a small number of comparatively inexpensive items, viz: A clinical thermometer, a stethoscope, a urinary test case, a hypodermic syringe, a sphygmonanometer and a few surgical instruments. In some instances a small stock of drugs.

With the meager equipment, just described, both are compelled to assume the duties and responsibilities incident to a medical eareer under countless disadvantages which public ignorance has forced upon them. Both are rendered helpless and practically worthless for want of the necessary working facilities.

One is lacking in education, but rich in experience, while the other is famished for want of experience, but a millionaire in scientific knowledge for which he has no market. Right at this point is where the strong arm of ecoperation should be released, and urged to crush the brazen fetters of commercial and political sponsorship.

Consequently, under present conditions, it would seem almost axiomatic that the continuation of the old time physician deprives society of nothing, and, that the advent of the modern type of physician supplies society with a commodity far short of the ideal.

Those of you who were in touch with medical education in the days of didactic teaching, will be in position to contrast that system with the much improved

methods of the present.

Much to the credit of the modern plan of teaching may be mentioned the various laboratories, to which all students of medicine now have compulsory access. Students are given bedside instructions in the different departments of the hospital; in which they are drilled in making physical examinations, and are given opportunity to make practical application of their laboratory knowledge, such as the examination of urine, blood, sputum, pus, etc.

They are also required to record the history of eases, and finally to venture a diagnosis and suggest treatment, based entirely on their individual association impulse.

with assigned cases. All of which is subject to correction and revision, both by the student and the teacher, and comprises an obligatory constituent of the prescribed curriculum. Under this regime, which I desire to emphasize as being none too exacting, at least six years, supplementing an accredited high school education, is now required to attain to the doctorate degree in medicine. Compare this with conditions existing in those old didactic days, when a young man possessed with fair intelligence and a second grade teacher's certificate could become a full-fledged doctor in two years, or less, after being seized with the

The present high standard of entrance requirements of medical schools has been so extensively advertised that thought of becoming a doctor never enters the minds of any who have not had the requisite college training, and who are not provided for with financial resources adequate to meet the contingencies of four more years of expensive college life. Neither the prospective doctor nor his deluded sire, up to late in the game, have given a single thought to the possibility—yea! to the almost assured probability, that the coveted goal, when reached, might be a treasure of very questionable value. This brings us to a question which I shall make no attempt to answer, lest I annoy you with a multiplicity of negatives, as I have yet in store an ample supply of them.

The wide open question is this: Is a medical education, under the present regime, worth to the individual, the time, money and effort required to possess it? Faithful to my promise, I submit no answer; although most irresistably tempted to do so.

Another question which I desire to submit for your consideration, is: Can not a shorter, more practical and more comprehensive method of making doctors be devised without detracting in the least from their efficiency and professional dignity? Thus it has been clearly shown that the requirements for the degree of Doctor of Medicine, have in recent years been increased more than four hundred per cent. and the expenses proportionately, as compared with con-

ditions existing in the old didactic days. In the face of these facts, I desire to ask the question—are the doctors of the modern school four hundred per cent. more efficient than those created by the old didactic method?

If the answer to this question rests with me, it will be an unqualified "no", and if any one has the bold effrontery to challenge my answer, I warn him now, that I am here prepared to trot out an array of my old didactic hardies with the chip on their shoulders, and with public opinion as the referee.

In the face of what has been described as present-day advantage, the inestimable value of which I willingly concede, it would seem that my challenge is sweeping and unwarranted, but again, when we consider how perfectly and effectually, the product of the old didactic school satisfied the demands of society, and how this (now antiquated) system served to create guardians of life and health whose opinions were seldom questioned and whose self-confidence in their methods was most gratifying. In them that look of distrust, uncertainty and anxiety had no place. They had been trained to believe that their clinical thermometer. their stethoscope, their interpretation of objective and subjective symptoms, when reinforced by the contents of their saddle-bags constituted an armamentarium which could be relied upon under all circumstances. The people they served respected them, loved them and regarded them as adequate to meet every requisite of the sick room or the parturiant cham-

The courts held them in such great esteem that perfection was expected of them, and actually demanded of them in cases of medico-legal differences.

Occasionally some more pretentious disciple of didactics would spring into existence, equipped with a bi-valve speculum, a uterine sound and possibly a rubber handled amputating case. To him advanced standing in the community was readily conceded, and his former field of activity soon became indefinitely expanded.

With the elaborate equipment, just described, he regarded himself amply prepared to assume the dignity of a con-

sultant, and to solicit referred cases from his more modest confreres.

It was by no means uncommon, in those days, to see a physician of this exalted type suddenly become ambitious and after a brief post-graduate course in some of the large cities, inflate himself to the dimensions of becoming an entire hospital unit.

The next step being to purchase some old abandoned church, schoolhouse or barn, slightly remodel it and call it a hospital, always preceding the word "hospital" with the name of the promot-

So extremely alluring was this new innovation that small "Big I" hospitals sprang up all over the country like the vegetating of mushrooms. So convincingly did the "one man hospital" appeal to the innocent and unsophisticated public, that even our own state legislature, some sixteen years ago, either became converted to the principles of the absurdity, or else seized the opportunity to shift the responsibility by stimulating public ignorance and credulity with three worthless toys of the same type.

It is a duty incumbent upon every reputable physician in the state to fearlessly unmask to public perception and interpretation such shameless mockery, and to create a living sentiment against the calamitous consequences of inefficient medical and surgical services both in private and institutional relations.

We should teach the public that they have sacred rights to protect, and that they have the right, the power and the opportunity to hold in their own hands (to borrow a word from the research library) the "reagent of control" necessary to safeguard themselves against error in the matter of selecting a hospital service, as well as in choosing their medical or surgical attendant.

Since we have so completely ostracised empericisms and traditional customs, and have taken into our embrace the broad principles of Chemistry, Biology, Psychology, and I may as well include Sociology and Criminology, we have laid a firm foundation for the acquirement of true scientific knowledge. There exists no longer any excuse for perpetuations

of creeds and sects. The distinction of Allopathy, Homeopathy, Eclecticism, Osteopathy or even Chiropractor, will not satisfy as the reagent of control against incompetency. Modern medicine knows no creeds or cults. The shining parchment from the class A medical school represents but the basic element of this reagent of control.

It must be fused and triturated with personal character, industry, perseverence, self-sacrifice and a highly cultivated and endowed conscience, all of which are the legitimate progeny of science and education. However, there is one thing which we must admit, and that is the fact that we are unable to defend the accusation that our practice is greatly at variance with our profession, and that many physicians who have been favored with the blessings of that ideal curriculum which I have described, still choose remain in the "Backward Abysm" where empericism and traditional dogmas reign supreme, while their higher intellectual emotions are urging them onward to regions rich in food for the very highest intellectual development.

In the light of my own reason, I can but express the belief that we are right now on the very eve of an educational awakening, one demanding a complete reorganization, a re-shaping and an actual reconception of what constitutes education in the light of our present civilization.

The absolute necessity of a logical revision of our educational system, is today, taxing the mental resources of every thinking individual throughout the land. This educational renaisance is itself the product of a new appraisal of life, health and true happiness; a new perspective of human needs, and a better and broader conception of the world's greatness and its moral requirements.

The domain of dogmas, creeds and traditions is like the domain of the American redskin; gradually shrinking before the advance of enlightened civilization. That same civilization which crowded the American Indian westward across the hickory forests of Tennessee, across the turbid waters of the Mississippi,

across the wheat lands of Kansas and the cattle lands of Dakota, is today boldly asserting its power to establish a higher medical and surgical civilization in "Free America." The river of progress will not be checked in her onward course over the rocks of dogmas and spurious doctrines.

Distinguishing creeds and sectarian doctrines are destined to soon pass into the realms of oblivion, and there seek refuge from the gleaming searchlight of reason. Whether one chooses to burden himself with some sectarian distinction matters naught, as all are borne on the same current into the same harbor. All who assume the care and management of human afflictions occupy exactly the same relationship to the individual thus afflicted, and there can be no valid reason assigned why all should not conform to the same professional and educational requirements, regardless of creed or pathy.

If we can ever hope to perceptably improve the profession we must first improve its constituents. Improve the man, improve his personal habits, improve his manner of living and his method of spending his spare time, and see that he spends less for that which injures his health and individual efficiency and he will have more to spend for that which brings true happiness to himself and family and to the community in which he lives. Improvement, like charity, begins at home.

This brings us again to that voluminous word Cooperation. In the face of duty and professional pride, it should be the watchword of every self-respecting physician in the whole world. We should make practical application of its boundless significance by zealous cooperation with the Journal of the American Medical Association in its masterly crusade against fraudulent and worthless medicaments, such as Turtle Soup, Autolysen, Sanatogen, Wine of Cardui, and the like.

We should likewise inform ourselves in every detail of the great work which has been done, and is now being done, by the Carnegie Foundation for the advancement of medical teaching in this country, and as soon as we ourselves, become competent, we should spare neither time nor pains in imparting this knowledge to the more enlightened citizenship of our respective communities.

We should let the world know that we are actuated by no prejudicial or selfish motives. That the making of better doctors and the search for knowledge is the single aim of modern medicine, and that no questions, as to creed or pathy is asked of the individual who aspires to enter the portals of a medical career. Satisfactory evidence of professional and scientific attainment is all that is required to remove every obstacle to a legal right to practice our profession.

From the standpoint of real efficiency I desire once more to pit the old didactic champion against the latest product of the new regime. For this contest let us select a brand new doctor. The very latest 1916 model electrily lighted, with self-starter, speedometer, left-hand drive and center control. Where does he stand?

He stands mentally equipped to give suffering humanity the very best that is known, but with none of his accustomed equipment at hand with which to render such services in a way acceptable to the mandates of his training. His laboratories, his hospital, his trained nurses, in fact, his entire confraternity has been left behind the bolted doors of his cherished alma mater.

His entire training has been within the walls of a perfectly equipped and systematically organized work shop, which he is unable to carry with him into the new field of his proposed activities or to duplicate with his own resources. In this embarrassing predicament, the young physician is forced to face the duties and responsibilities ineident to a general medical practice.

Right here in the blazing center of the firing line of routine practice is where my old didactic scout scores his victory.

The referee (public opinion) has coutned ten; while this polished gem of erudication and culture lies helpless and speechless on the National, State and Municipal couch of inertia.

When he again regains consciousness he is fully convinced that he is destined,

under existing conditions, to follow the trodden path of precepts, instead of lighting the way with the torch of progress, which he had been so amply trained to do.

He now realizes, for the first time, that science and system are entirely incompatable with a (financially) successful medical career, and unless he is stupid, beyond conception, he will at once adopt a new circumvention—one in which science bows down to tradition and tips its hat to empericism, and within the space of a few months he will recognize himself as an active accomplice in the art of perpetuating ignorance and superstition.

This brings us the point where I should be expected to protrude my personal views as to what is necessary in order to effect the reforms which I have advocated, and I can think of no more effectual means to do so than to refer you to the two articles by Dr. Richard C. Cabot, under the title "Better Doctoring for Less Money," which were published in the April and May numbers of American Magazine, and from which I desire to borrow for this occasion.

In the scholarly articles referred to, Dr. Cabot tells the world exactly what every physician has known since the hour he made his first professional visit; though none of us have ever had the temerity to divulge the secret to the public or to confide our inward convictions to our most intimate friends.

Dr. Cabot says, "Medicine is today far too large and complicated a field for any one man, no matter how wise and ex-

perienced, to cover."

He contrasts the professional services rendered in the physician's office and in the homes of patients, with the services of the same physician in the hospital. In the first instance the patient has all that one mind and meager facilities can give.

In the second he has all that a large group of highly trained minds, supported by all of the resources known to modern medicine, can supply. "It is really grotesque even to attempt a mental picture of the burden under which the family physician would stagger if he seriously undertook to give his patients the

best that medical science today can provide, yes and provide cheaply, too," says Dr. Cabot. When he said "Cheaply" I was simply amazed, as it had never occurred to me that cheapness could ever become a factor in maintaining a high grade medical and surgical service. In fact, I could see no possibility of anything but the very antithesis of cheapness being its greatest obstacle; but when I read Dr. Cabot's analysis and description of the system inaugurated and put into action some ten years ago at the University of California, in which seven thousand students, at an annual per capita cost of only five dollars were able to maintain an ideal medical and surgical service, including an adequate hospital and a well paid staff, I decided that "Better Doctoring for Less Money' is easily within the reach of all medium sized communities, and that the plan is as practical as it is just and logical.

Omitting the word "better" from Dr. Cabot's title would give to some of our West Virginia industries and to our law making bodies the distinction of priority, as doctoring for less money has apparently been their scheme for many years. Quality of service has never, to my knowledge, been a consideration in selecting the personnel of the services to

be rendered.

If modern medicine is ever to become a tangible asset to the public and to the profession, it must (for just cause and provocation) desert the bed and board of commercial and political sponsorship.

Experience in our own state has clearly demonstrated the fact, that minds dominated by commercial interests, or besmeared with political excrement, can not be relied upon to construct laws and methods by which the public can have "Better Doctoring for Less Money" or even better doctoring at any cost.

If the now existing inconsistencies, inefficiencies and gross injustices to the public, to the profession and to our State Treasury are ever to be subdued it must be done by the united efforts of untainted medical organization. Modern medicine has outgrown the one man hospital, the one man contract practice, and has thrown its last kiss at the one man

general practice. In fact, our present state of enlightenment has practically outgrown the one man system in every walk of life. The time is ripe to create public sentiment against the crude practices now being perpetuated in defiance of science and higher education. Create sentiment and there will be no occasion to invoke our legislative functions. Public sentiment is always the advance agent of law. I say again, create sentiment, and our victory is won. In the personnel of modern medicine we have a commodity for which the world is starving, but is denied its boundless benefits by reason of inadequate dispensing stations.

Let us as physicians, knowing best the actual needs of the public, take the initiative in creating public interest in the matter of constructing hospitals equal to the requirements, that we may be able to supply the blessings which modern medicine has made possible, to all classes of society regardless of age, sex, creed, nationality or financial status. With these admonitions and convictions I submit the proposition for your earnest consideration and ultimate solution.

I realize that my soldiery is fast coming to a close and that I must lay down my armor.

I am growing older every day;
I can see my finish clearer
Every day;
Hoary hairs are coming thicker,
May my courage never flicker.
Every day.

### PRACTICAL WORK FOR HEALTH OFFICERS.

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The chief duty of a health officer is the control of communicable diseases, since the decrease of sickness and death is the prime object of all public health work. The adoption of effective and practical means for the prevention of disease is an importance of the first magnitude.

Each communicable disease becomes a consideration unto itself, its methods of transference and of control requiring individual solution. The purchasable aspect of health is most evident in the control of communicable disease, and no infectious disease can be deemed conquerable unless the community recognizes the economic importance of disease Before attempting to control an infectious disease, the community should consider if the object to be gained is worth the cost, realizing that any activity in health work can ultimately be successful. When there are but few cases of any communicable disease in a susceptible community, immediate action to carefully control and effectively isolate the cases is always worth while. Where a disease of very mild infection has gained great headway, it may not be an economy, nor advisable, for a large investment to be made in its attempted suppression. This is true with German measles, and may be true with smallpox. With more severe infections, any and every action which can help to check or suppress an outbreak is advisable and advised. The great expense caused by an extensive outbreak intensely attests the necessity of careful control of every early case of communicable disease.

When an outbreak of smallpox attains great dimensions extensive publicity should be given the condition to fully warn those people who are sufficiently sensible and progressive to select vaccination in place of the more painful, more dangerous, more disfiguring disease, smallpox. Every case of smallpox, however, should be isolated, the house placarded, and all contacts located and vaccinated within three days of exposure or quarantined for three weeks.

Measles and whooping cough are controlled with similar methods of isolating susceptible contacts. Every child who has not had measles or whooping cough should be regarded as susceptible to the disease, although only about 85 per cent. of susceptible children contract these diseases when definitely exposed. These so-called susceptible contacts constitute, therefore, the problem to consider if any hope is entertained for suppressing an

outbreak of cither of these diseases. It is at the beginning of an outbreak, when there are but few existing cases of the disease, that the most careful should be done by the health officer, but it is just at that critical period when he is most lax, entertaining the delusion that with few cases there is little danger. That is the time when these outbreaks are easily controllable, and the inspections should be most thorough at that time, and the law fully enforced, with emphasis. A little relaxation, inattention or irresponsible neglect of public duty at this time quickly results in a rapid outbreak of the disease, with resulting preventable fatalties and consequent public condemnation of the health officer. Whether the condemnation is justified is never considered by the lay public—they denounce without weighing, and sometimes condemn on circumstantial evidence.

Tracking up susceptible people who become exposed to a communicable disease is clearly the duty of the health When done effectively it supofficer. presses an outbreak, yields a personal sensation of satisfaction of success, and induces public appreciation. In this work each person with a reportable discase is closely questioned to determine the entire associates the person has had since the earliest appearance of symptoms of the disease. The parents and playmates are also questioned about all possible contacts. The families who have been exposed are visited, are taught what early symptoms to expect and are made to realize that these early symptoms, such as cough, are the infective agencies by which the disease is most easily spread. The mothers are told to isolate the children after the minimum period of incubation has passed, being told the calendar day which will indicate this time with each child. The school teachers should be supplied by postal or otherwise, with a list of the susceptible ex posed children, with the order that on and after a certain day, within named, they shall be excluded until the passage of the maximum period of incubation, or until recovery.

With the appearance of any contagious disease in a school, daily examina-

tions of the scholars should be made to discover and to exclude those showing symptoms. The periods of incubation of the disease are considered when making these examinations.

A school disease census, made by asking each child which disease he has had previously, will assist in indicating which children should be examined and which may be disregarded. If a class shows a high percentage of immunity to a certain disease to which it has been exposed, little consideration may be given that class, and that class should not be disorganized in the event that it is believed expedient to close the rest of the school. It is rare that better control can be obtained over an outbreak by closing the schools. Closure is most justified for the presence of scarlet fever.

#### FUMIGATION

Serving as a cloak of assumed safety in a superstitious field of predestination, fumigation has long held sway as an indication of faith. The burning of incense as a religious motive was established upon the faith of ctherial purification. Down the ages this faith has crept until people became imbued with the thought that beautiful odors indicated purity and that sanitary dangers must necessarily reveal themselves unmasked to the olfactory nerves. Deodorants were, therefore, adopted to render unnoticeable noxious odors. Unsmclled does not mean non-existant. As pain is a symptom of derangement, so odors of decomposition are signs of impurity, demanding more than a narcotic. Deodorants should therefore, not be adopted to mask hidden dangers. Talcum powder is not intended to replace soap.

The superstition that an odorous air is antiseptic must be overcome. A jar of chloride of lime under the bed can in no way be of service in purifying the air. Neither should any disinfectant be used in any less proportion than proved necessary to become effectual. These are

common errors.

The active transmitter of disease is the man who carries the germs. No others need much consideration until these active carriers are controlled and sup-

pressed. It is not the air, not the floor and not any foods except those very recently infected, which deserve much attention in the effective control of disease. Room fumigation seems like grasping at a straw while planks and life preservers float quickly by. Search for the diphtheria carrier is more hopeful for results than room fumigation. It is useless to fumigate any room for diphtheria unless it has been proved that all the inmates are free from diplitheria bacilli in both the nose and throat. "Evidence seems to indicate the presence of scarlet fever carriers," writes Chesley of Minnesota. Room disinfection after measles, chickenpox, typhoid and pneumonia has been proved useless. Air disinfection after any disease is often a misplaced effort.

Experimenters have usually failed to get the typhoid bacillus to live much over two weeks under outdoor conditions.

Any well which is known not to have received any typhoid discharges within a month may usually safely be disregarded as the probable source of an outbreak. A neighborhood carrier should be sought. I saw a place where a county health officer, believing a well to be the source of typhoid infection, had four new wells sunk within as many years, and all within a radius of twenty feet. The only privy was two hundred yards down hill. It was clearly evident that the real source of the appearance of five cases of typhoid at the house within four years was a negro washerwoman who occasionally cooked for the family.

#### SCHOOL INSPECTION

The convincing arguments attesting the need of school medical inspection are economy, the prevention of disease, augmentation of scholastic work, increase of efficiency and better physical development. It is beyond the stage of experimentation; it savors of no argument; it is a school of necessity.

School medical inspection comprises the three divisions, inspection of the children for contagious disease, examination for the presence of correctable physical defects, and an inspection of the sanitary conditions of the school build-

ing and grounds.

School buildings require inspection to determine if the appointments observe the laws of school hygiene, and how they may be improved. Particular questions to be determined include if the light falls from the left side over the desk; if the blackboards are not glazed: if any sunny windows are properly shaded to keep the sunlight off the desks; if the children stand in class not facing the windows; if public drinking cups are not used; if the water supply is safely guarded from pollution; if the toilet facilities are proper, adequate, exclusive, clean, free from flies and do not pollute the ground surface or the water; if the playgrounds are dry or well drained; if the buildings are kept clean and the dusting of desks is done by a cloth, and how often the rooms are cleaned and the washed. Health officers may some day be asked to report upon these measures and to insist that the rules of the department be obeyed.

In the search for communicable diseases among school children the presence of trachoma in this state should especially be determined. Children showing symptoms of being in the infective period of any communicable disease should at once be excluded from school and then be admitted just as soon as their infec-

tiousness has passed.

### INFANT MORTALITY

The artificial decrease of infant mortality will depend upon education and upon improvement in milk supplies. Physicians must help the mothers to

nurse their young.

Practical education in infant hygiene can be carried on effectively through baby conferences and clinics. Baby shows where women enter baby clothes and their bank accounts in competition should be condemned. It is of more harm than benefit to know which of a set of babies is the fattest or the best dressed. Infant size depends very largely upon inheritance, and the prizes in baby shows are awarded to the offspring of fat mothers and fat pocket-books. Baby conferences should be held, not to compete for

prizes for appearances, but to determine if each infant is receiving the best fare, best care, and best air at the disposal of the mother. When prizes are offered for the best appearing baby, the infants and mothers who most need the help of the conference do not attend.

Baby-weeks are simply conferences and public educational movements extending over several days. Baby-weeks are needed in West Virginia. A babyweek lends itself to staging by any local enthusiastic health organization. lowing effective publicity, day time conferences are held, and to these all babies except those having communicable diseases are admitted. The babies and children are examined by physicians and dentists for the presence of correctable physical defects and diseases. They are measured and weighed to determine if they are below the par which would be indicated by the parental nationality and size, and by the weight at birth. needed instruction which will help the health and development of the child is given the mother, who readily becomes convinced during the demonstrations. Besides the day conferences for mothers, evening shows are held at which convincing speakers make addresses. Attendance at these public lectures is augmented by moving pictures, music and attractive advertising. The advertising most effective is of the same character to which the local community is accustomed. Whether handbills, window church announcements, or newspaper advertising is the most effective depends upon the success of previous attempts in the same community. Handbills are objectionable in that they litter the streets.

#### INSPECTION OF FOODS

The general public, imbacd with the idea of economic conservation, requires that the health officer develop an activity in inspecting public food supplies, and the public appreciates any work done to check the sale of adulterated or misbranded foods. For this work a model food and drugs law is essential.

Any practical work done to increase the standards of foods sold will include definite inspection of all places where foods are prepared, handled or sold.

In grocery inspection, the inspector notes the general cleanliness; the presence of flies and other vermin; the exposure to dust given to foods which are eaten uncooked, and the possible contamination of foods through carelessness or the nearness of toilets, barns, or other places of pollution. The offering for sale of spoiled articles of food, as of spoiled fruits, wormy dried fruit, stale bakery products or decomposed canned goods is noted. All swelled cans of goods and other foods showing decomposition or other evidence making their use unsafe, should be condemned.

A search should be made for typhoid carriers or tuberculosis subjects among the handlers of foods,

#### DAIRY INSPECTION

No class of food inspection and control will yield such valuable results as will dairy inspection, yet, because of necessary travel and delays, none is so tedious. The inspection of dairy farms requires special conservative judgment and diplomacy in order to accomplish the desired object, clean milk. No suggestions should be offered and no order given, without a careful consideration of the financial and intellectual ability of the dairyman, and no changes should be attempted which are clearly beyond his ability or power to install and maintain. When beginning dairy inspection, only the simplest improvements should suggested. When conversation is begun with a reference to tuberculin and concrete, the whole campaign is at once lost. Every small dairyman will resent as an intrusion any suggestions which require much money to follow.

The inspector who desires practical results from his dairy inspection will begin by talking about dirt and germs, illustrating with a dirty cow, and will suggest first the practice of wetting the udders before milking. As conditions warrant, some of the other suggestions, which may be developed in approximately the following order will be welcomely received and appreciated; wash the bottles or cans; clean out the barn; use for washing utensils only water known to be





Case No. 86: Mrs. M., age 51. Hard, nodular goitre; malignancy suspected. Pathological report negative.



Case No. 86: Same patient two weeks later.



Case No. 74: Mrs. II., age 51. Large colloid goitre with symptoms resembling myxodema.



CASE No. 74: One mouth after operation. Note the marked change in her features.



Case No. 34: Mr. M. suffered very much with dysphoea and hoarseness. Note the displacement of larynx.



Case No. 34: Same patient three weeks later.



Case No. 41: Large colloid goitre with symptoms resembling myxodema; dull and stupid.



Case No. 41: Eight weeks later; no change in expression.



pure; remove cobwebs and unnecessary bedding from barn; do not feed hay just before milking; do not strain the milk within the barn; whitewash the barn each spring; scald the pails; cool the milk immediately; construct an impervious flooring; clean the cows and use throat chains while milking; use the covered pail, and continue up the scale to concrete construction, sterilization plants, and tuberculin testing.

# DIAGNOSIS AND TREATMENT OF NON-TOXIC GOITRE.

Chas. M. Scott, M. D., St. Luke's Hospital, Bluefield, W. Va.

Read at Annual Meeting, Wheeling, W. Va., May, 1916.

For the purpose of convenience and in order not to make this paper too lengthy, I have limited myself to the non-toxic variety.

The toxic variety is a very broad subject and would take up too much time for this series I am going to present.

In the average case referred to the surgeon, the diagnosis is easy, because they are very large; and are removed more for cosmetic effect. As a rule, this type does not give pressure symptoms, but does cause a tugging or pulling on the trachea and important blood vessels; but it is the small deep-seated goitre that I especially want to call your attention to; these patients come to you complaining of shortness of breath, asthma, bronchitis, pain in the neck and many indefinite symptoms which are often treated for hysteria.

Now it is at times very difficult to find any enlargement of the thyroid, because it may be very small and will either be deep in the neck or else lodged behind the sternum. This, in my opinion marks a very much neglected field; for most text book writers and teachers make us believe the diagnosis of goitre is so easy that a professional opinion is unneces-

If each of you, when you return home will make a careful examination of all

of your cases or asthma, dyspnea, etc., in which the cause is not known, I am sure you will be surprised to find so many patients with goitre that you had never suspected of having one. I believe I am correct in classing goitre as one of the most frequent causes of bronchial asthma.

The danger of malignant degeneration in the hard, irregular variety after thirty-five years of age, makes a very positive indication for the removal of the gland.

The cystic thyroid gland seems to be predisposed to hemorrhage, and in dealing with these cases, should be constantly borne in mind. I have seen two deaths from this cause in the past twelve months.

Treatment may be medical, hygienic, injection or surgical. A great deal has been written about the injection treatment of goitre. I have never used it because I am afraid of it. I have a great respect for the blood supply to this gland and much prefer to have an open field to work through. If we bear the anatomy constantly in mind, the removal of the gland is easy and comparatively free from danger. The resulting scar is slight and the gratitude of the patient is so great that I cannot see why more of this work is not done; the fault lies, I believe with the general practitioner. have seen a great many people who have suffered for years because their physician had so greatly magnified the scriousness of the operation.

We do not follow any special technique, but do try to adhere to certain fixed rules in doing these operations. The first point is to make your incision over the most prominent part of gland from one Sterno-C-Muscle to the opposite. This enables you to have absolute control of the Supra-T-Artery; your clamp on this artery, the remaining part of the operation is comparatively easy; although in applying clamp on the Inferior Thyroid artery, it is well to remember to apply it in the same plane as the neck and not vertically to the gland; this enables you to avoid the recurrent laryngeal nerve. Next, we try not to destroy any of the muscle overlying the glands. Those that are cut are carefully sutured. Never attempt the operation without plenty of Oschner's forceps on hand, as the ordinary clamps, if handled or moved, will slip and cause no end of trouble. Often there will be a great deal of bleeding from the base. It is best to control this with sponge forceps applied as you do the hæmostat, because you may catch the recurrent laryngeal nerve and these do not crush it like the ordinary forceps.

BRIEF SYNOPSIS OF THE STRUC-TURAL CHANGES OCCURRING IN THE THYROID GLAND WIIEN DISEASED.

# T. E. Vass, Bluefield, W. Va.

In conjunction with the paper of Dr. Scott's upon Goitre, I will give you a brief synopsis of the structural changes that occur in the Thyroid Gland.

### EMBRYOLIGY

The Thyroid Gland originates as a pit from the floor of the Pharnyx at the base of the tongue. This pit deepens and elongates and gradually closes up, by fusion of its sides to form a solid rod of entoblast, lying in a longitudinal position under the floor of the pharnyx. It soon becomes separated from the pharnyx and lies freely in the Mesoblast of that region. It later becomes bilobed and the lobes send out solid rods of tissue, which become hollowed out to form the Vesicle of the adult thyroid. The thyroid gradually shifts its position backwards and becomes surrounded with a sheath of vascular connective tissue. It then gradually assumes the position, shape and structure of adult thyroid.

#### HISTOLOGY

Framework. The capsule of the thyroid consists of dense white fibrous and elastic tissue from which trabeculæ containing the large blood bessels passes inward and produce an indistinct lobular subdivision. A network of delicate fibres among which are very few, if any elastic fibres, passes from the trabeculæ forming

a delicate basement membrane for the epithelium. Flint has shown that much of this inter-follicular connective tissue is of the reticular variety. In it are contained the smaller blood vessels and lymphatics. It also contains a few leukocytes, which are scattered about in a diffused manner.

Follicles of the thyroid are ovoid saccules or short branched tubules with frequent diverticula. They vary greatly in diameter and in caliber of their lumen. Many of them present scarcely any lumen, others appear from their extreme size to similate small cysts (100 to 200 microns).

All follicles which possess any considerable lumen contain a peculiar acidophilic substance, known as colloid, which is apparently formed by the secretory activity of the glandular epithelium lining the follicles.

Colloid is a homogeneous or very finely granular substance which stains readily with eosin, taking a very bright tint closely resembling that acquired by the hæmoglobin of the red blood cells. Frequently and especially in specimens which have been fixed and hardened in alcohol it presents a vacuolated appearance.

As a rule the lumen of the follicle is not completely filled with the colloid mass, which is then adherent to the surface of the lining epithelium by delicate thread-like processes; the colloid thus acquires a deceptive appearance of extreme contraction, as if its surface except for occasional delicate strands, has been drawn away from the epithelium.

Occasionally a single large vacuole, often containing basophilic granules or crystolloid particles, occupies the center of the colloid mass in the large follicles; at other times the colloid material appears to be broken into minute spherules in general, the ratio of colloid contents within the follicles roughly stated, is in proportion to the age of the individual.

The follicles at the periphery of the lobes of the gland are less fully distended than those in the center.

Embedded in the colloid mass within the follicles even in the apparently normal thyroid, red blood cells and desquamated follicular epithelium are frequently found, but never in large quantities. Leukocytes are of less frequent occurrence and are more rarely found in the human thyroid than in that of the lower animals.

Follicular Epithelium is typical cuboidal in shape; in young individuals it is somewhat taller than broad. In those follicles which are distended with collord secretion the epithelium is relatively short; in those which are empty it is taller. Each cell contains a single spheroidal nucleus which lies in the center of the cell, or somewhat toward its basal extremity. This orderly disposition causes the nuclei when seen in sections in the follicle, to appear as a continuous row in the wall of the alveolus, a disposition which is noticeable for its exceptional regularity.

The cytoplasm of the epithelium is finely granular and decidedly acidophilic. It usually contains some coarse granules and very small fat droplets, which are prone to occupy the extremity of the cells. Minute spheroidal granules which give the color reaction of colloid are also found in the cytoplasm of the epithelial

cells.

The epithelium rests upon a very delicate reticular basement membrane and is in close relation with the capillaries and lymphatic vessels of the inter-follicular stroma.

Blood Supply. The arteries form a rich plexus in and about the capsule of the thyroid, from which numerous branches penetrate the organ, lying in the connective tissue trabeculae between the lobules; they are distributed to all parts of the gland. They supply a rich capillary plexus in the walls of the follicles. The veins retrace the course of the arteries. The walls of the smaller blood vessels consist only of endothelium, with a very thin coat of elastic connective tissue.

Lymphatics. The thyroid is very abundantly supplied with lymphatic vessels. These form a plexus of very broad lacunar capillaries in the inter-follicular connective tissue, where they stand in intimate relation with the follicular epithelium.

From this plexus of vessels to the interlobular connective tissue, in which they form a second plexus, whence lympatic vessels pass out of the thyroid in company with the blood vessels and enter the deep cervical lymphatic nodes.

Nerves. The nerves of the thyroid are derived from the sympathetic and are mostly non-mcdulated. They accompany the arteries and form a delicate terminal plexus in the walls of the follicles. The finer fibrils of this plexus end in contact with the epithelium of the follicles.

#### PATHOLOGY

Benign Strumæ. Hyperæmic struma or goitre is an enlargement, which depends upon dilation of the blood vessels of the gland. It is unaccompanied by important changes in parenchyma and is usually a transitory affection, appearing and disappearing paroxysmally. The tumor may be telangicatatic or cavernous. Interstitial hemorrhages frequently occur and are not infrequently followed by necrosis.

Hyper plastic or Parenchymatous Goitre, may be congential or acquired. It depends upon development of the already formed gland by accumulated secretion within the acini, or by extension of the normal alveoli offshoots, so that the glandular structure becomes hyperplastic without reverting to the embroyonal type.

The growth of the gland is sometimes uniform, affecting the entire organ, but more frequently is limited to one or the other lobes or isthmus; or being irregularly distributed, causes an irregular nodular appearance. The organ may be several times the normal size, in some cases even attaining the size of a child's head.

Microscopically the hyperplastic glandular tissue varies in appearance according to its condition. Parts of the tissue that consist of solid substances, that is, small acini full of epithelial cells, present a yellow color while the areas in which the alveoli are distended with colloid substance are reddish, transculcent and homogeneous.

In the same gland both kinds of tissue are often noticed and great irregularity exists as to the extent of colloid accumulation in the neighboring alveoli, some being distended, others containing only a drop of secretion.

Fibrous Struma. It not infrequently happens that the goitre consists chiefly of connective tissue. This may gradually develop by growth of pre-existing connective tissue or may take place subsequently to the not infrequent interstitial hemorrhage, which undergoes the usual retrogressive changes and slowly are replaced by fibrous tissue.

Macroscopically the growth is rounded or nodular, hard, firm and offers resistance to the knife in cutting. The cut surface shows chiefly the fibrous tissue and is frequently calcified and according to Forster, sometimes ossified.

The tumor at times presents a peculiar radiating appearance, as if the fibres extended toward the periphery from some central fibrous nucleus. Hyaline degeneration of both connective tissue and blood vessels is very common in this goitre and together the loss of the epithelium may transform the tissue into a hyaline spongy mass with rounded cavities filled with clear fluid.

Adenomatous Struma. This form of goitre is on the border line between struma and neoplasm. It is correct to describe only those cases as adenoma in which the growth forms a circumscribed mass in, but separate from, the gland. Unfortunately, however, in the thyroid there seems to be no sharp line dividing circumscribed tumors from peculiar rapid hyperplastic conditions of the parenchyma in which there is a combination of general enlargement, rapid growth of the alveolar structure, and an atypical vascular arrangement.

Cystic or Colloid Goitre. Cysts are observed in various forms of goitre. Their formation usually depends upon unnatural accumulation of secretion in groups of alveoli, the walls of which atrophy and disappear, permitting the colloid contents to form a cyst. Such cysts are quite common and may be numerous in the parenchymatons and adenomatous struma. They are usually about the size of a pea, but may be as large as a pigeon's egg, or in exceptional cases as large as a man's fist. The contents much resemble calves' foot jelly, but

may be more fluid or more solid, or may be discolored by bloody extravasation. The colloid substance is slightly yellow or honey like; it may be colorless. The cysts may contain a mixture of colloid substance, fat and lime salts; pus may be added to their contents.

Inside the cysts small papillary projections (proliferous cysts) occasionally occur, as a rule however, the cysts have a smooth wall. Cysts also form in the thyroid as the result of blood extravasation and anæmic necrosis. The walls of the cysts consist of indurated connective tissue, while the contents vary according to the age and changes incident to tissue destruction.

Malignant Struma all depend upon malignant tumors of the thyroid gland. The goitre is a growth accompanied by important secondary effects upon the sufferer. These are partly mechanical and partly physiologic. Of the mechanical effects must be mentioned compression and stenosis of the trachæ by bilateral enlargement; passive congestion and oedema from pressure upon the large veins; irregularities of circulation in the caroted arteries; cardiac, pulmonary and laryngeal disturbances from pressure upon the vagi, recurrent laryngeal and sympathetic nerves.

Variations in the thyroid secretion bring about changes in nutrition and innervation and may lead to peculiar systematic affections, known as cahexia strumipriva, myxoedema, cretanism and exophthalmic goitre.

I regret very much our inability to include in this paper photomicrographs of the sections made from these glands that were removed, but owing to the length of the paper it was deemed best not to include them. The slides show the picture much better than it can be presented in so many words.

# The West Virginia Medical Journal

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## Huntington, W. Va., Nov., 1916

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All original articles for this Journal must be made 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 juthors will have their contributions typewritten be-tore 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 Chemistry and Pharmacy 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.

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# Editorial

Recently when the Editor approached one of the firms advertising in our Journal, for a renewal of their contract for the ensuing year, he was informed that they did not care to renew.

When asked for a reason as to why the advertising should not be continued it was stated that they did not think any returns were received from it.

Just here is where the physicians throughout the state, who are joint owners of this Journal, miss a very great opportunity to help. We know that business has been secured for this firm because of their advertisements. Yet the men buying from them did not let them know the reason why patronage was given to this particular concern, rather than to a number of others handling the same

We know of two physicians whose purchase of instruments and so on amounts to from two hundred to four hundred dollars each year. In the past this was spent with several firms. Now all goes to firms advertising in the State Journal. And all of the parties concerned know it is because of the support given to the West Virginia Medical Journal.

Let us insist that you let each person or firm, with whom you deal, know that you do so because of their support of the official organ of the West Virginia State Medical Association. If you do this the Journal will secure more income from this source and so continue to grow, both in size and scientific value.

# NERV-WORTH IS THE KING OF THEM ALL

Mr. and Mrs. — Both Greatly Benefitted by Taking This World's Best Nerve Tonic

Here's a bit of new praise which tells how a user of little faith quiekly parted with her skepticism as a result of having been persuaded by her husband to try Nerv-Worth for her run-down condition. The-Drug Store just received this statement from \_\_\_\_\_ of \_\_\_ street and \_\_\_\_ Avenue:

"I have suffered for several years with indigestion of the stomach. I tried many doctors and many patent medicines but never found any relief until I had taken one bottle of Nerv-Worth. That has been six months ago and my misery has vanished. I am well and strong again by taking just one single bottle of the world's greatest medicine.

"My wife isn't much of a believer in taking medicines but has been complaining of nervousness and a tired, dragging feeling. I coaxed her to try a bottle of Nerv-Worth, and she feels that she has been very much benefitted and thinks it fine." (Signed)

At the -----Drug Store, that old reliable establishment which has sold thousands of bottles of Nerv-Worth during the past nine months, Mr. ——— added these words of verbal praise: "Nerv-Worth is the king of them all." If the reader had carried burdens of indigestion for years and then when all other prescriptions and remedies had failed, had been CURED, not merely relieved by one bottle of Nerv-Worth would he not also call this tonic "King?"

# GOT IN ITS WORK WITHOUT DELAY

Nerv-Worth Soon Put — -Health on Its Feet Again Readers of these local Nerv-- Worth endorsements find some central convincing fact in each one of these and taking the large number of statements together there is a great variety of these central facts. In the following, the main point brought out is Nerv-Worth's speed in aetion:

"Not able to sleep. Nervous and dizzy. Trouble with stomach.

"Got a bottle of Nerv-Worth about two weeks ago. Commenced taking it. The third dose began to give me relief.

"Now I sleep well, good appetite, stomach trouble about all gone.

Practically cured.

"My nervousness, dizziness about gone. Good medicine and willing to recommend it.

St. West, between — and Ave., — .''

Your dollar back at the old reliable ---- Drug Store if Nerv-Worth fails to overcome your nervous ills.

# READ THIS MAN'S STORY OF ILLNESS

-Man Troubled with Stomach Indigestion, Sluggish Blood and Rundown Condition

Recommends Tanlac Because it Helped Him Wonderfully

"I suffered from indigestion and stomach trouble for some time and pains would go up and down my body after eating. I suffered great pains and could not sleep at night. Then one day I read about Tanlac, and since taking it I can eat a big meal without any discomfort. The first bottle relieved me of all pain and I sleep fine now and get up in the mornings feeling like a different man. It has also cleared my skin of pimples and I have so much faith in Tanlae as a result I recommend it with absolute confidence to all.

(Signed) Ave., —, W. Va.

Stomach trouble may be indicated by many kindred symptoms but most frequently we have headaches, constipation, indigestion, lose energy, appetite, sleep, are nervous, have pains in pit of stomach, a suffocating, full, bloated feeling, gas pressure, belching spells, dizziness, fainting spells, loss of weight, and ofttimes a pain beginning on the side running down, then up and centering just behind the shoulder blades. Regardless, however, of the symptoms of trouble experienced, it has been the contention of Tanlac people that it all comes from the same general cause. After years of carcful study and labor, Tanlac was created to remove the cause and its success is well told by the thousands here and elsewhere who praise it.

The foregoing are clippings from daily papers published in one of the cities of West Virginia. In the same papers appears from time to time the advertisement of Chiropractors, Professors, and so on.

In this city not so very long ago a noted (self-styled) "Doctor" went about soliciting patients with Goitre to take up his sure-cure treatment for the same. He explained that he would treat them through "his agent," who would call upon them and report to him personally as to the progress of the treatment.

It appears to the Editor that such a state of affairs is not only an infringement of the spirit of the statute governing the Practice of Medicine, but also a breaking of the letter of the law as well

That it is unfair to regular physicians who have spent a number of years and much money to gain the right to practice medicine after passing a very rigid theoretical and practical examination, goes without saying.

In regard to the matter contained in the clippings, it is more or less of a surprise to us that the authorities intrusted with our physical welfare have not made an effort to secure action from the Federal government for the use of the mails.

Some months ago we stated, editorially, that the law governing the practice of medicine in West Virginia was one of the best, if not the best, of any state of the Union. There seems to be one very grave defect, as we stated then; namely, an inability to enforce it.

There is no question but that a very strenuous effort will be made at the coming session of the state legislature to emasculate our law. Let all the members of the profession throughout the state stand shoulder to shoulder in opposing any change which will bring this about; in addition let us use all of our influence to have our representatives strengthen it and make its enforcement possible.

It will be appreciated by the Editor if members who do not preserve their Journals for binding will send them to him. A few of our exchanges did not receive copies of the October issue. About ten are needed and only of the October issue.

The recent meeting of the West Virginia Hospital Association was certainly an enthusiastic one. Between thirty and forty members were present and all of them very much in carnest as to handling the many problems to be faced.

Papers and addresses showed that much thought had been given to their preparation. The discussions were enlightening and proved that already this young organization has borne fruit, in that all of the heads of hospitals are carnestly striving to raise the standards of the training schools; improve the facilities for ministering to the sick, and so on.

One thing which impressed us particularly was the spirit pervading this meeting, namely, that the patients, their care and rapid restoration to health was the first consideration and that while it was desirable to have the hospital pay in a financial way, this must not be gained by sacrificing the welfare of the ill persons entrusted to their care.

The papers delivered at this meeting will be published when received from the

Secretary of the Association.

We feel sure that the West Virginia Hospital Association will grow into a very influential organization, and urge that everyone connected with hospitals, either in a lay or professional capacity, become members.

# Hospital News

REPORT OF MEETING OF WEST VIRGINIA HOSPITAL ASSN., IN HUNTINGTON, OCTOBER 11, 1916.

The West Virginia Hospital Association held its semi-annual meeting at Hotel Frederick in Huntington on Octo-

ber 11, 1916.

Dr. G. C. Schoolfield of Charleston, presiding. After the invocation by Rev. Newton Donaldson and a warm address of welcome by Mr. C. P. Snow, president of Huntington Chamber of Commerce, the following addresses were made:

Mr. P. O. Clark, superintendent of the Ohio Valley Hospital of Wheeling, gave us a most interesting and instructive talk on the American Hospital Association meeting in Philadelphia. Mr. Clark is a very forceful speaker and gave us somewhat in detail the happenings at this meeting.

Dr. E. H. Thompson in his talk on "Purchasing Supplies" showed that he is familiar with this most important phase of hospital management, and brought out some excellent points.

Miss Emily Bauer's paper "The Commercializing of the Pupil Nurse" was most excellent and to the point, showing our duty and responsibility in conducting a training school. Every one in the hospital business should read this paper which will appear in the State Journal.

Dr. A. K. Kessler's address "Short Sketch of the History of Hospitals and Trained Nurses in West Virginia" presented most interesting data and showed the wonderful strides the hospitals have and are making.

Each paper brought out considerable discussion, every one seemed at ease and ready to enter into the discussions as a good fellow felling prevailed overcoming the usual stiffness of such a meeting.

At the afternoon session the election of officers resulted as follows: President, Wr. W. A. McMillan of Charleston, succeeding Dr. G. C. Schoolfield; First Vice-President, Mr. William R. Frantz, of Fairmont; Second Vice-President, Dr. J. A. Guthrie of Huntington; Secretary-Treasurer, W. H. St. Clair of Bluefield, re-elected.

The various committees reported. The Legislative Committee submitting the

following report:

### REPORT OF LEGISLATIVE COMMITTEE

No. 1. Regarding exemption, from taxations, of hospitals doing charity work. The committee considered this matter carefully and decided at this time to make no recommendation.

No. 2. Regarding recognition of hospitals and what shall constitute the minimum requirements for hospitals conducting training schools for nurses.

(a) Minimum daily average patients

treated, fifteen.

(b) Proportion of nurses to patients, not less than two, not more than four patients for each nurse.

(c) Length of course, three years. It is recommended that examining board for nurses formulate course of study, and

recommend suitable text books.

No. 3. (a) It is recommended that the state law for registration of nurses be so amended as to provide that the board of registration shall employ a graduate nurse as secretary who shall, under their direction, visit and inspect the schools of the state to see that requirements of law are being met. She shall also advise with the heads of training schools and render all assistance in her power to make schools more efficient. She shall also have charge of the books of the Board of Registration.

(b) That the necessary laws be enacted to enable the Board of Registration to raise a fund from which to defray all its expenses and that this fund be obtained in the following manner: (1) From fees of applicants for registration; (2) from "recognized" hospitals in the state which shall pay annually

the sum not to exceed fifty cents for each available bed for patients, which fund shall be kept and expended under the direction of the Board of Registration with an annual certification by the Auditor of the State.

No. 4. Regarding so-called Miners' Hospitals, it is the sense of your committee that these hospitals are practicing unnecessary and unfair competition with other hospitals. We believe further that the Workmen's Compensation Commission is now doing the work originally intended to be done by these hospitals.

We therefore recommend that the Legislature be asked to dispose of these hospitals in one of the following ways:

(a) To sell these hospitals.(b) To lease these hospitals.

(c) To convert them into charity hospitals for the admission of indigent patients of the state and for these only.

No. 5. We recommend state law regarding payment of hotel bills, be so amended that hospitals be included in this act.

The following recommendations of the Superintendents of Training Schools of West Virginia were submitted:

# RECOMMENDATIONS OF THE SUPERINTEND-ENTS OF TRAINING SCHOOLS OF WEST VIRGINIA

1. Only recognized training schools for nurses shall be allowed to send their graduates to the State Board for examination and registration.

2. No training school connected with a hospital of less than a daily average of twenty patients may be classed as

"recognized."

3. It is recommended that special hospitals (state hospitals) now giving their pupils a two-year course, arrange with some larger hospital for a year's work in obstetrics, and diseases of women and children—thus giving a three-year course and the practical work of a general hospital.

4. It is recommended that all superintendents of training schools be instructed to hold a preliminary examination for applicants, in reading aloud, dictation, and arithmetic through simple fractions; and a fair knowledge of these rudimentary branches insisted on, before the applicant is accepted as a probationer.

- 5. It is recommended that no hospital that commercializes its pupils by sending them out to private duty shall be "recognized" or be allowed to send its pupils to the State Board for registration.
- 6. It is recommended that the Board of Examiners request the superintendent of a training school in whatever city they may meet (or a superintendent from any other city) to give the nurses an examination in practical nursing. Such superintendent to be paid not less than \$4 per day and expenses.

Attention is called to the state law for the examination and registration of

nurses:

Section 2 says: "The Board of Examiners is authorized to frame such by-laws as may be necessary to govern its proceedings." This would cover recommendations 1, 2 and 6.

Section 4 says: "An applicant shall furnish satisfactory evidence that she has received the equivalent of a high school education (recommendation 4); has graduated from a general hospital, (recommendation 3); where two years of continuous residence training with a systematic course of instruction is given" (recommendation 5).

Attention is called to the fact that out of the 359 pupil nurses enrolled at present in the training schools of West Virginia, 272 were represented by their superintendents at our meeting, September 3, 1915.

It is recommended that any nurse who is superintendent of a West Virginia training school should be registered in West Virginia.

It is recommended that registered nurses must file their certificate with the Probate Court of the county in which she resides within sixty (60) days after certificate is received.

Respectfully submitted to the West Virginia State Board of Examiners for Nurses. The following curriculum was voted on and carried at the meeting of the Superintendents of Training Schools, held at Martinsburg, Scptember 28, 1916, and is submitted to the Hospital Association at their request.

### PROBATION TERM

Two Months

Practical Nursing Demonstrations, 20

periods.

Nursing Ethics, 6 periods, 1 hour each. Bacteriology, 6 periods, 1 hour each. Making of Solutions, 6 periods. Weights and Measures, 6 periods. Hospital Economy, 6 periods.

### JUNIOR TERM

Ten Months
Materia Medica, 20 periods.
Bandaging, 7 periods.
Anatomy and Physiology, 40 periods.
Surgical Technique, 8 periods.
Nursing and Emergencies, 15 periods.
Dietetics.
General Medicine.

#### INTERMEDIATE

One Year

Operating Technique, 15 periods. Contagious and Infectious Diseases, 20 periods.

Children's Diseases, 6 periods. Ethics, 4 periods. Dietetics, 20 periods.

Nursing Quiz Class, 5 periods.

## SENIOR TERM

One Year

Massage, 10 periods.

Eye, Ear and Throat, 8 periods. Mental and Nervous Diseases, 6 periods.

Skin Diseases, 4 periods. Special Lectures, 5 periods. Obstetrics, 10 periods. Quiz, 5 periods.

It is desirable that affiliation with a larger hospital be made for Gynccology, Obstetrics and probably Pediatrics.

Ohio Valley General Hospital offers these to all West Virginia Training Schools. The following is a list of those registered in attendance at this meeting:

Miss Emily Bauer, Huntington, W. Va., superintendent C. & O. Hospital.

Miss Susan Cook, Wheeling, W. Va. Miss Anna Bessler, R. N., Charleston, W. Va., Kanawha Valley Hospital.

Sister M. Stanislans, R. N., Wheeling, Wheeling Hospital.

Sister Mary Clare, R. N., Wheeling, Wheeling Hospital.

Miss Agnes T. Lynch, Bluefield, W. Va., St. Luke's Hospital.

Miss Virginia L. Summers, Charleston, Charleston General Hospital.

Miss Dea G. Hayes, Huntington, Charleston General Hospital.

Dr. Chas. M. Scott, Bluefield, St. Luke's Hospital.

Dr. M. R. Frantz, Fairmont, W. Va., Cook Hospital.

Dr. G. A. McQueen, Charleston, W. Va., Kanawha Valley Hospital.

Dr. W. A. McMillan, Charleston, W.

Va., McMillan Hospital.

Dr. E. H. Thompson, Bluefield, W. Va., St. Luke's Hospital.

Dr. J. Ross Hunter, Huntington, W.

Va., Sheltering Arms Hospital. Dr. B. H. Swint, Charleston, W. Va.,

St. Francis Hospital.
Dr. S. B. Lawson, Logan, W. Va., Lo-

gan Hospital.

Dr. A. K. Kessler, Huntington, W. Va., Kessler Hospital.

Mr. Pliny O. Clark and wife, Wheeling, W. Va., superintendent Ohio Valley General Hospital.

Mrs. N. McIntosh Noel, Princeton, W. Va., Princeton General Hospital.

Dr. H. H. Staats, Spencer, W. Va., Roane County Hospital.

Dr. James R. Bloss, Huntington, W. Va., member of staff C. & O. Hospital, Huntington.

Dr. W. H. St. Clair, Bluefield, W. Va., Bluefield Sanitarium.

Dr. R. E. Vickers, Huntington, W. Va., Mt. Hope Hospital.

Dr. J. E. Rader, Huntington, W. Va., Huntington General Hospital.

The Cabell County Medical Society entertained the association at the Frederick Hotel with a most delicious dinner which was heartly enjoyed by every one. Immediately following at a well attended meeting we had a symposium on hospitals. Mr. Clark opened with an address on "The Relation of the Hospital To The Physician," which was followed by Dr. Schoolfield speaking on "The Relation of the Physician to the Hospital." These subjects were open for general discussion Rev. Donaldson brought out in discussion the advisability of a chaplain, feeling there should be closer relationship between the ministry and the hospital. After some further discussion the association adjourned to meet in Fairmont in May, 1917.

The Mason Hospital Company at Clarksburg has laid the foundation for a new hospital adjacent to the site of the present Kessler Hospital. The new hospital will be a four story building, accommodating forty patients and will be equipped in the most modern way. E. F. Stevens of Boston, an authority on hospital construction, is the architect, and the contract to build is in the hands of R. R. Kitchin of Wheeling. If the schedule holds, patients will be admitted to the hospital by the first of next June.

The Huntington General Hospital at Huntington will be closed during the month of November for the purpose of making quite extensive improvements in the way of remodeling. It is expected to increase the capacity of this institution and add new equipment for the handling of both medical and surgical patients.

At the banquet tendered to the West Virginia Hospital Association on the evening of October 11, by the Cabell County Medical Society the following guests were registered: Dr. A. K. Kessler, Mr. M. R. Frantz of Fairmont, Dr. C. L. Morrison of Milton, Dr. A. J. Pickering, Dr. S. B. Lawson of Logan, Dr. C. M. Hawes, Dr. W. E. Neal, Dr. R. Hardwick, Dr. J. A. Guthrie, Dr. J. W. Rife, Kenova; Mr. J. E. Norman, Dr. A. J. Watts, Dr. H. P. Gerlach, Dr. E. B. Gerlach, Dr. Guy Yost, Mr. C. P. Snow, Dr. Newton Donaldson, Mr. and

Mrs. P. O. Clark of Wheeling, Dr. G. C. Schoolfield of Charleston, Dr. W. A. McMillan of Charleston, Dr. II. W. Keatley, Dr. J. R. Hunter, Dr. C. L. Hopkins, Dr. H. Lon Carter, Dr. R. H. Pepper, Dr. J. E. Rader, Dr. T. W. Moore, Dr. F. O. Marple, Dr. G. C. Morrison, Dr. H. H. Staats of Spencer, Dr. J. C. Mathews, Dr. R. M. Bobbitt, Dr. W. D. Hereford, Dr. J. H. Steenbergen, Dr. E. II. Thompson of Bluefield, Miss Georgia B. Kenney of Charleston, Dr. Karl C. Prichard, Dr. E. S. Buffington, Dr. J. M. Lovett, Dr. J. R. Bloss, Dr. Chas. F. Hicks of Welch, Dr. F. A. Fitch, Dr. A. M. Adkins of Griffithsville, Miss N. McClintock Noel of Princeton, Dr. W. H. St. Clair of Bluefield, Dr. and Mrs. B. H. Swint of Charleston, Miss Anna M. Trimble of Huntington, Miss Elfa A. Slaughter of Spencer, Miss Susan Cook of Wheeling, Miss Anna Bessler of Charleston, Miss Emily Bauer of Huntington.

# Health News

DO YOU KNOW THAT-

The constitution of the United States doesn't mention health?

-0-

Procrastination in sanitary reform is the thief of health?

-0-

A book on "Exercise and Health" may be had free for asking from the United States Public Health Service?

--0--

Not everybody can achieve greatness, but everybody can be clean?

---0---

If you sow a hygienic habit you reap health—reap health and you attain longevity?

Railway cars would be sanitary if it weren't for the people in them?

-0-

America's typhoid fever bill is more than \$270,000,000 a year?

The full dinner pail is the enemy of tuberculosis?

--0-

It is dangerous to put anything into the mouth except food and drink?

Sanitary instruction is even more important than sanitary legislation?

The United States Public Health Service issues free bulletins on tuberculosis?

The continuous liberal use of alcoholic beverages lowers efficiency and menaces longevity?

—o— Moderate exercise in the open air prolongs life?

"'Mouth breathing" makes children stupid?

Fish cannot live in foul water nor man in foul air?

Smallpox is wholly preventable?

The United States Public Health Service with the cooperation of the State Health Department, held a trachoma clinic at Williamson, October 30 to November 1. John McMullen, Surgeon U. S. P. H. Service, by means of holding clinics in various cities in trachomatous sections, expects to give many people an opportunity of getting free treatment which would not otherwise be available. Dr. McMullen was present. The method of publicity adopted was through local newspapers and by means of large posters which were displayed in adjoining towns. Other cities and sections wishing this service of a trachoma clinic are asked to apply to the State Health Dcpartment, Charleston.

Real anti-tuberculosis work is being done by Mr. W. O. League, of the Salvation Army, who is now working in the south-east coal fields of the state. He hunts out tuberculosis cases, giving out literature on tuberculosis and rendering much assistance to the poor unfortunates.

If physicians will be certain their cases are reported to the county health officers, they will assist in the saving of lives through Mr. League's work in preventive medicine.

A Hint: Smallpox vaccine which is not kept ice cold cannot be depended upon to remain active very long. Physicians should not buy smallpox vaccine which is kept by druggists upon their usual medicine shelves.

The following table shows the number of applicants for medical licensure by examination in this state during the five years ending December, 1915, and the number of failures. That there are now fewer failures is due to these facts, namely, the elimination of the poorer colleges, the exclusion from examination by the State Board of Colleges, and the requirements of a higher preliminary education, graduation from a four years high school or its proven equivalent:

Year Applicants Rejections
1911 124 25
1912 93 26
1913 85 25
1914 64 6
1915 77 5

# ARE YOU "TUBERCULOUS" OR "TUBERCULAR?"

Distinction between the words "tubercular," "tuberculous" and "tuberculosis" when used as adjectives are pointed out by the National Association for the Study and Prevention of Tuberculosis, in a bulletin issued today.

Of the various words used to designate some phase or other of the tuberculosis movement, says the bulletin, the word "tubercular" is most frequently misapplied. The term "tubercular" may be used correctly only to describe conditions resembling tubercles, but not necessarily caused by the tubercle bacillus, the germ of tuberculosis.

Thus, if one says a certain individual is tubercular, he really indicates that the person has a disease process manifesting itself by tubercles or little lumps, but it is not necessarily tuberculosis. To say that the person has tuberculosis, the adjective "tuberculous" is the correct word. It refers directly to diseased conditions caused by the tubercle bacillus. Thus, when an institution for tuberculosis recently labeled itself as a "tubercular sanatorium," it not only indicated that the sanitorium was sick, but that it was sick with something resembling tuberculosis. The adjective "tubercular" should be used very infrequently.

The word "tuberculosis," the bulletin holds, may be used correctly as an adjective, modifying sanatorium, hospital, nurse, etc. This is in accord with the common usage of such phrases as "typhoid hospital," "smallpox infirmary," etc. "Tuberculosis" may also be used, as it commonly is, as a noun, but the use of "tuberculous" or "tubercular" as nouns without a modifying definite article, "the," is extremely doubtful.

Since the anti-tuberculosis campaign is developing with such great rapidity. The National Association for the Study and Prevention of Tuberculosis is urging all newspapers and other publications, as well as its own affiliated associations to make proper use of the words "tuberculosis," "tuberculous" and "tubercular."

# HEALTH INSURANCE IN THE PRE-VENTION OF TUBERCULOSIS

ANTI-TUBERCULOSIS ASSOCIATIONS TO CO-OPERATE IN LEGISLATIVE CAMPAIGN

Nearly fifteen hundred anti-tuberculosis associations in almost every part of the United States will be ased to participate in a campaign for health insurance legislation by the American Association of Labor Legislation, according to an announcement made today from the headquarters of The National Association for the Study and Prevention of Tuberculosis. Bills asking for health insurance legislation will be introduced in more than twenty states during the coming fall and winter and the support of the anti-tuberculosis associations and other public health organizations will be urged for these bills.

The anti-tuberculosis associations are

counting upon Health Insurance as an aid in controlling the spread of tuberculosis, because it will provide machinery first of all to discover the cases that cannot now be found by ordinary methods in vogue, and secondly it will help to secure the much needed medical care in hospitals and sanatoria that will check the ravages of this disease. But more than these, the anti-tuberculosis workers are looking to Health Insurance as an aid in promoting periodic physical examinations in all industries, which The National Association for the Study and Prevention of Tuberculosis believes would be one of the greatest preventive measures that can be introduced in this country.

At the present time, tuberculosis is the greatest single cause of death and it is also the most difficult of all diseases to detect. Under a system of Health Insurance, which would necessarily presuppose regular examinations at periodic intervals of all workers, both the employer and the employee, as well as the state, would be interested to see that this disease was discovered before it had developed too far.

The proposed bills provide for participation of the worker, the employer, and the state in the insurance fund and also provides for the adaption of the scheme to already existing benefit agencies under state supervision. The health insurance laws will cover every worker earning \$100 a month or less.

# Propaganda for Reform

The following article is clipped from a daily paper in West Virginia:

FARMER TOOK CURE AND LOST AN ARM

Physician Tells Story of Quackery on Return from Roane

"In West Virginia and in every other state there is a certain class of ignorant non-professionals who think that they are possessed with such an intimate knowledge of medicine that they are competent to diagnose and treat all diseases," said a Charleston physician.

Thanks to the efficiency of the State Board of Health this class is rapidly disappearing in this state, but a prominent farmer near Big Otter in Roane County, is now minus an arm as the result of the "kindly" ministrations of an old woman who has been informally "practicing medicine" in her county for a number of years.

The story was told yesterday by a physician who had just returned from Roane county, where he amputated the arm of the Big Otter man. The farmer is about 70 years old and up until about six weeks ago was in the best of health. It became necessary for him to take a trip to Charleston, and on the train he chanced to occupy the seat with this old woman, whom he knew. There was a small skin affection in no way dangerous, on the old man's hand. It had been there for 65 out of the 70 years of his life.

## SPOTTED BY QUACK

The cagle-eyed old quack spotted it and at once pronounced it a cancer and told the man that she could cure it. He agreed, and the woman gave it a treatment of zinc chloride. The skin was eaten into, and after several applications which the woman subsequently made, the entire bones of the hand and wrist were exposed, and above the wrist the flesh became gangrenous.

A physician, called by relatives, at once saw that amputation was necessary and called in the Charleston surgeon who performed the operation yesterday.

# Miscellaneous Announcements and Communications

Birmingham, Ala., Oct. 6, 1916. Dr. Jas. R. Bloss, Editor, W. Va. Medical Journal,

Huntington, W. Va. Dear Dr. Bloss:—

Will you not give some publicity to the Southern Medical Association's meeting in the next issue of your journal? The place and date you know: Atlanta, Ga., Monday, Tuesday, Wednesday and Thursday, November 13-16, 1916.

The outstanding feature of the meeting will be the clinics every morning from 8 to 10 by visiting clinicians, men from various southern cities. The medical college and the large city hospital offer great opportunities for the successful carrying out of this idea.

Monday, the Railway Surgeons, Public Health Section and the Conference on Medical Education will be in session. Monday evening public meeting with addresses by prominent health workers. Tuesday morning addresses of welcome and the formal opening exercises. Tuesday night a reception at the Capital City Club. Wednesday a "Georgia Barbecue" at the Druid Hills Country Club. This club has fine golf links and those who wish to golf will have the privilege that afternoon. A golf tournament on Friday.

The section programs were never better, they offer a scientific treat. All the scientific sessions will be held under one roof, that great Auditorium-Armory of which Atlanta is so justly proud. This is an ideal arrangement. Nothing is being left undone that can be done for the pleasure of the guests at this meeting. An attendance of two thousand is predicted. Texas alone is arranging for special trains bringing more than 250.

Note in the last issue of the Journal (October), which you should have already received, our editorial on the meeting. Also enclosing copy of a little bulletin just issued. Hope to have the program out in printed form within the next ten days.

Any publicity you can give through your valuable journal will be appreciated. I hope to see you at the meeting.

Very truly yours,

SEALE HARRIS,

Secy.-Treas.

October 13, 1916.

Dr. Jas. R. Bloss, Editor,

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

My Dear Dr. Bloss:-

The Marion County Medical Society has recently appointed the following Executive Committee to have in charge the local arrangements for the next meeting of the State Association in October, 1917. Sub-committees have been appointed and are active in planning to make the next meeting a record-breaker in every particular. In co-operating to this end we tender our services to you and the State Association officers. Kindly feel free to offer suggestions at any time that may aid us in providing suitable entertainment for the visiting members.

Fraternally yours, C. W. Waddell, Chairman.

Committee:

Dr. C. W. Waddell. Dr. Wm. H. Sands. Dr. G. H. Brownfield.

# Society Proceedings

BARBOUR-RANDOLPH-TUCKER SOCIETY

Dartmoor, W. Va., Oct. 8, 1916. Editor Medical Journal:

The Barbour-Randolph-Tucker County Medical Society met in the reading room of the Y. M. C. A., Elkins, W. Va., on October 5, at 1:30 p. m. The following members were present: Drs. Daniels, Powell, Hamilton, Butt, Miller, Perry, Hoff, Rodgers, Golden, S. G. Moore, Wilson, Irons, Talbott, Gruber and A. S. Bosworth.

Dr. Wilson presided. Reading of the minutes was dispensed with. Since there has been great trouble and annoyance in getting sick and injured patients conveyed on the Western Maryland R. R., owing to the refusal to carry patients unless on a special baggage car, which is often beyond the means of the patients, on motion a committee of three was appointed by the president to take up the matter with Dr. Dunott, Chief Surgeon of the said railroad, and the railroad company and see if some more

satisfactory solution could not be made. Drs. Butt, Fredlock and Golden were appointed on the committee. Necessary expenses are to be paid by the society.

Chapter 2, Section 2 of by-laws of the Society were so changed as to greater time to select dates so as to not conflict with other events of interest. Instead of meeting within the first week of January, April, July and October, it is now within the first two weeks of January, April, July and October.

Complaint having been made of irregularities in making examinations for Mutual Benefit Orders, by a member of the Society, in violation of express rules of the Society, the matter was referred to the Board of Censors, with the request that they investigate and report at a special meeting to be held in Elkins at 1 p. m. on Thursday, October 19.

The following officers were elected for 1917: President, Dr. E. M. Hamilton; vice-Presidents, Drs. S. G. Moore and A. P. Butt; Secretary-Treasurer, J. C. Irons; Censor for Tucker County, Dr.

J. L. Miller.

Dr. O. L. Perry then took up the topic, Medical Inspection of Public Schools. He used his notes giving the difficulties encountered and defects found in the examination of the children in the Central Building in Elkins. He gave the per cent. of perfectly normal children in the different grades, which was greater in many respects in the lower grades, duc to neglect in giving proper attention. The most prevalent defects are of the eyes, and teeth, but that which is most difficult to control, is the contagious diseases. There is great need of thorough cooperation with the teacher, parent and physician, and the forceful backing of the boards and the mandates of the law.

Dr. Perry reported that contagious discases were now better controlled and the result was a lessening of disease and number of deaths. Still there is room

for improvement.

Dr. Golden then took up the dread disease, Poliomyelitis. Instead of giving a prepared paper, he gave the compilation of Health Boards, the result of long and painstaking investigation, showing the prevalence of the disease, its indefinite origin and mode of communication,

and the plans used to prevent its spread, etc. The most striking conclusion is that "not more than five per cent. of the cases are the result of contact."

Dr. Golden reported one case he had seen in Elkins this year which resulted fatally. Dr. J. L. Miller reported two cases he had treated in Thomas. One recently and one four years ago. One resulted in death. Dr. Irons reported a case he saw about one year ago. The case was in the isolation of the mountains and was treated by Dr. Dunham. The case made a good recovery with only

slight paralysis of one leg.

Dr. Powell gave a talk on "The Backward Child." Dr. Powell said that we find most of the cases of deficient work in our schools are due to some defect in the child's eyes, hearing or a neglect in proper food and sleeping apartments. Children frequently fail to learn because of defective sight. They are unable to endure constant strain on the bright page or unable to see the blackboard and learn what is or should be set before them. Again the child is hard of hearing, and fails to hear what is said to it, and it is punished for lack of attention, when in fact the trouble was not the fault of the child, but due to defects.

Then, too, children, especially of the poor, are often poorly fed, and made to sleep in illy ventilated rooms with the result that they have a weakened body

and impaired mentality.

Dr. Powell urged greater care by parents, teachers and physicians in dealing with the so-called backward child, and care in learning the cause and applying the proper remedy.

The papers were all of interest and should command the thoughtful atten-

tion of all.

J. C. Irons, Secretary.

# CABELL COUNTY SOCIETY

The semi-monthly meeting of the Cabell County Medical Society was held in the Hotel Frederick Thursday, September 28. Members present: Drs. Rader, Watts, Yost, McGuire, Hunter, Pepper, A. K. Kessler, Vest, Prichard, Hogg, Mathews, Wilkinson, Hereford, J. C. Kessler, H. P. and E. B. Gerlach,

I. C. Hicks, Fitch, Bobbitt, Meek and Schultz.

Minutes previous meeting read and approved.

Dr. R. M. Bobbitt read a paper on "The Value of Kidney Functional Test." This paper will be published in an early issue of the State Journal.

After the report of the committee appointed to arrange for the entertainment of the West Virginia Hospital, it was moved that the time of the first semimonthly meeting for October be on the same date as the meeting of the Hospital Association.

First meeting of Cabell County Medical Society for October was held October 11.

After a dinner given by the society in honor of the West Virginia Hospital Association, adjourned to the assembly hall of the Hotel Frederick.

Meeting was called to order by President Keatley at 9 p. m. On motion of the Secretary the minutes of the pre-

vious meeting were not read.

The first address of the evening was given by Mr. P. O. Clark, superintendent of the Ohio Valley General Hospital, Wheeling, W. Va. Mr. Clark's subject was "The Relation of the Physician to the Hospital." It is hoped that we shall be able to publish this at an early date.

The next address was by Dr. G. C. Schoolfield, the retiring president of the Hospital Association. His subject was "The Relation of the Hospital to the

Physician."

The third and last number of the evening's program was an address given by Mr. C. P. Snow, president of the Huntington Chamber of Commerce, upon the subject, "The Relation of the Municipality to the Hospital."

Jas. R. Bloss, Secy.

# GRANT-HAMPSHIRE-HARDY-MINERAL SOCIETY

The Grant-Hampshire, Hardy-Mineral Medical Society held its regular meeting at Moorefield on August 3. Luncheon was served at the Turley Hotel at one o'clock, after which the meeting was called in the directors' room of the Hardy County Bank.

Dr. Weirieh of the State Department of Health, delivered a very interesting and entertaining address in the course of which he dealt with matters of vital eoncern to the public and to the profession.

Dr. C. S. Hoffman read a paper en-

titled, "Obstetric Aphorisms."

In bringing out many salient points of a broad subject Dr. Hoffman showed himself up to his usual good form and gave the society an instructive and entertaining paper. Discussion was opened by Dr. R. W. Love and was engaged in by Drs. Hawkins of Cumberland, Babb and other members of the society.

Visitors present were: Drs. Hawkins, Gracie, Fochman and Kein of Cumberland, and Bro. Chas. Gilkerson and Dr. R. E. L. Hackney of Moorefield.

Members present were: Drs. Wright, Love, Gochenour, Thomas, Babb, Martin, Hoffman, Pervical Lantz, Oliver Lantz, Brook, Young and Walcott.

W. II. WALCOTT, Secy.

# HARRISON COUNTY SOCIETY

Clarksburg, W. Va., Sept. 28, 1916. To the Editor W. Va. Med. Jour.

A regular meeting of the Harrison County Medical Society was held Thursday, September 28, at 8:30 p. m. Thirteen members were present and Dr. C. A.

Willis presided.

Dr. II. E. Sloan read a timely paper on Infantile Paralysis. The subject matter was taken from the authoritative papers of Flexner and others who have made eminent progress in this field. While it is unfortunate that no cure has been found for this disease, physicians should bear in mind that the mortality is not as high as statistics indicate since mild and abortive cases escape recognition and are not figured in these statis-Again, most of the cases escape permanent paralysis and a great number of those who are paralyzed continue to improve and this improvement can be hastened, even instituted, by orthopedie means. During an epidemic quarantine should be sincere and thorough.

Dr. J. E. Wilson had a number of X-ray plates of interesting chest conditions but was unable to be present.

Dr. A. T. Post read an instructive paper on Rat-Bite Fever. This was a new subject to most of the members. About one hundred cases have, so far, been reported in the literature. Following a rat-bite there oecurs an intense erythema around the injury in the course of about two weeks. Following this there is a relapsing fever. The paroxysms last up to four or more days. The intervals of normal temperature run from four to ten days. The disease may last a year. About 90% recover. The eause is probably a spiroehete which can be found in the blood during a paroxysm with the darkfield illuminator. No treatment has been found uniformly successful but good results are reported from salvarsan.

## LOGAN COUNTY SOCIETY

The Logan Medical Society held its first regular meeting since May, on September 21, 1916. Seven members were present and the entire time was devoted to the discussion of proper ethics with "list" patients in contract work in mine practice.

Dr. Lawson contended the privatepractice doctor was doing much to keep the profession aggravated and as a whole it was degrading the whole bunch and causing much disrespect to the profession at large. He said he had tried to observe proper ethics to other doctors in contract work as well as private and he was led to believe that a better understanding would result from telephone notiec of these calls on contract work when made by other than the regular doctor in charge. Dr. Thomas contended the patient and the circumstances of each case should determine what ethics should apply and he was convinced that a first call in any illness should be the same as any other private practice and no notice was necessary.

Dr. McDonald thought that ethics eould not be made to apply to cases that had a physician in attendance whose service was arbitrary and not a matter of choice of the patient and certainly not to those who called the outside physician first. He also said that a physician who contracted work and "farmed" it out to some hireling for purely commercial

gains, under Section 1, Chapter 1, and under Section 2, Article 6, had no business in a medical society and certainly had no ethics coming to him and should be treated in a neglible way so long as such work continued. That a "money mad" commercial doctor should have no professional standing any place or time.

The meeting was adjourned to meet the third Thursday in October for regu-

lar work and instruction.

J. E. McDonald, Secy.

# MERCER COUNTY SOCIETY

The Mercer County Society met at Princeton, W. Va., September 27, 1916.

A surgical and medical clinic was given at the Princeton General Hospital, beginning at 12:30 p. m., and lasting throughout the afternoon, as follows: Adenoids and Tonsilitis (one case), Dr. Wallingford; Anæsthetist, Dr. Peters. Inguinal Hernia, Drs. Wallingford and S. R. Holroyd, anæsthetist Dr. Peters. Cancer of Breast (excision), Drs. Todd, Vermillion and Peters; anæsthetist Dr. B. H. Bird. Laparotomy (symptoms of gall stone), Drs. Todd and Peters and J. R. Vermillion; anæsthetist Dr. B. W. Inguinal Hernia, Drs. Wallingford and Scott; anæsthetist Dr. Leggett. Excision of 44 Lipomas of Arms, Drs. Wallingford and Scott; anæsthetist, Dr. B. W. Bird; anæsthetist, Dr. Leggett. Adenoids and Tonsils (two cases), Drs. Wallingford and Scott; anæsthetist, Dr. Peters.

The hospital staff and nurses are to be highly congratulated on giving such an excellent clinic in this small hospital. This should certainly stimulate members of other hospitals throughout the state who have not been accustomed to giving these clinics, and encourage them to begin giving such clinics, which we feel are a great benefit to the hospitals in Mercer County, and instructive to the physicians for fifty miles around.

The Society convened in the X-ray room of the hospital at 6:30 p. m. On account of the absence of the President, Dr. R. S. Holroyd acted as President pro tem. The minutes for the previous meeting was read and approved. It was decided to postpone the regular program

until we went to the Banquet Hall, the dining room of the Virginia Hotel, a little later. Dr. A. E. Leggett was duly elected a member of the Mercer County Medical Society. Dr. William Hearn's application for membership was regularly received and ordered laid over for the usual length of time.

The committee to draw up resolutions in regard to the death of Dr. Wood's

child was continued.

The committee of Red Cross Medical Work was completed. Drs. E. E. Vermillion and H. G. Steele being ex-officio members of this committee, Dr. Holroyd appointed Drs. W. H. St. Clair, E. H. Thompson and A. E. Leggett the other members, making five members in all, as required by the National Committee on Red Cross Medical Service, American Red Cross, Washington, D. C.

The society adjourned at 7:15 to meet in the dining room at the Virginia Hotel

at 8 o'clock.

At eight o'clock the following persons gathered around the banquet table, with Dr. S. R. Holroyd as toastmaster: Drs. J. H. Byrd, F. T. Ridley, C. M. Scott, T. E. Vass, Uriah Vermillion, J. R. Vermillion, J. B. Kirk, C. T. St. Clair, J. L. McSparran, G. L. Todd, B. W. Bird, P. J. McElrath, T. H. Becker, B. S. Clements, W. W. Harloe, S. R. Holroyd, J. H. Craft, W. H. Wallingford, A. E. Loggett, C. C. Peters, P. H. Killey, J. H. McGuire and H. G. Steele. Visitors: Miss Edith McCullock, Miss M. Frances Harrold, Miss Lura Dale Given, Mrs. N. McCuleck Noel, Miss C. Louise Duncan, and Dr. Levi Vermillion.

The first on the program was Dr. F. T. Ridley of Bluefield, W. Va., who has been chief of the medical staff at the mobilization camp at Kanawha City, and he gave us a very interesting talk on sanitation, which in part was as follows: One of the most important duties of the medical staff was to properly take care of the refuse matter, and the greatest enemy they had to deal with was the fly. The water supply came from the Charleston Water Co. Ice was delivered to them once a day. Their food was good. meat excellent and both inspected every day. Their ice boxes were made by al lowing one box to be telescoped inside of the other with a 3-inch space between the two filled with earth, then the openings in each box covered over with a thick wood door and then with heavy canvas. The diseases in camp were very few and most of them were due to overeating, the first few weeks. They had a few cases of measles, trachoma and appendicitis. Crude oil and straw were used to burn the refuse matter. Very little lime is used about the camp.

The reading of the papers of Dr. B. W. Bird and P. J. McElrath were postponed

until our October meeting.

The ladies present were called upon and each responded by an appropriate

little speech.

The programs for the future meetings are as follows: October Clinic at Bluefield Sanitorium, Bluefield, W. Va. Dr. H. B. Stone, Roanoke, Va., Maxillary Sinusitis, with report of one hundred cases. Dr. B. W. Bird, Princeton, W. Va., Dr. P. J. McElrath, Bramwell, W. Va., The Chromasome in Inheritance.

November: Dr. H. R. Fairfax, McComas, W. Va., Dr. J. J. Goodwill, Coepers, W. Va., Dr. F. F. Holroyd, Athens, W. Va., and Dr. W. C. Slusher, Bluca

field, W. Va.

December: Dr. A. M. Willis, Richmond, Va., Surgery of the Biliary Tract. Dr. O. S. Hare, Bluefield, W. Va., Dr. R. O. Rogers, Crystal, W. Va., and Dr. G. L. Todd, Princeton, W. Va.

H. G. STEELE, Secy.

# State News

Dr. and Mrs. C. L. Holland of Fairmont, are at Cambridge, Mass. The doctor is taking a special course in children's diseases in the medical department of Harvard University. He will be absent two or three months. Mrs. Holland will visit friends in Boston and Cape Cod.

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Drs. J. E. Wilson and Chester R. Ogden of Clarksburg, will attend the Clinical Congress of Surgeons in Philadelphia.

Dr. and Mrs. C. F. Hicks of Welch, were recent visitors in Huntington. The doctor attending the Hospital Association in session the eleventh of October.

Dr. H. C. Solter and family of Marlinton, spent some time in Huntington recently.

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Dr. W. R. Irons of Ronceverte, was the guest of his son, Harry S. Irons, of Huntington, during the recent reunion of Confederate veterans.

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Two cases of Infantile Paralysis were discovered in Martinsburg during October. These are the first to be reported in that section.

Dr. E. E. Rose, formerly of Hinton, now of Huntington, was married to Miss Ellen Ford of Talbott, W. Va., in October. Congratulations are extended to Dr. Rose by his many friends.

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Dr. E. E. Noel of Huntington, spent several days hunting in Greenbrier.

In response to an appeal from the American Red Cross Society, the Cabell County Medical Society at Huntington has designated five physicians who in case of a great national emergency or calamity would volunteer their services under the Red Cross. The physicians appointed are, Drs. Harry W. Keatley, James R. Bloss, F. A. Fitch, Karl C. Prichard and W. E. Neal. A similar

Gov. Hatfield on October 11, announced the appointment of Dr. J. E. Cannaday of Charleston as a member of the Board of Examiners for Registration of Trained Nurses.

organization of physicians is being effected in other parts of the country.

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Dr. and Mrs. C. O. Reynolds of Huntington, spent their vacation in October touring through Ohio.

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Dr. and Mrs. Miller, of Staunton, Va., were recent guests in Huntington.

Dr. G. A. Rivercomb, manager of the Lewisburg Laboratories died recently. The doctor had been in poor health for several months before his death.

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Dr. F. A. Fitch of Huntington, will spend some time in eastern cities doing post-graduate work.

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At a recent meeting of the City Board of Affairs of Fairmont, City Physician C. M. Ramage was authorized to purchase and install apparatus for testing milk and the city water supply. All milk supply sources will be investigated and samples of each dairy's output inspected. The city physician will be privileged to close all dairies should the test show that the milk is infected with disease germs. He will test daily the city water supply and will order the chlorine regulator advanced or retarded as the water may require.

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The following physicians attended the Hospital Association in session in Huntington October 11: Drs. Chas. H. Scott, E. H. Thompson, W. H. St. Clair of Bluefield; G. C. Schoolfield, Geo. A. MacQueen, W. A. McMillan. Walter Point of Charleston; C. B. Lawson of Logan, and Dr. Staats of Spencer.

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Mr. Pliny Clark, superintendent of the Wheeling General Hospital, was in attendance at the Hospital Association in Huntington. He was accompanied by his wife.

Dr. R. J. Wilkinson of the C. & O. Hospital at Huntington, was a recent visitor in Richmond, Va.

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Recently the Tuberculosis League of Fairmont, was reorganized and in the future will be a branch of the American Red Cross. Mrs. C. O. Henry presided at the meeting and introduced Dr. J. H. Bromfield, who gave a splendid talk in which he recalled the many noble things accomplished by the League and predicted more and broader accomplishments for the new organization. Miss Elizabeth Voak, the Red Cross nurse affiliat-

ed with the work of the league gave a report in which she stated that several nurses could be used with good effect in caring for the sick in Fairmont.

During the life of the league Mrs. Henry, Mrs. T. I. Brett and Dr. H. R. Johnston have served as presidents.

The following officers were elected: President, Mrs. C. O. Henry; First Vice-President, Mrs. T. I. Brett; Second Vice-President, Mrs. Tusca Morris; Secretary, Miss Susan Arnett; Treasurer, Dr. H. R. Johnson.

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Dr. A. J. Pickering of Huntington, was recently made presideunt of the Fourth Ward Hughes Club.

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Cooperating with the State Department of Health, the United States Public Health Service gave a three-day clinic for the free treatment of trachoma at Williamson, Mingo County. Dr. John McMullen of the Federal service, was in charge.

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The following invitation was received by a number of the physicians throughout the state:

Dr. and Mrs. Johnson McKee Sites request the honor of your presence at the marriage of their daughter Addie Estelle

Mr. Louis Robert Voris

on Thursday evening, the twenty-sixth
of October

at half after six oʻclock The Methodist Episcopal Church South Martinsburg, West Virginia

Dr. P. H. Gray of Weston, has severed his connection with the Weston State Hospital and accepted a position with the Davis-Collieries Coal Company at Coalton, W. Va.

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Dr. J. I. Miller of Huntington, spent some time in New York recently attending lectures.

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Dr. J. C. Jett, lately of Bluefield, is now located at Winding Gulf, W. Va.

Dr. Aaron Arkin announces that he is no longer connected with the State Hygienic Laboratory. He will continue his work as Professor of Pathology and Bacteriology in the University as in the past.

# Medicine and Surgery DRS. ENSLOW AND RADER

# **MEDICINE**

THE TREATMENT OF ITCH. The following prescription, says Pinto (Brit. Med. Jour.) will be found effectual in itch: Sulphur, precip., 2 drachms; hydrarg. ammoniati, 4 grains; acid carbol., ½ grain; creosoti, ½ grain; olei anethi, ½ grain; adipis benzoatis vel paraffini mollis, 2 drachms, Misce; ft. ung. This should be applied at bedtime. The parts affected should be washed with soap and hot water, all the scabs being removed as much as possible and the pustules broken. The ointment should then be applied with a slight friction movement and be left on over night; in the morning a warm bath of soap and water to wash off the ointment. The clothes worn over night should be boiled; and the fingers and nails must be kept perfectly clean to prevent reinfection. A sulphur purge may be given if desirable; this is best administered in tamarind whey. The patient should avoid scratching himself with his fingers, but if the pruitus is intense, a blunt-edged spoon is best for the purpose; it should be dipped in carbolic lotion each time after use; the hands should also be washed in antiseptic lotion several times a day. As a rule, one application of the ointment should be sufficient, but if the body is extensively affected, one side only should be treated at one time, the process being repeated the next evening on the other side. The ointment may be diluted if necessary, especially in the case of children.—Am. Med.

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Atropin for Convulsions in Children. Rascher (Munch. Med. Woch.) relates that a child of three had been taken suddenly with severe convulsions and laryngospasm. The pulse was 140,

temperature 40 C., with pronounced cyanosis. He had no methylatropinum bromatum, which he would have preferred as less toxic, and had to use atropin sulphate, which he injected, dissolved in boiled water. The dose was 0.0001 gm. of the atropin. The laryngospasm subsided in half a minute and the clonic spasms a few minutes later. There were still a few slight spasms in the arms up to the end of the half hour, but then the child was sleeping quietly and had no further convulsions, while the temperature was permanently normal. No cause for the convulsions could be discovered unless possibly the too monotonous diet of boiled milk.—Am. Med.

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These rules for tubercular subjects, taken from Lawrason Brown's "Rules for Recovery from Pulmonary Tuberculosis," strike us as being especially valuable:

Never get out of breath.

Never get tired.

Never run.

Never lift heavy weights.

Rest one-half hour before and after meals.—Ex.

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In ptomaine poisoning with fever always exclude acute appendicitis.—Ex.

To determine the boundaries of the spleen by percussion, it is necessary that the patient should lie on the right side. Its arterior border is readily determined because of its relation to the stomach and intestines. Inferiorly, where the organ comes in contact with the kidney, it is difficult and often impossible to determine its boundary. Its superior border corresponds to the lines which mark the change from dulness to pulmonary resonance.—Ex.

Local Treatment of Burns. The treatment employed by Willan was as follows: The blisters were punctured and the contents drained under strict aseptic precautions, the surface being first sponged with phenol solution, 1 in 20. If it was a recent burn he applied the service pieric acid dressing as the first dressing. Early sepsis in burns has

an unmistakable odor, and the sense of smell can detect it early. If there was no smell the first dressing was left on for two days, when it was removed in order to puncture any further blisters which might have formed. An ointment was applied made of equal parts of boric ointment and petrolatum. plentifully spread on strips of white "surgeon's lint," and was changed twice daily. If the dressing had the septic smell the infected part was formented with boric fomentations every four hours. The fomentation was four ply, and the covering jaconet projected for one-half inch beyond the margins of the fotus in order to keep in the moisture. When the area cleared up—that is, when sloughs, etc., had separated and a clean surface was left-the above mentioned ointment was similarly applied once a day, according to the amount of pus which had been secreted from the raw surface.

If the burn was aseptic the loose skin of the blisters was not removed, but was left to act as a protection to the exposed deeper and painful layer of the skin. If the burn was septic all loose skin was cut away. The dressing next to the skin was covered by wool containing a small amount of mercury perchlorid. whole dressing was fixed by a bandage loosely applied. Face masks were not used except when a fomentation was required. With face burns the nose, cheeks and lips were frequently smeared with the ointment, which was gently massaged in with the convex surface of a teaspoon. Out of twenty-eight cases, fifteen were aseptic, and all these recovered.. The remaining thirteen cases were septic to a greater or lesser degree, and five of them succumbed, but one of these had other serious injuries. Four of the cases were virulently septic, and two fatal cases developed erysipelas.—Jour. A. M. A., 10-7-16.

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CULTURES TAKEN FROM CLINICAL THERMOMETERS. Total cultures taken by Ramsey and Schoburg were eighty-two. Of this number, thirty-three were sterile; forty-nine contained organisms of various kinds. Streptococci occurred in

thirteen cultures. One thermometer which gave a pure culture of streptococci had been used in the mouth of a patient with facial erysipelas a few hours before returning to the case. Five others, from thermometers used in scarlet fever patients contained streptococci in large numbers. Staphylococcus albus and citrus were present in thirteen cul-Pneumococcus occurred in one culture. The remainder had various organisms, large spore forming bacilli, hay bacilli, mould fungus, etc. The authors emphasize that careless washing will not suffice but that thorough washing with running water and then alcohol will render them clean. A thermometer case containing some solution such as alcohol or formaldehyd solution, in which the thermometer could be carried, would lessen greatly the possibilities of infection. as several thermometers were examined which were carried in this way and all were sterile.—Jour. A. M. A., 10-7-16.

# Surgery

Gasoline for Cleaning Wounds. M. H. Embree, R. A. M. C., communicates to the *British Medical Journal* for September 2, 1916, some of his experiences with gasoline (petrol) in the cleaning of wounds. It has been in use for twenty years, he says, in the hospitals of Toronto, Ont., to cleanse contused, lacerated wounds with dirt ground into them. As wounds received at the front are contused, lacerated wounds, and come in a very dirty condition, it seemed worth while to try gasoline in cleaning them; the method used in his field ambulance for the first cleaning of wounds is as follows:

The skin and then the surface of the wound, is cleaned by vigorous rubbing with a swab of absorbent cotton soaked in gasoline. Swabs of cotton are wound round an artery forceps or probe and soaked in gasoline, and with them the wound is cleaned from the surface inward as far as the forceps can be pushed. The forceps is rotated and pushed in all directions, a number of swabs being used, and the process is continued until a couple of swabs come out perfectly

clean. If there is much dried blood or gross dirt on the surface of the skin or wound, it is best removed with warm water and soap, and a brush if necessary before the gasoline is used. The gasoline does not cause any special smarting, and patients did not complain of it when questioned. If gasoline is left wet on the skin and jaconet or adhesive plaster strips close together are applied over the dressing, preventing evaporation, there will be blistering of the skin, but otherwise this does not occur.

Gasoline used in the manner described certainly seems to clean up the surface and particularly the depths of wounds better than any other method that has been tried. If we are not mistaken, workmen in industrial plants in the United States have long been thoroughly versed in the effective use of gasoline in first aid treatment of dirty cuts and lacerations.

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ABDOMINAL WOUNDS IN WAR. advisability of early operation, in the great majority of gunshot wounds of the abdomen, Wallace says, may now be said to be established on a firm basis. The question is now: What cases are best left alone? In a large series of cases there will be many that are past help. In 511 cases there were 145 in which any surgical operation was out of the question. Of the remaining 366 patients no operation was considered advisable in 56 instances. Of this latter number 15 cases were in all probability wounds of the liver. Some were cases of doubtful abdominal penetration, which arrived late, and presented no symptoms suggesting involvement of a hollow viscus. A few were cases of uncomplicated traumatic hematuria. Wounds of the liver furnish most of the cases of undoubted penetration which it is advisable to leave alone. The kidney furnishes a few as well, and about the propriety of leaving both these alone there is no difference of opinion. All are agreed, too, that wounds of the small gut area should be explored. There is still some doubt about the best course to pursue in cases of suspected stomach injury, and in wounds which apparently involve only the colon. A chart made of some hundreds of abdominal injuries

shows that two-thirds of the projectiles enter anterior to the lateral line of the body, when viewed from the front, and one-third behind this line. On the whole, the posterior wound is the more dangerous. An anteroposterior wound in the upper part of the abdomen is the least dangerous, and a side-to-side wound lower down the most dangerous, though there is little to choose between the latter and anteroposterior hypogastric or butterly and him wounds.

buttock and hip wounds.

A chart made of a large series of cases that were too bad for operation, and in which a single entry wound was represented by a dot, and an in-and-out wound by a line, shows a darkened fan-shaped arca, the apex of which is in the left costal margin. This chart seems to show that, of the cases that come under observation the most dangerous wound is one of the left lower hypochondrium or upper lumbar region, for many such cases are too bad for operation. A chart with all the entrance wounds plotted shows a tendency for the dots to collect toward the sides of the body. probably connected with the presence of the great vessels in the mid line. Of the cases that arrive at the casualty clearing stations, wounds of the solid viscera are very much less fatal than those of the alimentary tube. When a fatal result ensues, the cause of death is, for the most part, hemorrhage. There is some evidence to show that wounds of the spleen and kidney vessels and of the liver veins are fatal before the cases reach the operation table. Wounds of the small intestine show a mortality of 63.8 per cent.; the large intestine, 60 per cent.; the stomach, 43.75 per cent.; while the total hollow viscera mortality is 64.5 per cent. This latter mortality shows the increased danger of multiple injuries, and is largely accounted for by colon injuries complicating those of the stomach and small gut. The small gut injuries are serious from their multiplicity, the large gut injuries from their infectivity.—J. A. M. A., 10-7-16.

Surgical Operations. Richardson (Boston Med. and Surg. Jour., Dec. 23, 1915) believes that it is a pernicious custom to give easter oil to clean out the

intestinal tract prior to surgical operation. The castor oil is not only an intestinal irritant, but it tends to produce postoperative intestinal stasis, facilitating gas accumulation. Dr. Richardson believes it more rational to give a saline cathartic or Russian oil, followed by a cleansing enema.—Am. Med.

# Book Reviews

DISEASES 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 Dermatological Association; Assistant Surgeon United States Navy, retired; Dermatologist to the Christian Church Hospital. Published by the C. V. Mosby Co., St. Louis, Mo. Price \$6.50.

This large-sized book is written by one of the most conscientious, experienced, hard working dermatologists of this country. In consequence of his labors and experience he has the right to speak authoritatively on the subject of the diseases of the skin. The sympatomotology, diagnosis and treatment are presented as succinctly, clearly and simply as possible. This taken in union with the 693 illustrations and eight colored plates and the extensive bibliography makes a very desirable work of reference for the specialist as well as the general practitioner and an authoritative text book for the student's use. Practically every form of the dermatoses is given the consideration its importance deserves. The anatomy and physiology of the skin is first taken up, then follows general etiology and pathology, general symptomatology, general diagnosis and general treatment, making a very valuable and instructive feature of the work. The classification more nearly follows that of the older authors or that of Croker which is a slight modification of Hebra. The book should be in the library of every practitioner who has to deal with the perplexing questions arising in dealing with skin affections.

We have received Vol. 3, twenty-sixth series of International Clinics, 1916. J. B. Lippincott Co., Philadelphia.

A quarterly of illustrated clinical lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopædics, Pathology, Dermatology, Ophthalmology, Otology, 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, Minn.; 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, Ill.; Jno. G. Clark, M. D., Philadelphia, Pa.; A. McPherson, M. D., Toronto, Can.; Jas. J. Walsh, M. D., N. Y.; J. W. Ballantyne, M. D., Edinburgh; John Harold, M. D., London; and Richard Kretz, M. D., Vienna, with correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels and Geneva.

This volume is up to the usual standard of the work giving the latest trend of professional opinion on the various subjects considered.

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The September Medical Clinics of Chicago (Saunders) is, if possible, above the usual high standard of that periodical. It is difficult to select the best of the articles, but those dealing with Acute Miliary Tuberculosis, Acne, Cyanosis, Pancreatic Cancer, and Chronic Diarrheas are especially good. This magazine is in the vanguard of medicine and is invaluable to every physician—in fact, a regular "post" course at home.—W. E. V.

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PRESENT STATUS TREATMENT OF BLADDER TUMORS.

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HISTORICAL

Until the last century tumors of the bladder were completely ignored by surgeons: until the end of the fifteenth eentury no mention of their existence was made by any author. Finally near the end of the sixteenth eentury there appeared the first mention of eertain exereseences of the bladder and many bizarre theories were put forward as an explanation of them. Lueuna in 1551 published a work in which he devoted a eertain number of pages to a description of bladder tumors, and laid down eertain general rules for their diagnosis and treatment. The diagnosis was prineipally to be made from the symptoms of painful and difficult urination and undoubtedly many of these so-called tumors of the bladder were confounded with eases of prostatie hypertrophy. For two hundred years following Lucuna, very little progress was made in the knowledge of bladder tumors, although

many reports were made of tumors found in autopsy subjects.

Until the eighteenth century very little was added either to the method of diagnosis or of treatment. Lavages, sounding, and in cases of complete retention, perforation of the new growth with an appropriate sound was advised. Many ingenious instruments were devised to give relief to the unfortunate patients in whom the symptoms were extreme. In the beginning of the nineteenth eentury tumors of the bladder began to be studied from a more scientifie More careful anatomical standpoint. and pathological studies were made, and while the diagnosis of these vesical ncoplasms still remained as uncertain and obscure as it had for previous centuries, methods of surgical attack developed rather rapidly. Civiale, Leroy D'Etiolles, and numerous others began to practice operative procedures on these through the suprapubic region. On exposing the tumors, they were handled in various ways; some used instruments resembling elamps, the tumors being twisted off; others used eauteries of different types. It is probable that the majority of these earlier tumors operated upon were very extensive, because the eystoscope had not yet been developed and the diagnosis was only made in the advanced eases. With the invention of the cystoscope came a rapid development in the early diagnosis of bladder tumors, more careful and complete histological and pathological studies and gradually the growth of more radical and scientific methods of treatment. It is rather interesting in looking over the records of the Johns Hopkins Hospital from 1885 to 1896 to find that during that period no case of bladder tumor was admitted to the words in which a diagnosis was sufficiently early to warrant anything more than a suprapuble drainage.

It is probable that the early records of other large hospitals will show the same sad series of inoperable tumors of the bladder as that presented at the Hopkins. With the development of the cystoscope and the possibility of early diagnosis, the awakening of the profession to the importance of investigating apparently innocent hematuria, a new era arose. Surgeons adapted their technique to the eradication and cure of this disease, and while triumphs of surgery in this particular field were not comparable to the achievements in other fields as far as ultimate results were concerned. at the same time cures were obtained. Even where recurrences later occurred. great relief was given to the sufferers.

Various methods were employed by the surgeon in the pedunculated tumors, the clamp and cautery being the measure most frequently employed. Where the tumors were broad and infiltrating, usually deep cauterization was resorted to. It was soon recognized, however, that even where the tumors were apparently of the benign type and pedunculated, recurrences followed so frequently many surgeons had come to the conclusion that this type of tumor, unless producing symptoms demanding relief, should be left alone and no attempt made to excise it. Gradually the knowledge was acquired that the bladder tumors were of peculiar nature, that implantation as the result of trauma to the bladder mucosa could readily occur, many of the so-called pedunculated benign tumors were malignant in nature, and many investigators were of the opinion that all papillomata, even those apparently histologically benign, were really cancerous in nature. With the diffusion of this knowledge, more radical methods were adopted, and within comparatively recent years resection of the portion of the bladder wall from which the tumor arose through all its coats became the operation of choice. This method of attack was advocated boldly for all tumors regardless of whether they were papilloma or infiltrating carcinoma. As radical and as extensive as these measures were, the results still were far from gratifying, and the recurrences seemed almost as frequent as from the simpler methods of earlier years.

While more and more radical surgical procedures were developing and being advocated, the development of the endovesical methods of attacking these tumors was growing. We find Nitze reporting a large series of cases in which he had succeeded in completely eradicating the tumors by his ingenious operating cystoscope, and securing results which were incomparably superior to any results which could be reported by the most radical surgical procedures. endovesical treatment, however, of bladder tumors did not seem to receive any particular encouragement until Beer in 1910 reported a method of treating papillomata by means of the high frequency current. The ease of application of this method and the apparently good primary results encouraged urologists in all parts of the world to try this form of treatment. The last five years have now accumulated sufficient evidence to show that for at least certain types of tumor, namely the papillomata, it is the ideal form of treatment, and that results are obtained by this method which cannot be duplicated by even the most radical surgery. More recently the addition of radium to our therapeutic armamentarium, promises to aid to a not inconsiderable degree, the modern methods of attacking the bladder tumors.

## TREATMENT

The selection of the proper treatment for tumors of the bladder depends upon the determination of many factors, most important of which perhaps is the ascertaining of the nature of the tumor pres-

ent. Other factors, such as the position of the tumor, extent and number of tumore, presence of metastases and complications, will all play a role in determining the best method of attack in any given case. From a therapeutic standpoint, we have divided our tumors into papilloma—benign and malignant—papillary carcinoma and in a separate class we place the adeno-carcinoma, squamous and scirrhus carcinoma, because as will be later shown the handling of papillary carcinoma requires a technique very much more developed than is necessary for the handling of the other carcinoma. From a therapeutic standpoint we have placed benign and malignant papillomata in the same group. Although from a histo-pathological viewpoint malignant papillomata are just as much cancer as the papillary carcinomata, yet they must be differentiated because of their different response to therapeutic measures employed. In malignant papilloma there is present principally changes in the shape, staining properties and nuclei of the epithelial cells without any marked evidence of cancerous infiltration. Experience, however, has shown that these changes are indicative of cancer and that patients die of cancerous metastases when these changes in the papillæ are the only evidence of malignancy which exists. In a series of twenty-five papillomata examined histologically sixty eight per cent. (68%) showed the changes characteristic of malignant papillo-When, however, the malignant papillomata has advanced to the point where infiltration of the bladder wall occurs we apply to it the term papillary carcinoma. This differentiation is arbitrary and is simply one utilized as a working basis.

For a number of years we have systematically excised pieces of bladder tumors and studied them carefully histologically in an endeavor to see if there was not some histological picture which would clearly direct us in the selection of the most suitable form of treatment. It has been our experience that in the vast majority of cases we are not able from the histological picture alone to decide with any degree of accuracy whether the tumor is one which will respond

to fulguration or whether more radical procedures should be adopted. Repeatedly we have excised pieces of papillary carcinoma and found the histological picture no different from that seen in the average malignant papilloma, while the clinical examination indicated most extensive infiltration, which was subsequently proven by the course of the disease. As a differentiation between malignant papilloma and papillary careinoma we have found cystoscopy, combined with other clinical methods, a greater aid than the histological picture alone. Finding on cystoscopic examination the presence of necrotic papillæ on an otherwise benign looking papilloma, the presence of edema around the margin of the tumor or nodules in the mucous membrane in the neighborhood of the tumor, the presence of an intractable cystitis, and when tumors are situated on the posterior bladder wall, feeling on rectal examination the slightest induration in the bladder, are points in the differential diagnosis which have served us best. Of course, it must be admitted that none of these conditions may be present and the tumor may still have invaded the bladder wall. When in doubt concerning the nature of the tumor our practice has been to tentatively adopt fulguration as the therapeutic test. After a few applications of the fulguration current it can usually be determined whether the tumor is one suitable for this form of treatment. When the surface of the tumor is vigorously fulgurated and the slough does not separate, or when it becomes covered with calcerous deposit, under these circumstances this is evidence of advanced malignant changes in the deeper portions of the tumor.

### FULGURATION

Fulguration has been employed in fifty-three cases, in twelve cases the tumors were inoperable carcinomata and fulguration was employed as a palliative measure or to test out the efficiency of this treatment in that type of case. In none of these cases was any marked impression made upon the tumor, while the treatment was rather painful in the scirrhus type of tumor. In forty-one cases

with papillomata, in thirty-four per cent. (34%) of whom the tumors were multiple, three ceased treatment before the tumors had disappeared. In two cases, although the tumors were small and apparently papillomata, the response fulguration soon indicated that they were really papillary carcinoma. In one of these a successful resection was subsequently performed; while the other case, a very elderly man, developed a senile dysentery and auricular fibrillation, of which he shortly afterwards died. In the remaining thirty-six cases the tumore in every instance entirely disap-There seems to be quite peared. marked difference in the promptness of response to fulguration between the benign and the malignant papillomata. The typical benign papillomata disappeared with astonishing rapidity, large tumors disappearing with comparatively few treatments. On the other hand malignant papillomata disappeared slowly, and frequently required many times the amount of treatment which would be necessary for the benign papillomata of the same size. In one instance it required almost nine months to completely remove a malignant papilloma which covered the whole left lateral wall and which was composed probably of not one tumor but of multiple papillomata fused on the surface, giving the appearance of one broad extensive tumor. In this case we were led to continue this form of treatment because of the definite and progressive decrease in the size of the tumor and the rapid separation of the burned areas after each treatment. Of twenty-five papillomata examined histologically, seventeen showed the changes characteristic of malignant papilloma but all of them were removed by fulguration, the benign and malignant differing from each other only in that the response was slower in the malignant types. The incontestable proof that at least some of these tumors were malignant or cancerous is that two of them subsequently died of cancerous metastases, although the bladder free from tumor.

## RECURRENCES

Of the thirty-eight patients in whom fulguration was successful in removing

the original tumor or tumors, recurrences are known to have occurred in seven cases. In all of these, with one exception the recurrence was present in less than a year. In one patient recurrences are observed every few months, although it has been over three years since the original tumor was destroyed. This tendency to recurrence seems as active today as it did during the first year. The recurring tumors with one exception have all responded to fulguration like original tumor. The one exception is of extreme interest. (Roeder.) This patient had a papillary tumor several centimeters in diameter just back of the ureteral orifice which disappeared fairly rapidly under a combination of radium and fulguration. For several months after the disappearance of the tumor the mucous membrane of the tumor-bearing area seemed entirely heal-Shortly afterwards, however, cystoscopic examination showed a peculiar reddening and some slight bulging of the mucous membrane without any ulceration or definite tumor formation. This was at first thought to be a localized inflammatory area. The process, however, seemed to spread and a piece removed with the cystoscopic ronguer showed the patient to have an infiltraing carcinoma of the bladder wall with the mucous membrane on the surface practically intact. This is undoubtedly a case in which cancer cells from a malignant papilloma have metastasized into the deep bladder wall and there continued to grow after the tumor mass has been entirely removed. A malignant tumor of this type has been studied histologically by Burger. Patients with multiple tumors seem more apt to have recurrences than those in whom only one tumor is present. While it is too early to draw definite conclusions regarding the percentage of cases that will remain permanently cured, the results to date would seem to warrant us in believing that a not inconsiderable cent. will be free, because the tendency for recurrence grows progressively less after the first year.

## EXCISION

Until a few years ago excision of bladder tumors with the knife, clamp and cautery or the actual cautery was the method most frequently adopted for the removal of bladder tumors. In our series of tumors there have been thirtyfour cases in which excision was carried out by one of the above methods. these thirty-four cases only four were known to be well and free from recurrences during a period of four years or It is rather difficult to explain why such dismal failure should have resulted from this form of treatment. In some of the earlier cases, before the true nature of the bladder tumors was clearly recognized, sufficient care to avoid implantation was probably not exercised. In later years, however, a more careful technique was employed in the handling of these cases and measures adopted to prevent implantation on the remainder of the bladder wall. It seems difficult to understand why a pedunculated papilloma should not be radically and thoroughly removed either by excision or by the clamp and cautery or the actual cautery, and the failure to accomplish cures in many of these cases must be attributed to the difficulties in securing a technique sufficiently perfect to prevent trauma to the bladder wall and implantation of tumor cells. The smaller percentage of recurrences in the cases treated with fulguration as compared with the cases in which excision has been employed would seem to point strongly toward the fact that the difficulties of obtaining a perfect technique for the removal of these tumors is an important cause of past failures.

Excision is a surgical procedure which today is seldom indicated and should be used only in cases which ordinarily would be suited for fulguration but on account of some complication fulguration becomes impossible or very difficult. The systematic opening of the bladder with subsequent prolonged fulguration of tumors is a procedure which cannot be recommended, and for the average case offers no advantage and many disadvantages over the intravesical procedure.

### RESECTION

The failure of excision to cure more than a very small per cent. of bladder tumors, whether benign or malignant, led surgeons to adopt more radical measures so that during recent years rescetion for all tumors, namely the complete removal of the aumor-bearing area together with all the coats of the bladder wall, has been the procedure advocated.

Experience has shown that when the growth has infiltrated the bladder wall resection with as wide a margin of healthy mucous membrane as seems necessary, is the only method which offers much hope of success. Resection is indicated when the tumor is of such a size that it can be completely removed even though it necessitates the transplantation of one or other ureter. It is quite generally conceded that resection should not be undertaken when the tumor has infiltrated close to the vesical orifive and particularly when it has invaded prostate. It is also questionable whether resection should be performed when the tumor is so extensive that transplantation of both ureters will be necessary. When the tumors are multiple resection again is contraindicated unless the tumors occupy an area which will allow their removal in one piece. Tumors occupying the anterior bladder wall are the ones most favorable for resection. The transperitoneal method except in occasional cases is not to be recommended. as a sufficiently perfect exposure can be secured without exposing the patient to this unnecessary risk.

### TECHNIQUE

The position and size of the tumor should be determined as accurately as possible before operation by means of cystoscopy. The bladder should be emptied and filled with air so that when the bladder is subsequently opened the infected fluid may not soil the incised tissues. Immediately on opening the bladder which should be done in such a way as to avoid trauma to the tumor, the tumor should be thoroughly cauterized in situ before any further manipulations are carried out. In order to avoid spong-

ing a glass tube connected with a suction pump should be placed in the base of the bladder but not allowed to come in contact with the tumor. If sponging becomes necessary, sponges wet with alcohol should be used and the sponges which comes in contact with the tumor-bearing area should not be used on other portions of the bladder wall. The main emphasis should be laid on the thorough destruction of the tumor by the cautery before resection is attempted. This having been done, the bladder wall can be incised with the cautery or knife with less danger of implanting tumor cells. Resection has been the operation carried out in twenty-four of our cases and nine of these eases were well two years or longer after the operation. Of these nine cases five of the tumors belong to the malignant papilloma type and four were small circumscribed papillary carcinoma in which it was possible to remove a considerable margin of normal bladder wall. In none of the carcinoma extensively invading the bladder wall has a cure been obtained.

## RADIUM

During the past eighteen months we have treated about fifteen tumors with radium alone or with radium in combination with fulguration. Our experience has not been sufficient to draw any definite conclusions regarding the ultimate value of this method. It has been employed most frequently on malignant papillomata in combination with fulguration and the effect of the radium in these cases has been most striking. three cases in which fulguration been employed over long periods of time and which had resisted very stubbornly all efforts to entirely destroy them, the application of radium to the tumors seemed entirely to change their nature. In all three cases after receiving 500 to 600 mg. hours of radium applied directly against the tumor, the tumors disappeared with astonishing rapidity on resuming fulguration. When possible the radium is applied directly against the tumor by means of the Young Radium Cystoscope, using a tube with an opening on one side so that the beta rays can be applied directly to the tumor while the rest of the bladder wall is screened. The combination of radium and fulguration in this type of case seems to promise much. So far we have not succeeded in definitely eradicating the papillary or other infiltrating types of carcinoma.

### CYSTECTOMY

Cystectomy has been employed in only a few isolated instances in our series. The operation, while technically not difficult, leaves the patient in such distressing and uncomfortable condition that one hesitates to adopt this most radical procedure. Furthermore, the percentage of cures, following cystectomy has not been sufficiently large to make one very enthusiastic. Usually in cases which are so far advanced that this method of attack forms the only hope of removing the local condition, metastases are generally present. Metastases occur even when the tumor is small and apparently well localized in the bladder, and Claido reports four observations in which iliac and lumbar glands were extensively invaded, although the tumor had not invaded the wall of the bladder. Such has also been our own observation. there are no convincing statistics regarding the frequency of glandular metastasis, when the tumor is well localized in the bladder, it is generally admitted that when the tumor is extensive and infiltrating deeply the bladder wall that metastases are practically always present. That the tumor may in rare instances be very extensive and even deeply infiltrating without any metastasis has come under our personal observation. Cystectomy in the past has not seemed a procedure which we felt justified in carrying out.

### PALLIATIVE

A distressingly large percentage of bladder tumor cases present themselves in the urological clinic for the first time with the disease so far advanced that nothing more than palliative measures can be employed. In our series of 180 cases of bladder tumors, in sixty-uine the tumors were so extensive and so hope-

lessly inoperable that nothing more than palliative measures were adopted.

## CONCLUSIONS

The experience in our clinic in recent years indicates clearly that benign and malignant papillomata should be treated by fulguration and excision or resection should not be practiced in this type of case except where the endovesical treatment is impossible or very difficult. Radium has proven a great aid in the treatment, particularly of the malignant papillomata, and our best results have been obtained when the radium was placed directly against the tumor. When the tumor is a papillary carcinoma resection should be practiced and a technique employed which will reduce to a minimum the dangers of implantation or subsequent recurrence. Radium as yet has not given us results in this type of tumor sufficiently encouraging to warrant our employment of it in preference to resection in cases which are considered operable. Following resection cystoscopy should be performed at an early date and at frequent intervals, especially for the first year and if recurrences are noted than can occasionally be successfully treated by a combination of fulguration and radium. Unfortunately a large percentage of cases are first seen with the disease so extensive that nothing more than palliative measures can be adopted.

# ACUTE ABDOMINAL PAIN; ITS DIAGNOSIS AND TREATMENT

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There are so many causes for abdominal pain that it would require a long paper to even mention them. Therefore it is my purpose in this paper to take up only the certain causes of acute abdeminal pain that I consider emergency work for the doctor.

There are numerous causes of pain oc-

curring in the abdominal region that are referred pain, that is, the pathological lesion is extra-abdominal. These, I shall not discuss.

Abdominal pain may be and usually is the chief symptom about which you are consulted in the following diseases. Constipation, Diarrhea, Lead-poisoning, Gastric adhesions, Cancer of Liver, Gallbladder, and ducts, Stomach and Intestinal tract, Liver Abscess, Pancreatitis, Appendicitis, Intestinal Obstruction in its various forms, Gastric and Duodenal Ulcers, various splenic diseases, Salpingitis, Dysmenorrhea, Ovarian Cysts with twisted pedicle, et cetera. To discuss all of these would take up too much of your time, so I have selected the following to which I would call your special attention:

First: Perforated Gastric or Duodenal Ulcer.

Second: Acute Perforative or Gangrenous Appendicitis.

Third: Intestinal Obstruction.

Fourth: Ruptured Ectopic Gestation. Fifth: Ovarian Cyst with Twisted Pedicle.

Sixth: Acute Salpingitis.

These compise the real surgical sextette that require immediate diagnosis and the institution of proper treatment so that we may prevent general peritonitis and its grave consequences.

Perforated gastric or duodenal ulcer. When seen early, the diagnosis of a perforation presents little difficulty to the trained abdominal surgeon. The history of previous gastric disturbance, sour stomach, etc., the violent onset sharp cutting, stabbing pain, more or less collapse the board-like rigidity and tenderness of the abdominal muscles, particularly of the epigastric region, the short breathing, the possible vomiting of blood are almost absolutely pathognomonic, if combined with an increasing Leucocytosis from hour to hour, rapidly increasing pulse rate and temperature increase corresponding to the extent of the peritoneal involvement.

The diagnostic value of the obliteration of liver dullness is in my opinion of no value. With this combination of symptoms, there is certainly only one indication for treatment; namely, laparotomy. Incision through right rectus down to and then carefully through the peritoneum, then the perforation carefully searched for, when found either in stomach or duodenum, closed by purse string or over and over, catgut suture, the peritoneal cavity should be gently mopped clean with gauze wet with warm normal salt solution, well placed Iodo gauze drain, eigarette form, and abdomen closed except for exit of drainage. In practically every case, this is all that should be done. I do not believe in subjecting these cases to gastro-enterostomy as I believe we will save more of them by getting in, carefully closing the perforation and getting out, in the shortest possible time. The patient should be put to bed in a medium Fowler position or have the head of the bed raised about eighteen inches, nothing by mouth for eighteen hours, then water in small quantities. Murphy drip by rectum as soon as in bed.

Appendicitis: Chronic appendicitis may and often does produce symptoms as many and varied as those produced by the Ascaris Lumbricoides in children, so in this paper I will only discuss acute perforative, or gangrenous appendicitis, the types absolutely demanding immediate operative interference.

There may or may not be a history of previous attacks of pain. The acute attack is ushered in by pain of a sudden severe and often colicky nature accompanied by, or ensuing in a very short time, nausea and vomiting. These two symptoms accompanied by localized tenderness and muscular rigidity in the right Iliac region, practically einch the diagnosis.

Pulse: In the majority of cases the pulse rate increases with the onset of pain and vomiting, usually at first ninety to one hundred per minute. A gradual increase in the pulse rate from hour to hour is a bad sign, especially if it goes to 120 or more and is jerky in character, it indicates a spreading peritonitis. Occasionally a case of increasing peritoneal involvement may have a slow pulse rate for a few hours, but the pain, continued muscular rigidity and vomiting give us the key to the diagnosis.

Temperature: A gradual rise of tem-

perature usually occurs in two to three hours after the acute attack, but cannot be relied upon by itself. It may go to 103° or 104° and be accompanied by a chill. A continued fever and localized muscular rigidity usually indicate a walled-off abscess. If temperature drops to normal or nearly so and pulse rate remains high, look out for a gangrenous appendix. I have seen a gangrenous appendix with normal temperature.

Leucocytosis: Usually in a case of perforated appendicitis, the leucocytes rapidly increase and may reach 25000 or even 35000, especially if there is a spreading peritonitis and no attempt by the omentum to wall off the infection. However, we cannot always depend on the white cell count to give us an exact idea of the intra-abdominal condition as often when gangrene or acute rapidly spreading peritonitis begins the system is so overwhelmed with toxins that we have no resistance on the part of the body and may find a low leucocyte count.

Treatment: There is only one indication in the treatment of acute perforated or gangrenous appendicitis. That is immediate operation. In these cases where we are sure to use drainage. I prefer the right rectus incision. As we can easily enlarge it as the case demands. Removal of appendix (inversion of stump with chromic catgut if easily done), where you do not have to tear up fresh adhesions so as to allow the pus to escape into the non-infected peritoneal cavity. If a well encapsulated abscess is found and the appendix not easily located and patient not in good condition, I prefer to leave the appendix hunt for some future time. McGuire, I believe, has made the statement that about one in six of the cases come back with symptoms referable to the appendix. I believe in free drainage. Iodoform gauze surrounded by rubber tissue, and if a tube be used, it should be of soft rubber, extend only down to the peritoneal cavity, surrounded by gauze so as not to come in contact with the intestines, and should be removed early.

The head of the bed should be elevated about fourteen to eighteen inches and the patient turned on right side for thir-

ty-six to forty-eight hours. Salt solution may be given by hypodermoclysis or proctoclysis according to the degree of shock and toxemia.

Intestinal Obstruction: There are three symptoms common to all types of intestinal obstruction. Pain, of varying intensity; vomiting, first of stomach contents, then bile and later fecal matter; inability to secure the passage of flatus or feces.

Pain varies greatly. It is most marked in cases due to volvulus or constricting bands. The pain is usually sharp and colicky at first. Later becoming more or less continuous until paralysis or gangrene of the gut occurs when it may cease until it is again caused by distention.

Vomiting may occur even before much pain is experienced and become so frequently repeated, that nothing will stay in the stomach. Usually fecal vomiting does not occur before twenty-four hours, and a diagnosis should be made if pos-

sible before its appearance.

Constipation remains absolute the lower bowel is emptied. The various enemas used will bring no result and often increase the pain. So absolute constipation, colicky pains, continuous retching and vomiting, more or less distention, gurgling sounds and possible peristaltic waves above the obstruction, some tenderness and slight rigidity, especially over seat of lesion with normal or slight rise in temperature, increasing pulse rate and beginning symptoms of collapse should easily make the diagnosis of intestinal obstruction. Of course, if due to hernia through any of the external abdominal openings, we have the evidence in the presence of the tumor and in intussusception we have the rectal tenesmus, presence of mucus and blood and tumor usually can be felt in abdomen or by rectum and it nearly always in young children.

Treatment: The treatment of intestinal obstruction no matter in what form or from what cause, is early laparotomy. A median or right rectus incision below the umbilicus, which can be easily enlarged either up or down according to the pathology found, is the best, unless a hernia or tumor indicates some oth-

er point of entrance more advantageous. The intestines should be handled gently always, and when the lesion is found, if not due to constricting bands holding the gut down, the intestines should be gently delivered out of the abdomen and kept covered and warm during the operative procedure. If due to constricting bands they should be severed and cut off closely at both ends so that nothing is left to

give future trouble.

In conditions of gangrene or sufficient bowel destruction to demand resection, the surrounding cavity should be thoroughly walled off with moist gauze to prevent soiling of the peritoneal cavity. In resection, I believe we should be careful to go far enough to get healthy gut with good blood supply. I prefer to do the end to end anastomosis with suture and use no mechanical means, and if carefully done, I believe we will get better results. The mesentery should be carefully closed so as not to interfere with the blood supply at the point of After carefully and gently resection. cleansing the intestines they are replaced in the cavity with the resection line fairly close to the abdominal incision so that if we are not sure about leakage or probable soiling of peritoncum, we can insert a small drain down to but not quite touching the line of sutures, which can be removed at the end of forty-eight hours or as soon as we believe advisable in each case. Certain cases of intestinal obstruction come to us so late that on account of the great distention of the intestine and poor condition of the patient we will have to be satisfied with a simple enterostomy above the point of obstruction, which often saves a life when further manipulation would put our patient over the border line, and a few days later, we may be able to repair the lesion.

Post-operative Treatment: Stomach should be washed out while patient is still on the table, and repeated as often as indicated by the vomiting. Then nothing by mouth in resection cases for eight or ten hours, and longer if vomiting. Then begin with hot water, small amounts, gradually increasing. No solid food for four to five days. Often enemas after the third or fourth day will suf-

fice for bowel movements, and no cathartic will need be given. However, I rarely give a purgative before the fourth day, and not then if patient is doing well and bowels have moved by enema. Where no resection is required, you may start purgative early, even through stomach tube while on operating table, to get rid of the toxic material in the alimentary canal. Thirst can be allayed to a great extent by the introduction of water into the system by protoclysis, using saline solution, normal or one-half strength or ordinary tap water, to which maybe added glucose or sodium Bicarbonate if you desire. Hypodermoclysis is often of advantage during the first twenty-

four hours post-operative.

Ruptured Ectopic Gestation: A condition which is rather frequently met with, which demands immediate diagnosis and treatment. With a carefully taken history, we should seldom fail to make the correct diagnosis. A history of more or less irregular menstruation, usually they will tell you that they have missed one or two periods or that the flow was very scanty at the last time, but they felt a weight or uneasy feeling in the pelvic region, possibly at times some sharp cutting pains of short duration in the ovarian region and may also have had some morning nausea. rupture makes itself known suddenly with sudden violent cutting or tearing pain in the lower abdomen followed by syncope and all the signs of internal hemorrhage. Cold clammy perspiration, restless, sighing respiration, dilated pupils, pulse rapid, weak and often imperceptible at the wrist. Occasionally temperature may be elevated, but as a rule, subnormal, may complain of being unable to see well, occasionally slight nausea and vomiting.

There is usually some rigidity of lower recti, more pronounced on the affected side, bi-manual examination will usually show resistance to both pelvic and abdominal hands and often a distinct mass can be felt. The bi-manual examination should be very gentle and not prolonged. As this procedure alone may cause further bleeding and our diagnosis should be made from the preceding symptoms and an immediate laparotomy

advised. Should the patient have to be transported any distance, to allow of a proper aseptic surgical procedure, they should have a small dose of morphine hypodermically; an ice cap over abdomen and be carried with extreme gentleness. Give no heart stimulants, such as strychnine, etc. A median incision. opening the abdomen, we should immediately grasp the fundus uteri and bring it up so that we may more easily locate the bleeding point and clamp same before we do anything else. We can then resect or dispose of the ruptured tube as we think best in each individual case. The blood clots may be removed sponges, but no irrigation. If the operation is done early and before the temperature goes up, and we can feel surc of our operative technique, no drainage is needed. If in doubt, a small properly placed drain in a cul de sac opening will give best results. Hypodermoelysis and even intravenous salt solution (not over 500 to 600 C. C.) is given if indicated. Proctoclysis when in bed, but strychnine and digitalin are not indicated.

Ovarian Cyst with Twisted Pedicle: Another emergency condition that we occasionally must face. It usually occurs suddenly with sharp severe colicky pain referred to the pelvic region accompanied by vomiting and more or less rigidity of the lower abdominal muscles, usually more marked on the side on which the tumor lies. If torsion is complete, the tumor becomes gangrenous and is rapidly followed by a spreading peritonitis, and its accompanying symptoms. The temperature is elevated, pulse rate increased, abdominal distention becomes marked. A bi-manual examination finding the tumor completes the diagnosis. Operation should be performed at the earliest possible moment, before gangrene, adhesions and peritonitis develop. In cases where drainage is indicated, the use of the cul de sac vaginal route is

preferred.

Acute Salpingitis: Acute inflammatory disease of the Fallopian tubes, usually of gonorrheal or the septic type following non-aseptic intra-uterine instrumentation in some form. Usually we get a history of an acute acrid leucorrheal discharge mixed with blood or an

exaccerbation of a chronic leucorrhea, with frequent and painful micturition. Temperature often high, accompanied with chills, pulse accelerated according to the extent of the inflammation, pain often severe, referred to the pelvic region, tenderness and muscular rigidity of the lower abdominal muscles more marked on one side, should there only be a unilateral tubal involvement. A pelvic examination shows an enlarged tender and painful mass either on one or both sides of uterus and occasionally posterior to uterus in case of prolapsed tube. I purposely included this acute painful condition of the abdomen because I feel that the immediate treatment differs from the preceding diseases, because in the acute tubal infection ordinarily seen, early operative interference is contra-indicated. The treatment should be rest, anodynes for pain, ice water or hot water bag over abdomen, hot douches and after third day purgation, should abscess formation take place shown by chills, continued fever, constant high white cell count and the physical examination show an increase in the pelvic mass, then we are justified in operative interference and when possible by the vaginal route. Sometimes we may not be able to reach the abscess pocket in this manner and be forced to do a laparotomy in which case the pclvic adhesions should be gently handled and the intestines well walled off with gauze before attempting to enucleate the pus tube. Then we can drain as indicated either through the abdominal incision or the vagina or both.

#### CONCLUSIONS

First: In any acute abdominal condition where there is suspected perforation or serious inflammation withhold all food and liquids, even water, until you are satisfied about your diagnosis and have repaired the pathological condition.

Second: Give no morphine until you have at least arrived at a tentative diagnosis, as it often masks your two most important diagnostic points, namely, pain location and muscular rigidity.

Third: Do not give any purgative or anything by mouth that will stimulate

peristalsis, in any acute abdominal condition, especially when perforation of a viscus is suspected.

Fourth: Do not give drug stimulation promiscously either before or after operation, such as strychnine, digitatin or nitroglycerin, it does no good and may do harm.

Fifth: In operating on serious cases, do only what is specifically indicated by the acute pathological condition present and save your patient unnecessary prolonged anesthesization.

THE USE AND ABUSE OF EXER-CISE IN THE TREATMENT OF PULMONARY TUBERCULOSIS

E. E. Clovis, M. D., Terra Alta, W. Va.

Read at Annual Meeting, Wheeling, W. Va., May, 1916.

There is probably no more useful factor in the treatment of tuberculosis than exercise at some time in the disease. From the carliest times exercise has been used in its treatment, and not until the time of Brehmer and Dettweiler in the middle of the Nineteenth Century was rest considered beneficial in the treatment of tuberculosis. Dettweiler obtained good results from a fattening and rest cure, but with this, when patients were dismissed they were flabby and short of breath and for financial reasons could not continue leading the same sedentary life that they had led during their treatment and many relapses were the result. It is an old and wise saying that "Only the rich can afford to have tuberculo-However, today we are trying to cure the working man as well as the millionaire, and we find it necessary that we harden him while under treatment. Today the sanatoria of our country have struck a happy medium between exercise and rest and each has been given its proper place. The cure in no sense is considered satisfactory unless the patient is able to resume some remuncrative occupation after his treatment. Only the rich can afford to live without the work of their hands and many of them do not wish to do so.

It is well at the beginning of this paper that we explain the term exercise: Exercise is any movement of the body which costs the body energy and heat and produces waste products. For example: a patient may be coughing for some little time with such force as to use up more energy and throw out more waste than if he had walked one or two miles.

The good effects of exercise on the body are so well known that I need only to mention them here as: improvement in digestion, better blood, harder muscles, healthier organs of the body and improvement in the general mental con-

dition of the patient.

We will therefore discuss briefly some of the beneficial effects of exercise on the disease, also the bad effects when injudiciously employed. A few guiding rules are necessary if we wish to be on the safe side, some of which, we must religiously obey at all times, while others may be passed by in rare instances without detriment to our patient: Namely, the patient should be free from fever at all times during the twenty-four hours of the day; the pulse should be below one hundred, but this is not essential, as we have often seen great improvement in the pulse after a few weeks of graduated exercise; the weight should be normal or above; there should be no toxic symptoms present, as headache, backache, malaise, etc.; and there should be no moisture at seat of disease in the lung except after cough. These requirements we have found to be very safe in the past, and we continue their use to the present time. When this condition has been attained in our patient, we are ready to begin with excrcise.

To raise the patient's resisting power, to throw out the bacterial poisons in the blood and to gradually raise his immunity, walking exercise is prescribed first for all patients, beginning the first week with fifteen minutes a day, preferably in the afternoon, the remainder of the time the patient spends in resting. This is continued for one week and if at the end of a week the patient's temperature shows no sign of deviation from normal, the second week we may allow

fifteen minutes twice a day. If everything is satisfactory, we may increase to one-half an hour twice a day the follow-The amount of exercise ing week. should be gradually increased each week if the temperature and general symptoms are satisfactory, until two hours twice a day is being taken. After this a patient is usually able to do five hours of light work each day, which may be gradually increased until an ordinary eight hour day's work can be done. It is very important that we never lose sight of the fact that the patient must rest the balance of the time.

The effect of exercise on the disease is to produce an auto-inoculation of the blood from the focus of the infection. Auto-inoculation may follow and be induced by all active and passive movements which affect the focus of infection, and upon all vascular changes which activate the lymph stream in such a focus. It is by this means that the protective mechanism of the blood is set in motion and when these bacterial products escape into the blood stream, immunizing responses must necessarily occur. No person can live in the presence of infection unless these immunizing responses occur, and no one can recover from bacterial disease, unless these protective elements are present in the blood. The great importance of obtaining a high standard of this substance in the blood, at all times, is obvious. And it is only through tuberculin, exercise and massage these substances are thrown into blood and that anti-bodies may be formed, so that our immunity is kept up to its highest level. If the focus of infection is in contact with the stream, two combating forces are present; on the one hand the action of all the protective elements which are found in the blood and lymph; on the other are the bacteria with their toxins and endo-toxins, and the battle between these two forces is called resisting power. obtain the highest resisting power it is necessary or important that exercise should be taken at regular times and results watched closely to see that we are not over-doing the thing. If after exercise we find a rise of temperature, headache, backache, loss of appetite and loss

of weight, we can be assured the patient has had too much. It is only through this regular and graduated exercise that we can stimulate the blood cells to form this protective substance, and for want of a better name, we call it "antibodies."

If exercise is indulged in when the body is not in condition for it, many very serious results may oceur-probably the greatest of which is eaused by an overdose of the baeterial poison, followed shortly by a rise in temperature, and aehing head and back; in fact, the symptoms are identically the same as those found in our old friend, "LaGrippe." It is always amusing to listen to the story of some our patients when they tell us that they have had the "Grippe so many times in the past few weeks.' These attacks are nothing more nor less than an over-dose of exercise. Then we have the bad effects on the lung tissue tearing and stretching all its protective and fibrous tissue that has been forming for several days, or possibly weeks. The loss of appetite must also be a great disadvantage, if only temporary, as very best nutrition of the body must be kept up at all times if we wish suecess to erown our efforts. The loss of appetite if only for a few days, will often change a favorable ease to that of an unfavorable one. The patient may be in bed on the flat of his back and still be doing a great amount of exercise in the way of conversation, reading exciting books or by having violent fits of eoughing. Exercise increases the eough and expectoration to a great extent and if indulged in while active symptoms are still present, the paroxysms of eough beeome more frequent and severe and lead to vomiting of food, especially the evening meal, and may also be the direct eause of hernia and pneumothorax. The profuse expectoration is also a loss to the body of albuminous substance which it ean ill afford to lose.

The danger of Hæmoptasis during exercise, I consider very slight indeed, as I have never seen it cause this complication in my past experience.

In eonelusion, there is no drug more poisonous than exercise, and none as eapable of doing as much good. Therefore, let it be used as a drug and not as is eommonly done given with the following instructions: "Take raw eggs, drink all the milk you ean and take exercise." We had just as well hand our patient a box of strychnine tablets with this advice, "Take raw eggs and milk and take these tablets." Let us be explicit in our directions and if exercise is needed for our patient, give it to him, but in the proper dose and of the kind to be taken and to the minute.

### CLINICAL NOTES FROM CON-GRESS OF SURGEONS

Philadelphia, Oct. 25, 1916.

By J. E. Cannaday, M. D., Charleston, W. Va.

Philadelphia is in many respects a suitable place for such a meeting as the American Congress of Surgeons. As the home of William Penn and Benjamin Franklin the eity is redolent with the history of the American Nation. Here was the seat of the first Continental Congress. Independence Hall and Congress Hall are still to be seen in an excellent state of preservation. Both are now used as historical museums. The hospitals are numerous and well equipped. The Clinical Week in Philadelphia was a great suecess in many respects, however, the surgical pabulum was furnished in such large doses that it was very difficult to digest and assimilate.

Dr. John B. Deaver still continues to be the human dynamo of the German Hospital and does not fail to express his opinion on any and all subjects, especially those pertaining to surgery and polities.

Dr. Frank of the University Hospital discussed the after treatment of wounds. He said that in the gynecological department they had given up the use of glucose reetal instillations after they had had two eases of serious intestinal disturbances to follow its use. They found, however, that their solution of glucose had undergone decomposition.

One of the most interesting surgeons in Philadelphia is Dr. Davis of the

Orthopedic Hospital. He conducts his clinic in the large and splendidly equipped Weir Mitchell Memorial Building. He has the advantage of practically an unlimited quantity of material and his results are remarkable. He exhibited a number of very interesting cases showing the after effects of infantile paralysis. In most of the cases with a flail knee he does an osteotomy of the femur in order to make the knee stand well back so that the patient will not fall forward in walking.

One of the most finished surgical technics seen was that of Dr. Chas. H. Frazier of the University Hospital. In his method of handling goitre cases he has even improved on Crile. The patients are handled so cautiously and adroitly that for weeks after the thyroid has been removed they do not even suspect that they have undergone an operation. The tonsils are painted with silver nitrate in order to account for the soreness of the neck following the operation. Dr. Frazier shares with Cushing the well merited reputation of being one of the foremost brain surgeons in the United States. If I remember rightly Dr. Crile told me a few years ago that Dr. Frazier was the only surgeon he knew of who, in his operation for trifacial neuralgia cut the sensory root and did not remove the ganglion, thereby preventing to a considerable extent trophic disturbances of the eye. Among the interesting things done by Dr. Frazier was a puncture of the corpus callosum. He is apparently as much at home in the surgery of the brain as the average surgeon is in the abdomen.

Dr. Pfahler gave an interesting discourse on the use of radium in the treatment of malignant growths. He stated that while there were many failures there were a number of remarkable successes. Radium is not only valuable in the treatment of malignancy but offers the best treatment in the removal of

angiomas.

Dr. Edward Martin in his clinic in the University Hospital gave an extended lecture on the subject of fractures and illustrated his numerous points with patients. He exhibited the many excellent new splints and materials used in the

military hospitals of France and England for the treatment of compound fractures. The improvement in splints and in the methods of traction is so great that it revolutionizes the treatment of these cases. Broken arms or legs do not rest upon the mattress but are suspended by a system of weights and counterweights and so nicely balanced that the limb can be lifted a few inches to allow the use of the bed pan or changes in the dressings and in this state of suspension remains immoble until restored to its original location. The new methods of elevation of the fractured limb from the bed tends to prevent swelling and removes the possibility of pressure sores of the heel, which are sometimes seen when fractures have been carelessly treated. A special cinch was exhibited for the making of strong traction from

Dr. Martin spoke of the use of the Balkan splints. This splint is very suitable for gunshot wounds in the limbs. It is made of a bar of iron bent so it comes around the foot in horseshoe fashion. The long end is applied to the side of the ileum and has a pad to steady it at that point. On the shorter end there is attached a perineal pad. A series of canvas bands attached to these rods support the leg. Four rings are attached to the upper surface of these rods so as to swing the leg free. To the crossbar below the foot are tied strips of imbricated adhesive which give extention. narrow strips are applied over the sole and are twisted together back of the lower part of the ankle just above the heel. The ring splints for arms and legs are handled in a similar way. Dr. Martin and his associates have devised scheme for the use of the Bradford frame in connection with the use of the Hawley fracture table. They are able to handle the patient with a broken leg in such a manner as to minimize any possibility of disturbing the fracture that has been reduced. Doll models were exhibited, illustrating the various methods of treatment of fracture in vogue. The advantages of the Bradford frame were many in securing comfort to the patient and ease in handling. By the use of Dakin's solution infected wounds

are cleared up with great rapidity. In irrigating this solution is usually forced upward against gravity and so percolated through the wound recesses far more effectively than if it were to flow from above downward.

An aeroplane splint was shown for the treatment of compound fractures of the humerus. In simple uncomplicated fractures of the humerus the arm is placed in the so-called Mittendorf triangle as to afford complete and perfect fixation without discomfort to the patient. Many of the new arm splints are made of aluminum and are models of lightness and strength and will add greatly to the ease and comfort of the patient.

Dr. Davis never uses plaster casts in the treatment of club foot in small babies as he says it is not possible to keep them on unless the knee is flexed and the whole leg included. He over corrects the deformity manually then uses a flannel bandage and a suitable splint. The foot should be straightened every day until the child cries, and then some. By the faithful cooperation of the mother with the doctor in this form of treatment the serious contractions so often seen in these cases can be prevented.

With reference to the Ecke-Brougham beef bone plates and screws which are being introduced, Dr. Paul Magnuson of Chicago tells me in a personal communication that he finds that bone and ivory are much better tolerated in the tissues and in the course of two years the beef bone plates are completely absorbed. He also says that he has never seen a case of trouble following the use of these bone plates where the technique was good.

Dr. Lewis gave an illustrated lecture on fat and fascia transplantations. He has accomplished many remarkable results in his method of correcting deformities.

Dr. Clark is probably the most popular gynecologist in Philadelphia. After doing a Watkins operation for perineorraphy, he demonstrated his operation with a clay model which he uses in teaching and it makes the operation very clear and simple to the audience. The clay being spread on a cloth to indicate

the rectum, a bit of bandage on either side to represent the levator ani muscle. He makes an elliptical incision over the rectocele plicates the redundant rectum, then sutures the mucosa. By the use of clay models for teaching purposes he makes his gynecological course most interesting and clearer than it would be possible to make it in any other way. He afterwards did an operation for stone in the kidney and it was rather soothing to some of us to see that no stone was found.

The museum in the Jefferson Medical School Building contains a very fine collection of fracture specimens suitable for student instruction. There is a collection of Roman surgical instruments which were recovered from Pompeii. These instruments show that the Romans had made great progress along the line of gynecological instruments.

The Military Base Hospital at Fairmont Park was quite novel and interesting. It was a five hundred bed institution all under canvas with ambulances, nurses, doctors and everything but the

patients.

At the Episcopal Hospital we saw Dr. Alexander do a bone transplant for an ununited fracture of the humerus. was rather disappointing to see him trying to get along with as crude an appliance as a dental engine equipped with a motor saw attachment. However, he finally got by with his operation and made his graft a combination of the Murphy bone dowel and the Albee inlay. sharpened ends of the graft which had been taken from the tibia were wedged together into the marrow cavities. removed the graft from the crest of the tibia and thereby greatly weakened the bone and permanently altered its shape. One of his assistants who had just returned from the American Ambulance in Paris said that a few of their patients had broken their legs after the taking of bone transplants, the bone being so weakened. However, this accident could be avoided by removing the crest of the tibia and not taking too wide a graft, also by protecting the limb slightly during the process of healing. Dr. Alexander drained the wound with a rubber drain. Lane and Albee are both strongly

opposed to this method. Albee sutures his incision tightly, Lane, however, closes them loosely with interrupted sutures in order that no serum may accumulate. The excess serum draining out between the sutures. I have been, in my work following the method of Lane and have found the results to be quite satisfactory.

The next operation was a removal of an enlarged prostate. The entire operation was done at one sitting as it were. The cavity left after the removal of the gland was packed with gauze and the edges of the bladder mucosa were drawn over the tampon in such a manner as to

hold it securely in place.

We watched Dr. Rugh operate at the Methodist Episcopal Hospital. He did two Albee bone transplant operations for tuberculosis of the spine. He makes a curved incision a little to one side of the spine, turns back the flap of skin and immediate subcutaneous tissues and exposes the tips of the spinous processes, with a sharp chisel splits down one side of each process. Meanwhile an incision has been made over the tibia. He then removes a graft with the chisel mallet. The tibia in small children is so soft that motor instruments are not required for the rapid and easy removal of the graft. Dr. Rugh does this operation with great dexterity and ease, and from the time of the first incision to the completion of the dressing only takes twenty or twentyfive minutes. The graft is sutured to the freshened spinous processes chromicised cat gut or kangaroo tendon after the transplants are applied a small pad is placed on either side for the protection of the spine then a plaster cast is applied. These patients wear a plaster cast or jacket for the support of the spine for about three years in the average case. His results have been excellent. Since the perfection of the bone transplant for the relief of Potts disease no case of hunch back should develop. The time will certainly be soon at hand when the pitiable sight of a child going around with a large lump on its back will be considered a monument to ignorance or neglect, or both. The same might be said of Rugh as of a sculptor, that he is a genius with a chisel. His dexterity

with this tool is remarkable. His appliances are simple but effective. The patient is supported on a strip of canvas and handled with extreme care during the period of anesthesia. These badly diseased spines are unequal to the task of supporting the weight of the body and are only held to their duty by a constant spasm of the muscles of the back. When they are relaxed under anesthesia the slightest careless movement might result in great harm to the spinal cord. This matter has been deemed of such great importance that some operators before attempting to do this operation have the patient put up in a plaster cast which is cut down each side. The patient is given an anesthetic with the plaster cast on, then turned over and the half of the cast covering the back removed that the operation may take place. After the completion of the operation the two halves of the cast are secured together by adhesive plaster. Instead of using the old fashioned dinner pad Rugh applies his cast snugly and before it has quite set makes a circular opening for the expansion of the stomach. Frequent X-ray examinations of the spine needed to determine the amount of callous formation and the condition of the spinal segments. When there is much curvature of the spine the transplant is weakened by a number of crosscuts with a saw in order that the proper curvature may be secured. The transplants are sutured to the sides of the spinous processes and when healed in place acts as a firm brace. The canvas strip supporting the patient is wrapped in oiled paper so that it may be easily withdrawn after the cast has been applied.

In operating for hallux valgus and bunions Rugh does not always remove the head of the bone but in some cases removes only the lateral enlargement with a sharp chisel then sutures the periosteum and subcutaneous tissues over this for the possible prevention of exostoses. The feet are put up in plaster casts and the big toe is securely held in place, after it has been over corrected by manual stretching.

Dr. H. C. Deaver discussed the symptoms of perforation in the upper abdomen. He contends that the pain will not

be relieved by the ordinary hypodermic of morphine but will continue and calls for an immediate operation. The results in the surgical treatment in these upper abdomen perforations are remarkably successful. Dr. Deaver reports eighteen perforations of the stomach without a death. I have personally done my fifth operation for perforation of the stomach without a single mortality. Dr. Deaver advocates in the treatment of intestinal fistula that we wait for from six to ten weeks for spontaneous healing, then if the patient is in fair condition and the fistula has not elosed to free the adherent bowel and close the opening.

Drs. C. H. Mayo, Deaver, and Finney discussed the old subject of eholeeystotomy versus eholeeysteetomy and as usual disagreed. I believe there is no question but what the percentage of permanent eures is larger with the former procedure. However, in the event of the patient developing further trouble in the gall duets the old land mark the gall bladder has been removed and the treatment will be rendered quite difficult. All the essayists agreed however, that under certain conditions such as the strawberry gall bladder and a few others, the gall bladder should be removed entirely.

Dr. Albee discussed in detail Carrell's new method of treatment of war wounds. His results are quite remarkable many of the severely infected wounds are clean and free from pus after ten days of treatment.

### VALUE OF KIDNEY FUNCTIONAL TESTS.

By R. M. BOBBITT, M. D. Huntington, W. Va.

Read before the Cabell County Medical Society.

For the past few years the interest in general functional work has been increased and this interest has been most marked in the urological field, because very often the diagnosis, and practically always the treatment of pathological conditions above the urethra, depend upon the function of one or both kidneys.

This work is not only of interest to the urologist for very often the general surgeon must depend upon the activity of the kidneys for the successful outeome of a severe surgical operation. In many hospitals the phenol-sulphonephthalein test is used as a routine on all surgical eases. It has been learned by experience that one cannot rely upon the chemical and microscopical urinary findings to tell what might be expected of the kidneys, and frequently patients are lost when a simple test would have warned the surgeon to wait a time until the kidneys could do better work.

In unilateral disease of the kidneys such as tuberculosis, calculus, uew growth, and different infections, a differential kidney functional test, that is, passing ureteral catheters and then giving the test, not only helps in the diagnosis by positively identifying the affected side and showing the degree of funetional loss, but helps decide the future treatment by showing just how much work the good side is eapable of doing. In prostatie hypertrophy and advanced urethral stricture these tests are important because the function of the kidneys is generally much lowered and the sueeess of operative procedure depends upon increasing the kidney function by releasing the back pressure and residual urine by means of the permanent eatheter, suprapubie drainage, etc.

In this paper I shall only mention the tests that are most used, namely, the phenol-sulphone-phthalein and The use of injections of indigocarmin often helps in locating ureteral openings in difficult eases and gives some idea as to the activity of each kidney by

the time of appearance.

The phenol-sulphone-phthalein test worked out by Geraghty and Rowntree, because of the simplicity of technique, is universally used, and the findings give very valuable information.

This dye is injected in 1 e. c. doses either intra-museularly or intra-venously, the time of appearance noted, the urine eolleeted for the allotted time diluted to 1000 e. c. of water and compared with a seale which is made by diluting 1 e. e. of the solution to 1000 e. e. In noting the time of appearance and in making the final reading, a small amount of  $22\frac{1}{2}\%$  of the dye should be excreted in the first hour and 20-30% in the second. Only one-half of this time is needed for the excretion after intra-venous injection.

Some men have made objections to this test because of the fact that differences of 6-10% may occur at different times of the day, more being excreted during the hours of active digestion, etc. However most urologists use it as a routine test and consider the findings accurate enough for all practical purposes. In using it to differentiate the work of the two kidneys the test is very accurate. It has the advantage of very simple technique and the combined phthalein can be done in any physician's office.

The blood urea test consists in estimating the amount of urea per liter of blood serum. The urea of the blood differing from the urea of the urine is fairly constant, there being a slight difference according to the amount of proteids ingested. Normally there is present from .3 to .6 grams of urea per liter of serum. In pathological conditions in which the function of the kidneys is lowered and the phthalein output is decreased there is an increase in the blood urea, which may run as high as 2 to 4 grams per liter of serum. These high figures are usually found in uræmia, post operative anuria, etc.

Unfortunately the technique of this estimation is complicated and although considered to be more accurate than the phthalein cannot be done outside of an especially equipped laboratory. Therefore it will be less useful to the average man until the technique is simplified. I shall outline two case histories to illustrate the value of these tests. One of these cases was taken from the records of the Urological Clinic, Mercy Hospital,

Baltimore, Md.

Mrs. J. R. M., age 37, widow, housewife. Chief complaint, frequent painful urination; family history negative; personal history, general health not good for years; eight children, youngest six years; abdominal operation one year ago; menses regular; lasts four to five days; no pain or excessive bleeding. Last menses one week ago.

Present illness began seven years ago with frequent burning urination. This symptom became intermittent. About eighteen months ago she became very much worse and has had several attacks since. Also has pain in back on both sides. An abdominal operation, the nature of which is not known, seemed to aggravate the condition. Hematuria dating from one year ago.

Examination: General nutrition fair head, chest and neck negative. Abdomen, some tenderness at costo-vertebral angle on left side. Neither kidney could be palpated. Pelvis, perineum gives fair support. Uterus anti-flexed, movable, slightly tender to pressure, broad ligaments negative. Blood, total leukocytes 7600. Differential; Polynuclears 52%; Small Lymph, 36%; Large Mononuclears 10%; Eosinophiles 2%. Urine, microscopically contains blood and pus. Cystoscopy, congestion and ædema of trigone. Right utereral orifice congested. small ulcers in region of left ureter. Left ureter, because of edema and congestion, could not be catheterized. Right ureter catheterized, urine therefrom showed no pus. One week later Cystoscopy, bladder in slightly better condi-Left ureter catheterized with a Garsuch catheter—urine collected phthalein test given intravenously. Urine loaded with blood and pus. Phthalein. Right side through bladder showed output of 50%. Left side practically none. Diagnosis: Left side non-functioning, pus kidney and secondary cystitis. Treatment, patient advised to have left nephrectomy.

L. E. W., colored man, age 62, laborer. Family history: Father died kidney trouble, age 60; no T. B. or malignancy. Personal History: General health good—P. V. gonorrhea at age of 26, lasted 3 months. No lues, alcohol moderately.

Present illness: For past three years must get up at night to urinate. For last six months has also had considerable day frequency, and gets up from eight to ten times at night; pain at end of urination of cramp-like character and at times has much difficulty in urinating. Has lost eighteen pounds in weight. Some indigestion but symptoms indefinite.

Examination: Colored man; nutrition poor. Head and neck negative. Chest negative, except moderate enlargement of heart with accentuation of aortic second sound. Abdomen negative. Prostate shows marked bilateral enlargement; soft and doughy to touch. Some tenderness. Secretion shows no pus. Urine sp. gr. 1018. Trace of albumin. Microscopically moderate amount of pus. No casts. Cystoscopy shows, some congestion of trigone; moderate sized median lobe. Bladder capacity 200 c. c. Residual urine 130 c. c.

Combined phthalein shows output first hour 12%; second hour 17%. Blood urea 1.2 grams per liter of serum—permanent catheter introduced and bladder drained every hour for first three days, then urine could be held at night for three hours. (Ten days after admission phthalein) first hour 32%; second hour 22%. Blood urea .7 grams per liter. Perineal prostatestomy done and patient made an uneventful recovery.

# THE COMMERCIALIZATION OF THE PUPIL NURSE.

By EMILY W. BAUER, R. N., Supt. the Chesapeake & Ohio Hospital. Huntington, W. Va.

Read at Meeting West Virginia Hospital Association, Huntington, W. Va., October, 1916.

Possibly too few of us realize the responsibility we bear, when we assume charge of a training school and undertake to direct the lives of young women during the formative period of their professional career. We are so to speak, in loco parentis, to these girls, and it is our duty to train them so they are best fitted to meet the demands of their profession. A nurse's entire subsequent life and her value to the community she serves are dependent upon the training we give her. If we fail, she fails; if we are faithful to our trust and give her the proper training, she is not only competent, but a blessing to those she comes in contact with.

The controlling officials of hospitals who permit the commercialization of the pupil nurse are neglecting a duty not only to the pupil, but to the medical profession, the laity and to the graduate nurse as well. When a doctor goes to a hospital to give treatments, or to do dressings, if several of the pupil nurses are doing special duty, he is often greatly inconvenienced by being kept waiting, or he must get along as best he can without assistance. A patient's family usually leaves it to the physician to arrange for a nurse when one is needed. Is he looking after the best interests of that patient if he sends a pupil into the home and charges, or permits the hospital to charge, full graduate rates? Does he tell the family that the patient is in the hands of a nurse who has not completed the prescribed course of training, although they might have procured the services of a registered, graduate nurse on the same terms? The undergraduate or practical nurse, is a necessity, but let it be understood that she is not a graduate and is not entitled to the fees of a graduate.

Women enter our training schools for various reasons; but with very few exceptions it is necessary for them to earn their living expenses. The graduate nurse who has given us years of her best work is not getting a "square deal," if we give the work that is rightfully hers to the pupil nurse and collect the fees therefor to help defray the expenses of the hospital. What incentive is there for intelligent, cultured women to enter our hospitals if, after they have been graduated, we do not help them to get the work they have spent years preparing for? As long as the doctors will give cases to undergraduates at graduate rates, we are going to have women enter training who, after a few months, will leave the hospital and will say, as I heard a very incompetent probationer remark, "What is the use of wasting three years studying and being disciplined when I can go out and earn twenty-five dollars per week with what I have picked up here?" Another probationer who had been dismissed wrote to a nurse in training, and to use her graphic language, "You are a fool giving them three

years. I am nursing a case of cancer and getting twenty-five per week." Are the doctors loyal to their faithful helpers and assistants when they employ the undergraduate in preference to the graduate? When a nurse comes to you asking assistance in securing work, do you ask for her credentials? If she has a diploma do you examine it to see whether it was issued by a recognized hospital or whether she received it from a corresponding school? We have in this state today, many women nursing without a diploma and they are being employed by the medical profession as graduates with-

out question.

When a probationer makes application to a well organized training school, she receives a booklet of information which leads her to believe that she will be given a general practical course and a thorough theoretical course. We accept pupil nurses on a cooperative basis. The hospital receives service in exchange tuition, board, training and the privilege of earning a diploma. After she has been in training six months, and sometimes less, a special nurse is needed. Instead of calling a graduate, the pupil is put on the case and the hospital collects twenty-one to twenty-five dollars week for her services. The patient is paying for a special nurse and does not expect the pupil to leave her alone, consequently the pupil misses her lectures and classes. I know of nurses who spent at least eighteen months of the three years in which they were supposedly receiving their training, doing special duty. Have they received what has been promised them? At the final examinations of the hospital and when they go before the State Board of Examiners, if they fail or make a poor average, they are not to be blamed for it is the fault of the superintendents who permitted them to be used to make money for the hospital instead of insisting that they receive the general, thorough course that was their due.

Often a pupil is detailed to special an operative case. The doctor in charge of the case is favorably impressed; he requests that she be kept on his cases. He may mention to other surgeons the fact that Miss A took excellent care of his

patient. As a result if the superintendent permits, and often—especially if the hospital is controlled entirely by doctors—she has no choice but to permit 't. Miss A. will spend practically all of her time on duty with surgical cases. After she has been graduated her first call may be a case of typhoid fever; she either accepts the case feeling incompetent or she is sorry but has been nursing surgical cases and does not know much about typhoid. Nurses should be allowed to specialize, but first let us give them a thorough general training.

It is not fair to a pupil nurse to interrupt her course by permitting a doctor, who is one of the directors of the hospital where she is in training, to send her to another hospital with a member of his family and cause her to remain away from her own hospital a month or more. However that very thing has been done in our state recently, and while specializing at the other hospital she wore the

uniform of a graduate.

The pupil should be given a certain amount of special duty during her course, but let it be in the senior year, at a time when it will not interfere with her class work. When possible let the specializing be in the hospital so the pupil may be under the guidance of her superintendent, who will advise her how to meet conditions that may arise. If the patient really needs a special nurse and cannot afford to pay for a graduate, let us provide a pupil, but at a greatly reduced rate. We should have an understanding with the patient, or patient's family, that they are paying for an undergraduate and that she must leave the patient to attend all lectures and classes. Let us not permit our pupils to remain on duty eighteen to twenty-four hours specializing. If we do will they be mentally fit to understand their class work?

The mission of a hospital is service to the community which gives it support and makes its existence possible. As is the nurse so is the hospital whose efficiency is dependent certainly as much upon a capable corps of nurses as upon its medical staff. Water cannot rise higher than its source, nor can the real efficiency of a hospital rise above the true worth of its individual nurses. Therefore, the true aim of the training school is the development of its nurses so they can be best fitted to render service, the keyword of our profession.

Let us then not reduce our pupils to terms of dollars and cents, so to speak—not as did Shylock, place his ducats before his daughter; but let us give her the best training our facilities afford which certainly cannot be done if we keep her on special duty more than a proper portion of her time.

### Book Reviews

Vol. XI, Practical Medicine Series is to hand. This is one of a series of ten volumes issued at practically monthly periods, embracing the entire field of medicine and surgery. Each volume is complete on the subject of which it treats for the year prior to its application. This publication is published primarily for the use of the general practitioner and may be purchased in single volumes at states prices or as a whole for \$10 for the series, in this way enabling the practitioner to get in touch with the latest trend of professional opinion on the subject he may be most interested in. Price of this volume is \$1.50. The Year Book Publishers, 327 S. La Salle St., Chicago.

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BLOOD PRESSURE FROM THE CLINICAL STANDPOINT. By Francis AshleyFaught, M. D., formerly director of the laboratory of clinical medicine and instructor in medicine at the Medico-Chirurgical College, Philadelphia. Second edition, thoroughly revised. Philadelphia and

London. Price \$4.50. W. B. Saunders Company, 1916.

The comparatively recent knowledge gained and the well known ability and extensive experience of the author is a sufficient justification for the appearance of this, the second edition of this work on blood pressure. While the test is easily applied by means of the Sphygmomanometer and the knowledge which may be gained of the greatest value there is margin for inaccuracy and a great deal of misinformation. Herein lies much of the value of this book, in that the author has endeavored to and succeeded in a great measure in dispelling this margin and pointing out the means whereby very much that is misleading may be avoided. The book opens with a short chapter on the physiology of the circulation and is followed by one on the principles of the Sphygmomanometer which will greatly aid the tyro in understanding the use of and the proper application of the instrument. After describing the several most used and upto-date instruments and discussing the weak points of each the author then proceeds to interpretations of the results of the observations made in relation to hypotention, hypertention and pulse pressure, illustrating the text with numerous charts showing the points they are intended to elucidate in connection with the different pathologic conditions under consideration. The book is evidently intended more for the use of the general practitioner although the scientific investigator may also find it of use as much on account of its own intrinsic value as from the numerous references given.

### The West Virginia Medical Journal

JAS. R. BLOSS, M. D., EDITOR C. R. ENSLOW, M. D. ASSISTANT EDITORS (ASSISTANT EDITORS

HARRY W. KEATLEY, M. D., BUSINESS MANAGER

### Huntington, W. Va., Dec., 1916

THE JOURNAL issued on the first of each month

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All original articles for this Journal must be made it exclusively. Communications and items of gen-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

should be given.

#### CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if uthors 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 Chemistry and Pharmacy of the A. M. A.

#### REMITTANCES

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

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

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

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### Editorial

The various component county societies of our State Medical Association will elect new officers for the coming year, either at the meeting to be held in December or January.

During the year which closes with this issue of our Journal, your editor has had his attention particularly called to the very great necessity for the careful selection of the officers of our county organizations. In the past it is possible that we have been entirely too lax in our requirements of the men selected. One of our members may be very popular and a fine fellow, as well as a valuable "member," and yet not be just the man to elect to office, or it may be just any office in the society.

In our opinion the practice of medicine is the greatest of the professions; not even excepting the ministry. The qualifications for the "true physician" are certainly God-given. It is needful for us to remember, however, that there is the fact that most of us are compelled to depend upon our labors in this line for our livelihood.

In any line of human endeavor greater progress is made where there is cooperation and organization. Our profession is not an exception. When we strive to make the county, state and national medical associations stronger, we will assist the whole profession, and necessarily each of us individually, to become better equipped as physicians; not only in this will our profession benefit, but also we will be able to gain that state of affairs where our incomes will

be more nearly commensurate with the services which we render to our fellow men

This brings us back to the selection of our county officers. Let us give this matter our careful consideration and pick "the man" for each position, remembering that the most important officer in the county society is the secretary. It is upon him that the bulk of the work is placed and upon him depends, far more than is realized, the "holding-together" of the society and the success of the work. Then when we have elected our officers, let us each make a firm resolution to give them our earnest cooperation that this work may prosper.

In this connection the attention of the local secretaries is called to the great importance of collecting the dues for 1917 and reporting to Dr. Anderson just as promptly as is possible. editor is continually receiving complaints from members of our State Association, that they are not receiving the Journal. Dr. Anderson can not be expected to keep his lists "up to the minute" without the cooperation of the county secretaries; the accuracy of the mailing list of your Journal is dependent upon his reports to the editor. I am frank to confess that, as Secretary, I was sometimes lazy and got an idea that the society would "run itself." (All secretaries have days like this, when the other members do not help and offer about seventy-eleven resolutions directing that the secretary write letters expressing the opinions and appreciations of the society to most of the societies, commissions, committees, etc., extant.)

I did not appreciate the editorials of my beloved friend and predecessor along these lines. Believe me, brethren, there is no question in my mind that only his religious convictions (and the Federal postal laws) were all that held him in leash.

Under times of sufficient stress (possibly this is one) if the regulations did but permit, we question if one would not be justified in "taking a vacation" from that "conviction" position.

## DOCTORS AND CHRISTIAN SCIENCE

"The day that the average physician displays a name plate on his door announcing that he is ready for practice, it is safe to assume that an investment has been made in his education approximately as follows:

From four to seven years at a university, representing a minimum of \$3,000.00

Living expenses during university course, minimum 3,000.00

Books, instruments, laboratory charges, etc. 1,000.00

Expenses during hospital internship 1,000.00

Total cost of med. education \$8,000.00

"In the course of this training, extending over from five to ten years of his life, the physician has received instruction at the hands of men whose entire careers have been devoted to mastering the practice of medicine. Until he is past thirty-five years of age, his career is one constant, painstaking preparation for the protection of humanity against disease.

"A law pending in New York proposes to set all this preparedness at naught. The legislature of that state has been asked by the Christian Scientists to legalize the "practicing" of their healers.

"The Christian Science 'healer' enters upon his activities with the following stock in trade:

\$38.00

"Thus equipped, he can pray over a virulent case of smallpox until the infection sweeps the neighborhood. He should worry! There is no such thing as smallpox; the patient is merely in 'error.' Epidemics under the healer's benignant influence might ravage communities; it would be quite unnecessary to take steps to check them; there is no such thing as

illness. As soon as the unfortunate victims receive faith through Mrs. Eddy's tract at \$3.00 a copy, the scourge will subside.

"It is all very simple—buy the book!
"Weird incantations over the grievously ill passed out of American history
when the last Kickapoo turned his toes
to the setting sun. Before the steady
stride of enlightenment, the old lady who
wore red yarn around her ankle to ward
off chilblains has linked arms with her
consort who carried a shriveled horsechestnut in his vest pocket as a cure for
rheumatism, and together they have
passed into the Great Beyond, a little
earlier, perhaps, than had their ailments
been attended to by a skilled physician.

"Superstition, whether set forth in 'Science and Health' or Hostetter's Almanac, is banished from most intelligent minds. Diseases that a generation ago spelled certain fatality are now under the doctor's control. They are not cured by prayer, nor by sorcery. Mary Baker Eddy was an extremely commonplace New England woman. It has been our privilege to read some of her early correspondence in the original; much of it was illiterate and none of it convincing.

"Licensing the Christian Science healer is a dangerous retrogression. If it means the substitution of prayer for Peruna, we would advocate it; but we cannot imagine a condition which might place control over a deadly epidemic in the hands of a zealot who enters upon his medical career with an investment of thirty-eight dollars."— Editorial from April "Puck."

### Health News

The Division of Sanitary Engineering of the West Virginia State Department of Health under the direction of the Chief Engineer, Mr. Mayo Tolman is working on a score card for rating the sanitary conditions of farms. Perfect sanitation is represented by 100 points which are divided among all factors that tend to sanitary perfection as the water supply, disposal of wastes, etc. These points are sub-divided among such fac-

tors as location of the well, its construction, the location of the privy, its type and construction, disposal of sink wastes, disposal of garbage, presence of screens on the house, handling of manure at the barn and so on. In order to create an interest in better farm sanitation, prizes are to be given each year at the "County Fairs" to the two farms in each county that show the greatest improvement in sanitation. One prize will be awarded to the farm for the highest total score, and the other to the one that shows the greatest gain in points during the year.

Those farmers who wish to enter the contest are required to hand in their names to the Health Department between the last of October and the first of January, when the farm will be visited and rated by a representative of the Division of Sanitary Engineering. A second visit will be made to each farm the following June, and a new rating given. A comparison of the two scores thus obtained will determine the winners of the prizes.

A Trachoma Clinic was held at Williamson the end of October by Dr. John McMullen of the U. S. Public Health Service, and Dr. H. B. Wood of the State Health Department. Twenty cases of trachoma were treated. The Mingo County Court paid the expense of the hotel accommodations for the patients and the rental on the clinic room. The schools were visited and fifteen cases of trachoma were found among 201 children examined. Any other community of West Virginia wanting a temporary trachoma clinic established similar to that at Williamson should make arrange-

Williamson has begun systematic school inspection. Has your city?

ments with the State Health Department.

West Virginia is one of only three states east of the Mississippi river not using the Model Vital Statistics Law. Let this be the last year of our old defective law which lets anybody make reports and collect fees!

The records for 1915 show that in 35 counties 3524 death reports were made by people who are not by law or by training capable of declaring the cause of death, and that certain persons who were not present at the time have declared that 6482 babies were born at certain times to certain families. Nearly ten thousand valuable records made upon mere hearsay, and probably not one would stand the legal test in court!

The public food supplies in twenty two cities and towns of this state have been investigated during the past five months by the State Department of Inspections were made of 65 grocery stores, 37 markets, 11 bakeries and 14 dairy farms besides numerous smaller places where foods were sold. Some revolting conditions were found. Fifty-five pounds of spoiled meat and 144 cans of decomposed canned goods were found offered for sale, besides much spoiled fruit and fresh vegetables. Painted sausage, doctored hamburger and similar supplies were found. Many orders were issued and where later inspections were made, the orders were found to have been obeyed.

Through the efforts of the Division of Sanitary Engineering of the West Virginia State Health Department, six towns, namely Charleston, Morgantown, Buckhannon, Weston, Clendenin and Stealey Heights have installed plants for disinfecting the drinking water supplies with chlorine gas. This method of treatment is now in use in many of the largest cities of the country and is everywhere giving marked satisfaction. Twenty West Virginia cities and towns are now making sure by this means that the drinking water shall be safe for consumption.

### DENTAL PREPAREDNESS

What is the most important attribute of a soldier?

Rin

Good feet?

No.

Good eyesight?

No.

Good brains?

No.

What then?

Good teeth.

A soldier may have good feet, good eyesight, and good brains but if he has bad teeth he can't eat. If he can't eat he can't march near enough to the enemy to see him and use his brains to fight him.

How does a soldier get good teeth? By having good teeth in childhood. How do children keep good teeth?

Through being taught by their mother how to keep their teeth clean and having their teeth looked after while they are growing. This makes good teeth for future soldiers.

It would seem then as though the first patriotic duty of a mother was to keep her children's teeth in good condition.

It is.

### DO YOU KNOW THAT-

The U. S. Public Health Service found 78% of the rural homes in a certain county unprovided with sanitary conveniences of any kind?

Scarlet fever kills over 10,000 Ameri-

cans cach year?

Hookworm enters through the skin?

### THE U. S| PUBLIC HEALTH SER-VICE ASKS, DO YOU—

Insist on sanitary eigar factories and

then use a public eigar cutter?

Carry a fine handkerchief and then forget to cover your mouth when you cough?

### PROGRAM OF PUBLIC HEALTH CONFERENCE OF HEALTH OFFICIALS

STATE HEALTH DEPARTMENT Charleston, W. Va., Nov. 18, 1916.
Dear Doctor:

The next conference of Health Officers of the State will convene at Hotel Chancellor, Parkersburg, on Tuesday, November 28, at nine (9:00 a.m.) The law provides as follows:

It shall be the duty of every county and municipal health officer to meet with the State Board of Health or its representatives at least once a year, due notice having given, at such time and place as said Board of Health may designate, to attend a school of instruction for the purpose of familiarizing such health officers with their duties in the interest of the public health. The actual expenses of the attendance of such county or municipal health officer shall be paid by the county or corporation represented by such local officer, upon presentation of a certificate showing the expense of such attendance made by the State Board, provided that such expense shall not exceed the amount sufficient to cover an attendance of three days in any one year.

In pursuance of the above you will be present at the coming conference, the program of which is herewith sent.

Respectfully yours, S. L. Jepson, M. D., State Health Commr.

### PROGRAM

9:00 a.m.

The Model Registration Law, Dr. —

Surgeon U. S. Census Bureau.

Safe Water Supplies at Low Cost, Mayo Tolman. Sc. B., Chief Engineer, State Health Department.

Sewage Disposal as a Health Factor, Andrew N. Wardle, Assistant Engineer,

State Health Department.

Poliomyelitis and its Sanitary Control, S. L. Jepson, M. D., State Health Commissioner.

1:30 p. m.

Practical Experience with the Milk Problem, L. O. Rose, M. D., Bacteriologist.

Relation of Public Health Council with Local Health Officials, F. F. Farnsworth, M. D., Member of Public Health Council.

Our Medical Law; Its Evolution, W. W. Golden, M. D., President of Public

Health Council.

The Troubles of Local Health Officers, by Visiting Officials.

### Propaganda for Reform

MARK WHITE GOITER TTEATMENT.-The Council on Pharmacy and Chemistry reports that Mark White Goiter Serum and Mark White Iodinized Oil, submitted by the Mark White Goiter Serum Laboratories, Chicago, was not admitted to New and Nonofficial Remedies because the sale in interstate commerce of the "serum" has not been authorized by the Treasury Department, because the statements regarding composition are indefinite and contradictory, because the therapeutic claims were not substantiated and because the routine treatment of goiter is irrational. Mark White is a veterinarian and, in association with various physicians, has exploited his treatment, at one time called "Goiterine" from different cities. In Chicago he has been associated with Dr. Rachel Watkins.-Jour. A. M. A., Sept. 23, 1916, p. 967.

### A FITTING REJOINDER

The statements of Life on medical and public health questions are usually so distorted and radically misleading that the average reader does not take its utterances seriously. The Boston Herald however, recently replied to one of Life's characteristic insinuations in words which are work quoting. Life said:

### THE MEANEST CRIME

The assasin who shoots you in the back does a cowardly thing. But he does it frankly as an enemy, and he takes chances of punishment. He knows there are legal penalties for that kind of murder.

But when a doctor in a hospital tries his latest "discovery"—a surgical trick, or the injection of a fatal disease into a confiding patient—he does it, not openly as an enemy, but pretending to be a friend. Unlike the assasin who shoots you in the back, he has no fears of punishment. He is doubly safe, because he selects his victims among the poor, the sick, the helpless.

Such victims, always the weak and friendless, whose only hope is in health and strength, are indeed fortunate if they escape with no more diseases than when they entered.

No law protects them.

There is no punishment for this meanest of crimes.

To this the Boston Herald replied:

Is there anything more cowardly than lying insinuations against a set of men and women who devote their lives, and often sacrifice them, to alleviate suffering?

Is there anything more contemptible than the back-handed thrust of generality to conceal the falsity of

what admits of no proof?

Is there anything more unworthy of a paper that lays claim to being a force for good than to sow the seeds of malicious untruth?

No law prevents this form of slan-

der.

There is no punishment for this meanest of journalistic crimes.—Jour. A. M. A.

Tanlac.—Food Commissioner Helme of Michigan reports: "A new panacea for the cure of 'all ailments of the stomach, kidneys and liver, catarrhal affections of the mucous membranes, rheumatism, nervous disorders and the like' is offered to the public under the name of Tanlac. The label on the bottle neatly avoids the pure drugs act by claiming to be only a 'tonic and system purifier.' An analysis of Tanlac in the laboratory of this department shows the following: Alcohol 16.4 per cent., Glycerin 2.0 per cent., Licorice present, Aloes or Cascara present, Gentian present, (Berberin) trace. The presence of a trace of tartaric acid shows that winc is the base of this medicine. The 16 per cent. alcohol gives it the 'kick' that makes a fellow feel good and ought to fill a long felt want in 'Dry Counties.' Aloes is a laxative. Gentian is a bitter drug, a so-called tonic. If the reader wants to be cured by the Tanlac routc

at one-fourth the expense, let him get a quart bottle of good sherry wine. Then go to the local druggist and get 1½ drams of glycerine and 2 drams each of aloes, gentian, licorice and cascara. Mix (if you wish) and you will have Tanlac so near that neither you nor the manufacturer can tell the difference. This formula will give four times the quantity found in an ordinary \$1.00 bottle of Tanlac.—Jour. A. M. A., Feb. 26, 1916, p. 676.

It is so well recognized that certain occupations may involve serious dangers to young, growing persons that most states now have their child labor laws. Massachusetts, which has been a leader in legislation of this character, is now engaged in a systematic effort to collect information that may be of value in determining the need of changes in its present laws and regulations governing the employment of minors. At the request of the Massachusetts Board of Labor and Industries, Assistant Surgeon M. Victor Safford of the U.S. Public Health Service was detailed by the Federal Government to cooperate with the state authorities in a study of the effect of employment in various occupations on the health and physical development of children now permitted by law to work therein. A report of this study with respect to the cotton manufacturing industry of Massachusetts has just been published by the Federal Government as Public Health Bulletin No. 78, entitled "Influence of occupation health during adolescence."

The physical condition of over 600 boys between the ages of 14 and 18 employed in this industry in different parts of the state received careful study. It was brought out that in Massachusetts boys between these ages for the most part do not remain long in the cotton mills. This fact and the strict regulations of the state governing the employment of minors may not make some of the conclusions reached in this local investigation equally true elsewhere, but among the facts disclosed the following

may be mentioned:

considerable proportion of the younger boys and also of those over sixteen were undersized and physically undeveloped for their ages, while those between fifteen and sixteen averaged larger than other classes of boys of their age with which comparisons were made. This fact is explained by the accumulation in the mills of strong boys waiting to reach the age of sixteen to go into permanent "full time" occupations. presence of a noteworthy proportion of undersized boys is not ascribed to the effects of the occupation, but to the fact that the cotton mill offers one of the few chances of employment for undersized boys. Evidence of injurious effects of their work or working conditions, even of the temperature and humidity of the mills, on normal boys was seldom found, although further investigation of possible effects of atmospheric conditions is recommended. Probably as a result of the state regulations relative to the issuance of employment certificates comparisons relative to the issuance of employment certificates comparatively few cases of dangerous diseases were discovered. There was, however, a wide variety of defective conditions disclosed by the investigation, many of them of such a character as to impair seriously the future health and economic usefulness of the individuals concerned if not remedied.

### LAY VIEWS ON VACCINATION AGAINST SMALLPOX

Although it considers anti-vaccination legislation a remote possibility at the present session of the Pennsylvania legislature, the Philadelphia Record advises caution, since "the anti-vaccinationists are as industrious as beavers and as persistent as terricrs;" as their measures are cropping up continually, "unless public attention is kept on their campaign they will here and there succeed in their efforts to popularize smallpox." This disease in the eighteenth century is spoken of as "the most appalling foe to the human race," but in recent times has been so thoroughly suppressed that in some communities havor resulted because it was not recognized by physicians, who had never seen a case. The specious argument of the anti-vaccinationists that, because smallpox is rare there is no occasion for vaccination, is answered by saying, "Let vaccination be abandoned for a few years, and there will be enough smallpox to make the people, lay and medical, familiar with it." Indeed, the people of a great many communities are becoming familiar with it to their serious cost, for the disease, because of neglect of vaccination, seems to become more widespread each year. The right of the people to protect themselves from the disease is thus put by the Record: Persons who insist on their right to have smallpox if they wish it, or choose to take their chances, assume precisely the attitude of the man who insists on his right to build a frame house in the middle of a city. If he is willing to take the chance of a fire, he says, whose business is it? Well, it is very plainly the business of the neighbors whose houses would be endangered by the presence of a combustible structure. The unvaccinated child is a menace to a school because he may at any time develop the disease, and if so, he has probably communicated it to a dozen other children of parents who insist on their constitutional rights to take and disseminate smallpox. No man has the right needlessly to make himself or his child a possible conveyor of an appalling pestilence." The New Haven Courier, while not condemning vaccination or upholding the anti-vaccinationists, criticiscs the working in New Haven of the compulsory vaccination law, caused a reputable citizen to be imprisoned because he refused to have his child vaccinated in order to enter the public schools. The Courier believes that such laws "savor of an earlier generation." Vaccination itself the Courier does not discuss, because confessedly it knows little of the subject; but it deems it a safe contention that if "vaccination is so important for the welfare of the community at large that it is within the right of the state to compel public school pupils to submit to it on pain of jailing their parents, then it should be within the power of the state to compel general vaccination. Both editors seem to be in favor of compulsory general vaccination one willingly, because of the clear verdict of history; the other because the logic of the situation compels him to accept it.

## AMERICAN COMPULSORY INSURANCE

A succinct statement of Dr. Huffman's proposal is: Let Congress enact a bill decrecing compulsory sickness insurance for the 30,000,000 wage earners of the United States. Let each insured person select his own doctor. The doctor will be given two dollars for every insured person who selects him and goes upon his panel, but no doctor is to be allowed to carry more than 2,000 names upon his panel. Statistics show that not more than sixty of these 2,000 insured persons are sick at one time. The physician would have an income of \$4,000 a year from this industrial source.

The average annual income of the physicians of the United States, Dr. Huffman goes on to point out, is only \$500. The aggregate annual income of the whole medical profession is \$63,500,000. He contends that more than this whole sum could be raised through national compulsory sickness insurance, and the members of the profession would still be free to augment their incomes by treating patients whose incomes were more than \$1,200 a year. Support for this proposition will probably be forthcoming from a large proportion of the wage-earning population and from those members of the profession whose long hours, scanty remuneration, unpaid bills and miscellaneous anxieties lead them to look in any direction for relief—and relief is due them.

Those members of the profession whose professional activities are among the classes and not among the masses need not concern themselves with this question except as a purely academic proposition. It will not affect their practice or their incomes, and they surely will not place a stone in the way of their unfortunate professional brethren bettering themselves. The British Medical Association made a most unfortunate blunder in opposing the British act and

it is to be hoped that the American Medical Association will not do the same should this proposition ever become a matter of actual debate and legislation.

—Ex.

### HEALTH INSURANCE

Twenty-five out of every 1,000 employes in American industries, according to recent statistics, are constantly incapacitated by sickness, the average worker losing approximately nine days each year on this account. This "non-effective rate" for the great army of industrial workers in the United States barely suggests the total money loss to employees and employers. The lessened efficiency, the effects of reduced earnings in time of sickness, as well as the cost of medical attention, and the economic loss from deaths, swell the cost to industry and to the Nation to almost incalculable figures. That much of this loss is nothing less than preventable waste and that this waste can be largely reduced by a properly conducted system of governmental health insurance for wageworkers conclusions set forth in Public Health Bulletin No. 76, containing the results of a study of Health Insurance—Its Relation to the Public Health, just issued by the Public Health Service.

The preventive value of health insurance receives especial emphasis in this study. "Any system of health insurance for the United States or any state should at its inception have prevention of sickness as one of its fundamental purposes," says the bulletin. "This country should profit by the experience of European countries, where prevention is being recognized as the central idea necessary to health insurance, if health insurance is to attain its greatest success in improving the health and efficiency of the industrial population."

Such a system, it is pointed out in the bulletin, would—

1. Provide cash benefits and medical service for all wage earners in times of sickness at much less cost than is now possible. Adequate medical relief would thus be placed within the reach of even the lowest paid workers, who are most subject to ill health.

- 2. Distribute the cost among employers, employees, and the public as the groups responsible for disease causing conditions and afford these groups a definite financial incentive for removing these conditions. This can be done by means of small weekly payments from employees, supplemented by proportionate contributions from employers and government at a rate reducible in proportion to the reduction of sickness.
- 3. Become an effective health measure by linking the cooperative efforts of the three responsible groups with the work of National, State, and local health agencies, and by utilizing these agencies in the administration of the health insurance system.
- 4. Afford a better basis for the cooperation of the medical profession with public health agencies.
- 5. Eliminate the elements of paternalism and charity giving by making employes and the public, as well as employers, joint agents in the control of this fund.
- "A governmental system of health insurance," concludes the study, "can be adapted to American conditions, and when adapted will prove to be a health measure of extraordinary value."— N. Y. Med. Jour., 7-15-16.

# WHERE CHIROPRACTORS ARE MADE

Thos F. Duhigg, M. D., Des Moines, Ia.

As the season for legislation approaches I feel that the information I have concerning chiropractors should be put at the disposal of those interested in guarding the public health and maintaining respectable educational standards. The chiropractor's machine-made bills will be introduced into the legislature of every state where they have not received recognition.

Iowa schools of chiropractic probably graduate more than the schools of any other three states. Davenport is called the home of this sect; but Iowa does not recognize chiropractors, and they are liable to a fine of \$300 if they practice here. Obviously they swarm to other states, in some of which they are permitted by law to practice, and in others they are merely tolerated. It strikes us as peculiar that other states, some with high educational standards, should take large consignments of our "graduates" chiropractors who have graduated from schools which require no preliminary qualifications and which have no libraries or hospitals—graduates of schools without any standing inspected by no one, regulated by no one and conforming only to their own low estimate, which refers entire to financial and not at all to scientific standards.

After reading the reports of the inspector of the state of Pennsylvania, I believe the forty-seven other states will exclude the graduates of the Iowa schools of chiropractic the same as Pennsylvania has done. This report is remarkable in that it was made by one outside Iowa and in the interest of the health of the people of a far distant state. It is a testimonial to the care and judgment exercised by the officials of the great commonwealth of Pennsylvania in safeguarding the lives and health of those they are sworn to protect. Likewise it is an indictment of the officials in all those states which have accepted these graduates without first having made a careful inspection and ascertained the extreme wretchedness of the physical equipment of the schools and the mental equipment of their graduates.

The accompanying tabulation gives the reports on the three schools of chiropractic at Davenport, Ia., made by the inspector of the Pennsylvania Bureau of Medical Education and Licensure:

#### CHIROPRACTIC COLLEGES OF IOWA

A Tabulation from Reports of the Inspector of the Pennsylvania Bureau of Medical Education and Licensure.

	Davenport College	Universal College	Palmer School
Buildings		One, fair	Four
	old church	size	(erowded)
	None	None	None
Dispensary facil	No. ev. of	Ample*	
Admission regmts		Com. schl.	Com. schl.
Anatomy, disetg	Not taught		Only dogs
llistology	Ya aquin	few dogs Didaetic	dissected Very in-
		7-	
Embryology	Not taught	Vot taught	Not taught
Surgical anatomy	Not taught	Not taught	Not taught
Embryology Surgical anatomy Physiology	Didactic	Lectures	Lectures
2 117 101083	only	only	only
l'hysiologic chem	Not taught	Lectures	No equip-
		only	ment
Chemistry, inorgan-	Not taught	No practi-	No equip-
ie & organie		cal work	ment for
		done by	teaching
		students	
Pathology	*	*	*
Bacteriology Pharmacology Microscopic diag	Not taught	Not taught	No equip.
Pharmacology	Not taught	Not taught	Not taught
Microscopic diag	Not taught	Not taught	Not taught
Medicine Pediatrics	Not taught	Not taught	Not taught
Vary & mont die	*	*	*
Nerv. & ment. dis. Surgery	Vot taught	Not taught	Not tought
Anesthesia	Not taught	Not taught	Not taught
Gynecology	Not taught	Not taught	*
Eye, car, nose and	1100 budgiib	2.00 taagne	
throat diseases	Not taught	*	*
Dermatology and			
genito-urinary dis.	*	*	*
Class rooms	One	Two	Four
Clinical ampithe	One large		Two
Medical library			None
Microscopes	None	Two	Twelve
Hav. oil immer Reflectoscopes	Vana	One	One Yes
Stereoutieons	None	Yes Yes	Yes
Stereopticons Obstetrie manikin	Part of one		Yes
Maternity work	Not taught	Vot taught	Lectures
WOIR	rot taught	not taught	only
Charts	A few	Large sup.	
Models	None seen	Yes	Yes

"This subject is taught only from the chiropraetic standpoint, as it is related to certain spinal "lesions."

Regarding the individual colleges the inspector made the following statements:

Davenport College of Chiropractic:—
"Their alleged 'chemical laboratory' consisted of a table about 18 inches square, on which were six dusty bottles and three dirty test tubes. There were no records of work done by the students or of attendance at lectures or clinics."

Universal Chiropractic College:—
"They are not in any way equipped to give the character of instruction that would make their graduates safe advisers to the sick."

Palmer School of Chiropractie: "They pretend to give a course in obstetrics with no practical experience. A person

who assumed to practice on information gained from this course alone would be dangerously incompetent.

"Some of their professors are exceedingly ignorant. The 'professor' of chemistry alleged he taught the 'Widal test' chemically, but chemicals for even ordinary tests were not in evidence; those in evidence showed no marks of use, most of the bottles being still sealed.

"This institution is not physically equipped to turn out safe graduates."

A letter from Dr. J.M. Baldy, president of the Pennsylvania Bureau of Medical Education and Licensure, to whom the manuscript of this article was submitted, states as follows:

"The data quoted from our inspection is correct. I have gone over it myself and have submitted it to the inspector."

It is sufficient to say that the three schools are uniform on the following points: None has a library, a hospital, a laboratory that is worthy of the name, post-mortems or capable teachers. Add to this farce students without preliminary education beyond the mere ability to read and write and who "graduated" after a course of only one year in one of these "colleges," and we have an individual who is hopelessly handicapped for life, one who cannot in any sense be considered a safe adviser of the sick.

These reports set forth with painful exactness and embarrassing detail. Any patriotic legislator will be justly incensed at the thought of taking the intellectual refuse from these schools who are not permitted to practice in Iowa, to be used in his own state as the guardians of life and health. They should not be given legal recognition to practice in any state. If they are permitted to practice, it should be only after they have obtained the same professional and preliminary training that is required of physicians, which in Iowa is a high school education and two years of college work plus four years of professional training in a medical school that maintains a standard satisfactory to the licensing board.

# Miscellaneous Announcements and Communications

Nov. 18, 1916.

Publishers W. Va. Med. Jour.,

Huntington, W. Va.

Gentlemen:

You are no doubt interested in the work the Salvation Army is doing at home and abroad, and we are writing to inquire if you would not insert the following advertisement in the next issue of the Journal as a donation to our work among the very needy classes in India:

#### MISSIONARY HOSPITAL WORK IN INDIA

Qualified medical man required who is in sympathy with religious work. Passage paid and small monthly allowance made. Three years agreement. Apply sending copies of testimonials.

COMMANDER EVA BOOTH,

Field Dept. Salvation Army Headquarters, 122 W. 14th St., New York City.

Your help in this matter will be very

greatly appreciated.

Very truly yours,

Evangeline Booth.

Commander.

Nov. 17, 1916.

To the Editor W. Va. Med. Jour.,

Huntington, W. Va.

Dear Sir:

The National Board of Medical Examiners held its first examination from October 16 to 21 in Washington, D. C.

There were thirty-two applicants from seventeen states, representing twenty-four medical schools, and of these sixteen were accepted as having the necessary preliminary and medical qualifications, ten of whom took the examination.

The following men passed:

Dr. Harry Sidney Newcomer, Johns

Hopkins University.

Dr. William White Southard, Johns Hopkins University.

Dr. Orlow Chapin Snyder, University of Michigan.

Dr. Thomas Arthur Johnson, Rush Medical School.

Dr. Hjorleifur T. Kristjanson, Rush Medical School.

As this will be of some general interest, we would appreciate a notice of this examination in your journal.

Very truly yours,

J. S. Rodman, Secretary.
P. S.: The second examination will be held in Washington, D. C., June, 1917. Further information may be had by applying to Dr. J. S. Rodman, Secretary, 2106 Walnut St., Philadelphia,

### NATIONAL MEDICAL EXAMINA-TION DAY

Nov. 6, 1916.

Dear Doctor:-

We would like to interest your medical society in the campaign which we are conducting for periodic physical examinations under the name, "National Medical Examination Day," to be held this

year on December 6.

The object of Medical Examination Day is to get everyone, whether sick or well, to go to his family physician and arrange for a complete physical examination either on December 6 or as near to that date as convenient. We believe that in this way many defects and impairments can be discovered which if corrected, will help greatly in the prevention of tuberculosis. In this connection we call your attention to the enclosed circular which we have prepared for the movement.

We also enclose a blank prepared by the Life Extension Institute, which we think may be helpful in suggesting the type of examination preferred. We will appreciate it if you will bring this letter officially and personally to your medical society or to your individual friends in the profession, and will do all you can to interest them in the National Medical Examination Day. We can furnish these circulars to you at cost price, the blanks for \$11.00 per thousand postpaid, and the circulars for \$2.50 per thousand postpaid.

We venture also to suggest that your society officially take action and announce through the newspapers and otherwise that any member of the society will make a thorough examination between certain dates for whatever sum you may fix. This plan was adopted in certain communities last year with great success, and with no reflection on the profession, but rather with a distinct financial and moral benefit.

We shall be pleased to assist in any way to make National Medical Examination Day a success in your community.

Very truly yours,
Chas. J. Hatfield,
Executive Secy.

NEW PRESIDENT ELECTED BY FRANK S. BETZ SURGICAL INSTRUMENT HOUSE.

Considerable interest has been aroused in medical circles by the announcement of the election of Mr. Louis R. Curtis, for eighteen years Superintendent and Secretary of St. Luke's Hospital, Chicago, as president of that institution.

Mr. Curtis was born in 1865 in Philadelphia. He obtained his college training at Stevens, graduating as Mcchanical Engineer. In 1889 he entered the hospital field as Assistant Superintendent of the New York Hospital. During that period he attended medical college, not with an idea of practicing, but to better fit himself for his hospital work. From the New York Hospital, Mr. Curtis went to the General Hospital Elizabeth, N. J., staying there for about one and one-half years. From there he came to St. Luke's Hospital, Chicago, as Superintendent and has been the dominating figure in that institution, both as superintendent and secretary, until recently and is now vice-president in charge of the operation of the institution. During the last years Mr. Curtis has also been prominent as a consulting engineer, especially among hospitals, and has introduced many advanced and successful ideas in hospital construction and organization. His wide experience among the hospitals and medical men, coupled with his technical training, makes him peculiarly well fitted for his new position.

Mr. Frank S. Betz, under whose control the concern bearing his name, as-

sumed its present proportions, will continue with the company as chairman of the Board of Directors, and give the organization the benefit of his long experience and training. His many and diversified interests are given as reasons for his retiring as active head of the company—Adv. Ann.

The European war, which has so profoundly affected our industries, has had a considerable influence in increasing the patronage of American health resorts. Many Americans who usually go to foreign spas, have visited home institutions instead. Furthermore, numerous residents of other neutral countries have come to the United States in search of health, who would in other conditions have gone to Carlsbad, Hamburg or the hundred other health headquarters of This is particularly true of Europe. wealthy residents of Central and South America. In the last year the Battle Creek Sanitarium has had about 200 patients from abroad. The number will probably increase, for in the last three months the institution has had letters of injuiry from prospective visitors residing in the following lands: Cuba, Caiman Islands, Mexico, San Salvador, British Guiana, Venezuela, Colombia, the Argentine, Urugury, Peru, Honduras, Italy, Switzerland, Russia, England, Germany, India, Japan, the Belgian Congo and Australia.—Adv. Ann.

## SEVENTH ANNUAL OBSERVANCE ON DECEMBER 3 OR 10.

More than 100,000 churches and other religious organizations are expected to observe Tuberculosis Sunday on December 3 or 10, this year, making the seventh annual participation of religious bodies in an intensive campaign to educate the public on the subject of tuberculosis.

Two Sundays have been designated by the National Association for the Study and Prevention of Tuberculosis in order that the churches may choose the one which will best fit in with their program of services. These dates come at the beginning and end of Tuberculosis Week, which is conducted under the direction of the National Association. For those worshipping on Saturday, December 2

or 9 have been set aside.

The fact that Tuberculosis Sunday is an undenominational and non-sectarian movement is being emphasized in order that all possible religious groups may be reached. In addition, many social, fraternal and civic organizations are planning to hold meetings on one of these days or at other times during Tuberculosis Week. Fifteen hundred state and local anti-tuberculosis associations in every state in the Union are assisting in arousing enthusiasm and organizing the campaign so that on these days the subject of tuberculosis will be presented to the greatest possible number of people.

It is estimated that last year 2,000,000 pieces of literature were distributed during Tuberculosis Week, a half million of which were sent out by the National Association. This year the Association has prepared a sermon on "Indifference to Tuberculosis' and a pamphlet entitled "Talking Points on Tuberculosis." A prayer written especially for Tuberculosis Sunday by Prof. Walter Rauschenbush of the Rochester Theological Seminary will also be distributed. Copies of these pamphlets and others relating to the week's campaign may be obtained by writing to The National Association for the Study and Prevention of Tuberculosis, 105 East 22nd St., New York City.

## Society Proceedings

### CABELL COUNTY SOCIETY

Cabell County Medical Society met in Hotel Frederick. Called to order by President Keatley at 8:30 p. m. Secretary being absent Dr. E. B. Gerlach was chosen Secretary pro tem. The reading of minutes was dispensed with. Members present: Yost, Kessler, Fitch, Vinson, Prichard, Hawes, Reynolds, Hunter, H. P. and E. B. Gerlach, Keatley.

Case reports were given by Drs. Fitch

Hawes, Prichard and Kessler.

Dr. Vinson brought up for discussion the plan of the Rotary Club for assisting needy persons requiring surgical attention. After discussion Dr. Hunter moved that the Secretary be directed to write a letter to the Rotary Club expressing our appreciation of the motive prompting their plan and to advise them that the members of the Cabell County Medical Association would render services gratis to those persons in need. This motion was seconded and carried.

Dr. Yost brought up the question of organizing clinics to be held every two or three months. After discussion Dr. Hunter moved that a committee be appointed to take up the consideration of establishing clinics and report at the next meeting. Carried. Drs. Kessler, Fitch, Yost and Prichard were appointed on

this committee.

Dr. Vinson suggested that the members increase the fees, due to the increased cost of living. Discussion but no action taken.

Dr. E. B. Gerlach reported that the city commissioners would place signs for the hospital zones if the hospitals would bear the expense.

Adjourned.

### MERCER COUNTY SOCIETY

The Mercer County Medical Society held its regular monthly meeting in the City of Bluefield, W. Va., Saturday, October 21, 1916.

The staff of the Bluefield Sanitarium gave a clinic in the afternoon beginning

at 2 p. m. as follows:

Inguinal Hernia, W. H. St. Clair, operator; T. H. Becker, assistant; W. C. Slusher, anæsthetist.

Post Operative Ventral Hernia, W. II. St. Clair, operator; Becker and Slusher, assistants; Wm. Hearne, anæsthetist.

Goitre, Adenoma, Fox and St. Clair, operators; O. S. Hare, assistant; T. H. Becker, anæsthetist.

becker, anæsmenst.

Hysterectomy for Fibroid, Fox and St. Clair, operators; Wm. Hearne, anaesthetist.

Tonsils and Adenoids, C. T. St. Clair, operator; T. H. Becker, assistant; Wm. Hearne, anæsthetist.

### CASES SHOWN

Double congenital dislocation of hip, by Dr. Fox.

Tumor of the Liver, by Dr. Fox.

Plastic Case of Hand and Head, by Dr. Becker.

Thirty-three clear X-ray Plates, shown

by Dr. Becker.

Demonstration in laboratory of Wasserman and Nagouchi systems of complement fixation test, etc., by Miss Alice Hare.

At spare moments Dr. Fox read and explained the histories of some very interesting medical cases, which were instructive to us all.

At 6:30 p. m. we went to the Commercial Hotel and were entertained by Mrs. J. F. Fox and W. H. St. Clair at a

delightful eight-course dinner.

At 8:30 p. m. the society convened in the dining room with Dr. E. E. Vermillion presiding. The following doctors were called upon and made interesting talks: S. S. Gale and T. D. Armstead of Roanoke, Va.; A. H. Carr of New Hope, W. Va.; S. R. Holroyd of Athens, and E. H. Thompson of Bluefield.

The other doctors present were as follows: Fox, W. H. St. Clair, C. T. St. Clair, Becker, Slusher, Weltner, Gott, Fairfax, H. G. Steele, McSparrin, Hearne, Cornett, Pyett, Thompson, Frazier, McGuire, Hare, U. Vermillion, Bird, Todd, Peters, J. R. Vermillion, Tanner, Hoge, Vass, H. B. Stone Roanoke, Va.; Stiff, Graham, Va.; McElrath, D. P. Scott, Ashland, W. Va.

Dr. H. B. Stone of Roanoke, Va., read us a very complete and instructive paper on Maxillary Sinusitis with report of seventy-five cases. We hope to read Dr. Stone's paper in the State Journal in the near future, which will give you a much better idea of its instructive substance than I could attempt to picture to you here from memory. The discussion was rather interesting and in part was as follows:

Dr. C. T. St. Clair said infected Anthrums are frequently overlooked, are called catarrh and allowed to run on. One sided catarrh with a discharge from that same side of the nose one can easily make a diagnosis of infected anthrum in most cases. In a chronic pollapoid anthrum a radical operation is necessary. In some cases the bone is so much thick-

encd that it is impossible to do the operation under local anæsthesia. He thanked Dr. Stone for bringing this valuable subject before the Mercer County Medical Society, and complimented him very highly on having a complete and well understood paper.

Dr. Frank Pyett of Tip Top, Va., said, how would a doctor out in the country, with a pine torch at night, be able to make a diagnosis of infected Anthrum? When I do find them I pull out a tooth and put in a gauze drain and they get well and you specialists would have them (the patients) coming back to your office indefinitely.

Dr. C. T. St. Clair: "They don't get well and can't be cured in that way."

Dr. Pyett: "They get well for general practitioners right away but for you specialists they are months getting well."

Dr. A. D. Wood: "Dr. Stone are you able to irrigate the anthrum without removing the inferior turbinated bone?"

Dr. Stone: "I insert an instrument into the anthrum and irrigate without removing the lower turbinate."

Dr. Steele said he was impressed with the idea of this one-sided catarrh along with tenderness and a purulent discharge which makes it easier for the general practitioner to make a diagnosis. He also recommended that each of us provide ourselves with one of these little nasal electric light outfits, which will be a great help in making a diagnosis of these Maxillary Sinus cases. He congratulated Dr. Stone for bringing this subject before the society and making it so clear.

Dr. McElrath said he looks for a cavity where a tooth has been removed or for a decayed one that he can extract without inconveniencing the patient in the least, punctures through and drains the cavity with gauze which he ties to the adjacent tooth. A good way to drain this cavity on account of the position of the opening, is to lean out over the bed and while looking under it blow the nose right hard. As an irrigating solution he use one to two drops of carbolic acid to the ounce of warm water.

Dr. St. Clair: "A favorite irrigating solution in my hands, which prevents pain, is equal parts of iodine cholride, sodium bicarbonate, sodium borate, fif-

teen grains of this mixture to the pint of warm sterile water. And this is to be used often enough to keep the cavity

from filling up."

In closing the discussion Dr. Stone said he was not able to do some of these operations under local anæsthesia, but by using strong solution of cocaine and adrenalin, or sometimes even using the crystals of cocaine it makes it possible to operate on most of these cases. It is more difficult to do it under a general than a local anæsthetic. Twenty-five per cent. of antrum infections are due to infection from the teeth. Why drain the purulent discharge into the mouth when you can drain it through the nose?

Now in regard to the position in draining. It is true that the opening into this cavity is some distance up the side of its inner wall while the patient is in the upright position and in most of the cases the mucosa is hypertrophied which closes the opening, therefore, the best way to drain this is to irrigate it often enough. The pain is due to the filling

up of the anthrum.

Dr. McElrath said by percussion around the edge of the malar bone the least tenderness in the cavity could be detected.

Dr. Bird made a motion that the rest of the program be postponed. This was seconded by Dr. Cornett and carried.

Dr. William Hearne was elected a

member of the society.

The committee on Dr. Wood's resolu-

tion was continued.

The following bill was allowed: Daily Telegraph Printing Company, Sept. 20, 150 circular letters, \$3.25; October 18, 150 circular letters, \$3.00.

Adjourned at 9:50 p. m.

H. G. Steele, Secretary.

### MONONGALIA SOCIETY

The Mononghalia County Medical Society met on Tuesday, October 17, 1916. Report of clinical cases: Dr. Wade reported a case of forceps delivery, in which the cord was wound about the neck and in a collapsed condition, the child dead. Dr. Maxwell reported two cases of severe burn from kerosene oil, both of which resulted fatally.

Dr. C. B. Wylie read a paper entitled: "Tuberculosis in its Relation to the Eye, Ear, Nose and Throat." This very instructive paper considered the more common forms of tuberculosus involvement, their diagnosis and treatment. The paper was discussed by Drs. Maxwell, Wade, Brock and Arkin.

AARON ARKIN, Sccretary.

### State News

Dr. A. L. Peters of Fairmont, has returned from New York where he spent over a month at the Polyclinic.

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Dr. F. A. Fitch of Huntington, attended the Clinical Congress of North American Surgeons recently held in Philadelphia. He also spent several weeks in the east attending clinics on surgery.

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The Cabell County Medical Society of Huntington, at a recent meeting named a committee to confer with the city commissioners relative to establishing hospital zones, in which all unnecessary noises will be rigorously prohibited. Such hospital zones are as essential as school traffic zones.

A number of free trachoma clinics in West Virginia are proposed to follow the one recently held at Williamson, Mingo County. Reports to the health department indicate that it was a success and further development of the disorder is thought to be improbable in that vicinity.

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Dr. B. M. Ricketts of Cincinnati, has presented the town of Proctorville, O., with a five hundred dollar library.

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Dr. Karl C. Prichard of Huntington, spent some time in November in the east attending clinics. He also took in the Clinical Congress of North American Surgeons at Philadelphia.

Dr. L. II. Clark of Kyle, was one of the prominent Masons who attended the Grand Lodge of Masons held in Huntington the week of November 12.

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Born to Dr. and Mrs. Ray Bobbitt of Huntington, a daughter on October 27. Congratulations are extended to the parents.

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The following announcement has been received by a number of physicians throughout the state:

Dr. and Mrs. Thomas Hood announce the marriage of their daughter, Agnes Fleming

Mr. Herman Arthur Gronemeyer on Wednesday the twenty-fifth of October

ninetcen hundred and sixteen at the First Presbyterian Church Clarksburg, West Virginia

Dr. F. L. Round of Wilcoe, formerly of Huntington, attended the Masonic Meeting held in the latter city in November.

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Dr. T. W. Moore of Huntington, at tended the annual meeting of the Southern Medical Association held in Atlanta, Ga. Dr. Moore was elected chairman of the eye, ear, nose and throat section. He read a paper on the "Operative Treatment of Chronic Frontal Sinusitis."

On Tuesday evening, November 14, the visiting staff of the Ohio Valley General Hospital in Wheeling attended a dinner upon the invitation of the hospital, and organized for clinical study work during the coming winter. The work in no way interferes with the meetings of the Ohio County Medical Society. It is intended that this shall be a demonstration clinic at which the most interesting work which each member has under observation will be gone over.

As a matter of hospital news it is of interest to us to know that this very progressive hospital is now running to its full capacity. A large flat opposite to the hospital has been secured as a home

for their sixty-three nurses. This information comes to us from the Superintendent, Mr. P. O. Clark.

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Among the West Virginia surgeons attending the Clinical Week in Philadelphia were: Drs. Akerman, Caldwell, Reed, Schwinn and Noome of Wheeling; McDonald and Johnson of Fairmont, Scott and St. Clair of Bluefield, Cooper of Hinton, Ogden of Clarksburg and Schoolfield of Charleston.

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Drs. G. C. Schoolfield, P. A. Haley and H. D. Hatfield of Charleston; J. W. Mc-Donald of Fairmont, and J. R. Caldwell of Wheeling were elected to membership in the American College of Surgeons.

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Drastic steps have been taken by the College to break up the evil of the secret splitting of fees. One of the Fellows of the state of Ohio was publicly expelled for committing this offense. His name was read publicly and will also, it is understood, be published in the official journal of the Association.

Drs. T. E. Peery and J. B. Kirk spent ten days in Newfoundland in November

### Medicine and Surgery DRS. ENSLOW AND RADER

hunting big game.

### **MEDICINE**

Chas. D. Aaron, writing in the Buffalo Medical Journal on the treatment of chronic intestinal stasis, advises the use of enemata of olive or cotton seed oil. He suggests that one-half to one pint be injected into the rectum and retained as long as possible—preferably over night. The treatment, which should extend over several weeks, should be given at first every day and gradually decreased in frequency to twice a week. If putrefaction is an attendant factor, the carbohydrate content of the diet should be increased and the protein diminished. At the same time Bulgarian bacilli should be given by mouth, making sure that only a virulent culture is used.

An excellent hand lotion may be made by using equal parts of witch hazel, glycerine and strained lemon juice. This is best applied at night when retiring.

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Friedenwald and Leitz submit a second report on the use of scarlet red in peptic ulcer (Bulletin of the University of Maryland School of Medicine, October, 1916). They advise its use as an adjuvant to the rest and dietetic treatment already long in vogue. Their results in a series of eighty-three cases are sufficient to warrant further use of the drug in this stubborn condition. We

"According to our observations scarlet red may be administered in doses of from 15 to 20 grains three or four times daily, without producing the slightest toxic effect, provided, a pure preparation be employed (Biebrich). It is best given in 7½ grain cachets, two of which may be taken three or four times daily before meals. It may, however, be administered in much larger doses, and only after very large continuous doses can the odor of camphor be detected in the urine. Not the slightest toxic effect of this drug could be observed in any instance. From our experience with this remedy in the treatment of peptic ulcer, we believe we

1. Scarlet red still remains a useful adjuvant in the treatment of peptic ulcer and while it cannot by any means replace the usual forms of treatment, when administered in conjunction with them, it adds materially to the effectiveness of the cure.

are justified in drawing the following

ness of the cure.

conclusions:

2. It is of great help when administered in the ambulatory cases, the effect being even more favorable than the usu-

al remedies, such as bismuth.

3. Inasmuch as scarlet red in no way interferes with the administration of other remedies, such as the alkalies or atropine, these may be administered when indicated at the same time and in fact, the effect of the combination is at times most beneficial."

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James Kenan (Southern Medical Journal) advises the use of iodine in typhoid.

His theory is that nascent iodine in the blood stream will destroy the typhoid bacilli floating therein. The method he employs is as follows: At 7 a. m. give thirty grains of potassium iodide. One hour later give half an ounce of freshly prepared chlorine water in lemonade. Repeat the chlorine water each hour until three doses have been given. One hour after the last dose of chlorine water, give ten grains of potassium iodide. Repeat each day until the temperature is normal. In children the dose should vary according to age. The usual symptomatic treatment should be given.

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Atropine is peculiarly useful in gastric disturbances with hypersecretion, pylorospasm and pain incident thereto. It promptly relieves the pain and distress, checks the pylorospasm, and lessens the amount of the gastric juice as well as the acidity.—Ex.

## Surgery

TREATMENT OF UTERINE CANCER.—Allmann (Zentrabl. f. Gynaek., No. 6, 1916) advises in place of hysterectomy the ligature and division of the internal iliac arteries through an abdominal incision. This treatment is based upon the idea that cancer cells require for their growth an abundance of oxygen, and that this is withdrawn by ligature of the arteries. In combination with this procedure he To facilitate the reemploys radium. moval of the broken down masses of the tumor the author recommends peroxide of hydrogen followed by application of a dusting powder, a mixture of calx chlorata and bolus alba being preferred if the discharge is very purulent. Internally, he gives potassium iodide and neosalvarsan. Of twelve patients thus treated seven were improved, but as none of the cases dates back more than one and one-half years it is impossible to tell whether cures can be effected. The results are claimed, however, to be superior to those from any other method, particularly in advanced cases.—Ex.

THE CURETTE.—This popular little instrument which is in the armamentarium

of nearly every practitioner and is familiar to every medical student, looks so innocuous that one can hardly imagine that any risks attend its use. But the prevailing notion that one can can curette the uterine cavity as well as another is not shared by the gyneeologist, who recalls fatal results that followed the simple operation in pre-aseptic days and eases of perforation of the organ in his own practice, to which he looks back with no little chagrin.

It is one thing to use the curette and another to know when to use it. How many of us during a routine curettement have a clear mental picture of the mechanical insult to the endometrium and the reparative process which follow?

That more harm was not done by the older generation was doubtless due to the fact that Thomas had popularized the blunt curette with the flexible shank. and that it was a routine practice to apply iodin and carbolic acid to the raw surface afterward. We did not understand the reason why iodin was so valuable as a prophylactic, knowing only its astringent and hemostatic action. have often thought that the uterus has been under a special Providence, so tolerant has it been of the introduction of unclean instruments. But, after secing several patients die of septic peritonitis, I was so impressed with the possible risks that I always laid down the rule to my students: Never introduce any instrument into the uterus except under the same aseptic precautions that you would adopt if performing an operation upon the organ.

But it is superfluous to dwell upon aseptie technic, which is so familiar. As I said before, it is far more important to know why one curettes than how he does it. The latter is easily learned by the tyro; the former is the result of long experience and observation—in pathology, as well as in gynecic surgery.

It seems to me that the intelligent use of the sharp curette (which is the only effective kind) is a true index of modern surgery, or, in fact, of progressive medicine in general. Formerly we were satisfied to treat symptoms; now we look beyond them to the *cause*.

The old saying, "When in doubt, open

the abdomen," is now recognized as a coarse, mechanical methow of trying to cover up one's ignorance. Unfortunately when the operator picks up a curette he is apt to apply this outworn ad-If he has any doubt (which is rarely the case) he eurettes whenever he divulses the os internum for stenosis or anteflexion and as a preliminary step before trachelorraphy or amputation. Indeed it is only after a vigorous campaign of protest on the part of specialists that the cautious practioner has learned to withhold his hand in eases of acute endometritis, whether septic or specific, and to give the phagocyte a chance. The eurette has been a veritable fetish and it is time to stop and look at all sides of the question.

The old idea that uterine hemorrhage (typical and atypical) and sero-purulent or purulent, discharge were positive indications for the vigorous use of the sharp eurette is a relic of the mechanical theory of the older school, to "endometritis" was the explanation of these symptoms and the ablation of the "hyperplastic tissue" the cure of the "disease." Clinical and pathological studies have taught us that the explanation is based entirely on apparent rather than hidden causes. As a matter of faet there are so many eases of uterine hemorrhages that are not relieved by local treatment that we are beginning to be more careful about our promises of cure after curettement.

I have been amazed to see how many practitioners resort to the eurette in cases of oligo- and amenorrhœa (true homeopathie treatment;) without stopping to think that the trouble is not with the endometrium at all, and how uniformly they promise to cure an obstinate leueorrhea with the eurette without investigating its bacterial origin. When in doubt don't curette is a safe rule. Doubtless the diagnostic use of the instrument is its most valuable, for one should always exclude intra-uterine conditions before looking for general, or so-called "functional" causes of mono- and metrorrhagia, but to attack the endometrium roughly with the sharp curette merely as an experiment is unscientifie and is sure to bring the operation (and gynecology as a science) into deserved disrepute. We all know this, because we all fail to relieve our patients as we

have promised.

If we find to our surprise, after divulsing the cervix in an unmarried woman with obstinate menorrhagia, that the endometrium is normal, let it alone. cause-ovarian, There is some occult faulty innervation, hematopoieticwhich we have not discovered. We shall not help her by curetting. That is only common sense, but we do not seem to adopt it. As soon as the average man introduces a curette into the uterus he is unable to resist the temptation to scrape. Moreover, even when we have removed a teaspoonful of "granulations" we frequently fail to relieve the bleeding, because we have not attacked cause.

All this seems trite, but it is worth remembering, for it has been learned only as the result of many failures and

promises unfulfilled.

The elder Flint never uttered a wiser caution than when he insisted on the constant observance of the old dictum: Non nocere.

Let us not regard the curette with the "familiarity that breeds contempt," but with more respect as a two-edged tool that requires careful handling.—H. C. Coe, A. M. Jour. Surg., Nov. 1916.

INDICATIONS FOR OPERATIVE TREAT-MENT FOR GALLSTONES. Patry expatiates on the importance of distinguishing between the various factors causing disturbances from the presence of gallstones. Some require operative measures and others do not. On the whole, he declares, the general treatment of lithiasis is medi-Operative treatment should be reserved for cases of acute angiocholitis; acute cholecystitis when the symptoms indicate that the infectious process is spreading; and a stone impacted in the common bile duct when the liver shows signs of alteration. In all other types of gallstone trouble the decision whether to operate should be left to the patient. One can count almost absolutely on a complete cure and with the minimum of risks if the general condition is good. -J. A. M. A.

RUPTURE OF CAESAREAN SCAR. Sixtythree published cases are analyzed by Findley. He is convinced that a perfectly healed cæsarean wound may be relied on to resist the forces of labor, but in view of the fact that the integrity of the wound is an unknown factor in all cases, he says, we are constrained to exercise the utmost caution in the conduct of every case in pregnancy and labor following cæsarean section. Failure to secure perfect healing is accounted for by departure from the principles of suture proposed by Sanger and by septic infection of the uterine wound. The possible existent of latent gonorrheal infection may defeat the most painstaking efforts to secure perfect wound healing. When cæsarean section has been followed by a fever course the uterine wound should be regarded as insecure in event of a subsequent pregnancy, and should call for a repeated casarean section at the onset of labor. Sterilization and hysterectomy should replace conservative cæsarean section when infection is known to exist. The alternative invites faulty wound healing, if not more disastrous results. Transverse fundal, extra-peritoneal and cervical incisions have not lessened the liability of rupture in subsequent labors, but, on the contrary, have probably increased the hazard. The possibility of rupture of the scar following cæsarean section does not justify sterilization, but rather calls for the exercise of masterly control in event of a subsequent pregnancy. All such cases should be hospital cases and labor should be anticipated by timely repetition of cæsarean section at the onset of labor if the uterine wound is known to be defective or if some cause for obstruction to the delivery of the child through the natural passage exists. Version, high forceps, uterine tampons, hydrostatic bags, and pituitary extract should never be employed in the presence of a cæsarean scar.—J. A. M. A., 10-7-16.

# The West Virginia Medical Journal

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ECTOPIC GESTATION WITH SPE-CIAL REFERENCE TO TREATMENT

X. O. WERDER, Pittsburgh, Pa.

Read at Annual Meeting West Virginia Medical Association, Wheeling, May, 1916.

Extra uterine pregnancy which up to thirty years ago was considered a rare freak of nature, has through better knowledge of the condition, and especially through our ability of promptly recognizing it, become quite a frequent occurrence. In spite of the voluminous contributions to the literature in recent years, however, many features of this interesting condition are still of a debatable character. Even the treatment, which to a superficial mind would seem to be a simple matter in view of the old surgical axiom: "Stop the hemohhrage by tying the bleeding vessels," is by no means a closed chapter. On the contrary, there are so many questions to be considered in the skillful management of this often so trying surgical affectation, that at times the finest judgment is required to decide the proper action necessary, especially in choosing between immediate surgical intervention and the watchful waiting policy.

In order to initiate an intelligent course of treatment in any condition, a clear understanding of the developments and changes taking place in the organ involved is necessary. The organ requiring our special attention in this connection is the Fallopian tube, which with rare exceptions is the seat of conception and development of the ovum until its death. Ovarian pregnancy is of such rare occurrence compared with tubal pregnancy that it may safely be ignored from a practical standpoint, and primary abdominal pregnancy, cases of which have been reported at various times, must be regarded at least as very doubtful, as none of them are entirely above suspicion; they all probably had their original scat in the tube. If it is true that the impregnated ovum requires as its nidus mucous membrane lined with cylindrical epithelium, which can be found only in the tube and Graafian follicle, the peritoneal surface can at once be eliminated as a structure to which the ovum is likely to become attached.

The tube for obvious anatomical reasons is poorly fitted as a receptacle for the impregnated ovum. It is capable of only slight decidual reaction; the decidual membrane or capsule remains thin and delicate and consequently serves as

a very weak protection to the embedded ovum. Under the increasing pressure of the growing embryo this thin capsule presents but little resistance, especially as it is apt to be still more weakened and damaged by the invading chorionic villi, giving way usually at a very early period and under these influences causing rupture of the capsule into the lumen of the tube. Or the pressure upon the stretched tubal wall aided by the erosion of the wandering trophoblast cells, may perforate the tubal walls, including the serous coat, producing a rupture into the peritoneal cavity. In the first case with rupture of the decidual capsulc, hemorrhage into the tubal lumen takes place, which, if slight may be retained, causing a hematoma in the cavity in which the ovum lies, the latter changing into a mole; this condition is known as a tubal mole. More frequently, however, the blood oozes out through the fimbriated end into the peritoneal cavity, and when in small quantities, may collect around the fimbræ and outer portion of the tube, especially if the latter is adherent, forming a peri-tubal hematoma. This process is usually known under the term of tubal abortion which, however, is incorrect, inasmuch as the entire product of conception is very rarely expelled from the tube into the peritoneal cavity.

Rupture of the tube is usually more serious in its results, as the hemorrhage is more profuse, its source being not only the damaged ovum but also the torn maternal blood vessels. These are the cases that may lead to rapid exsauguination, and the fatal terminations occurring in ectopic gestation are usually of this character. The tubal rupture may be acute and sudden, coming on without any warning whatever or it may be preceded by a capsular rupture, which by the increased tension created through the accumulation of blood in the ovisae and tube, and aided by the destructive action of the trophoblast cells in the tubal walls, may cause a subsequent complete rupture through the entire tubal wall. Hence, the internal rupture of the capsule into the lumen of the tube, the socalled tubal abortion, may later on be followed by the external rupture through the tubal wall. This accounts for the

recurrent attacks which are often noted; they may also be accounted for by the fact that different layers of the ovisac or tubal walls may give way, one at a time, until complete perforation has resulted, these stages following each other at intervals varying from hours to days.

In the more or less profuse hemorrhage necessarily accompanying complete rupture of the tube and at times also the internal rupture of the capsule, the blood is poured into the free peritoneal cavity, but gradually gravitates to the lowest level in the abdominal cavity, the pelvis, where it slowly coagulates forming a blood tumor, which from its location is usually called a retrou-utcrine hematocele. This may not only fill up the pelvis, but may especially in the more advanced cases, extend into the abdomen as far as the umbilicus, when it becomes surrounded with coils of intestines which in time form a protecting wall around it. When no such protecting wall exists, nature covers over the exposed clot with lymph which after a time becomes organized, forming a pseudo-membraneous sac around the more or less solid blood mass.

The death of the embryo and the formation of the tubal mole, hematoma or hematocele, unfortunately do not always mean the last stage of this process. Not only are infections of these large hematoceles not rare, seriously menacing the safety of the patient, but fatal hemorrhages have not infrequently been observed weeks after the subsidence of all serious symptoms, when a safe and smooth convalescence had apparently been reached.

In the writer's experience termination by internal rupture through the capsule seems most frequent, which accounts no doubt for the many cases coming under his observation which at no time seemed to experience any serious or alarming symptoms. Some of these did not even require rest in bed and not a few came to the office with a distinct blood mass in the pelvis, even though they had practically never been off their feet. There is therefore the widest possible range between this class of cases and those that succumb to fatal hemorrhage before a surgeon is able to reach their bedside.

It is therefore quite apparent that the typical well known text-book cases which are suddenly seized with severe cramps accompanied by shock and collapse and which are followed by death unless prompt surgical intervention checks the bleeding, are quite exceptional. My own experience is that few die immediately as a result of hemorrhage from rupture. When this occurs pregnancy is usually further advanced, to two or three months or longer, while in the majority of cases pregnancy is interrupted before or at six to seven weeks. In a personal experience covering considerably over two hundred cases the writer met only one where a fatal termination took place before an operation could be per-This patient was seen within an hour of the onset of the tragic symptoms, and in spite of every effort on the part of the attending physician who was at the scene almost immediately, she was pulseless and moribund, not reacting in the least to stimulation, and died within half hour after my arrival. Another patient seen by my assistant some distance from the city late in the evening, though badly shocked, began to react promptly and showed every evidence that bleeding was stopped and her condition im-On account of the very unproving. favorable surroundings it was thought best to defer operation until the patient could be moved to the hospital. No immediate danger being apprehended, she was advised to be brought to the hospital on the first train in the morning. Two or three hours later hemorrhage evidently returned and proved fatal. These are the only cases of which I have any personal knowledge, which succumbed without operation. In most cases hemorrhage has ceased by the time the physician has reached the bedside and under appropriate treatment reaction and improvement follows. Repeated hemorrhage coming on within a few hours, days or sometimes weeks, constitutes a very serious menace and causes death more often than primary rupture.

As I have stated before, the most careful judgment is required in determining whether immediate operation is indicated or whether delay gives the patient a better chance for life. I personally be-

lieve that if we follow the advice given by a large number of surgeons to operate immediately in all cases, no matter how badly shocked or how nearly exsanguinated the patient, we will sacrifice many lives, which with a few hours or days of delay with careful and judicious treatment might have been saved. When the patient's surroundings are favorable and her condition safe for operation, immediate surgical intervention gives, of course, the best results and delay would therefore not be excusable.

It is the writer's experience that cases of extra-uterinc pregnancy before gestation is interrupted and while the ovum is undergoing its normal development, rarely come under the surgeon's observation. Could the operation be performed at this stage, all anxiety and danger could be averted, as the operation could be performed under the most ideal circumstances. That this is not done except in rare instances is not due to any faulty diagnosis, but to the fact that on account of a total absence of symptoms at this stage, there are no reasons inducing the patient to seek surgical advice. If she has symptoms at all they are those of ordinary pregnancy which require as a rule no treatment. Cases operated upon with the diagnosis or unruptured tubal pregnancy have, in my experience, almost invariably turned out to be either tubal mole in a closed tube or a decidual rupture with a small amount of hemorrhage in the abdominal cavity. In either case pregnancy has been interrupted and terminated without any serious symptoms, though it is true that more serious symptoms, even a fatal tubal rupture may have been averted by this timely operation. The first symptom of ectopic gestation which is pain, usually indicates death and destruction of the embryo and for that reason operation before this stage has arrived are rare exceptions.

It is therefore with the cases after rupture and its effects and complications that the surgeon has, in practically all cases, to deal. As soon as the diagnosis is made, which in the majority of cases presents very little difficulty, the question foremost in our minds is to determine whether bleeding is progressive or under control. If the pulse becomes

more rapid and feeble, the features and finger tips more blanched with increasing weakness, restlessness and dysponea, the abdomen more distended and tender, there is every reason to assume that the hemorrhage is continuing. Under such circumstances preparation for immediate operation should be made if sorroundings and patient's condition warrants such a procedure. Unless a hospital is in close proximity, moving the patient in such an emergency would be hazardous and the patient's chances considerably diminished thereby. It would seem much more preferable in the patient's interest to do the operation at the house with as little delay as possible. Laparotomy should be performed under a minimum amount of anesthesia. if necessary supplemented by infiltration of the abdominal wall with 1% novocaine and adrenalin solution and the radical removal performed as quickly as possible. Under such extremely urgent circumstances we need not waste time in the attempt to remove all or even much of the blood collected in the abdominal cavity. I have found a pitcher or several pitchers of hot normal salt solution poured into the abdominal cavity with some force, not only serviceable in removing many large clots, but much of the solution remaining in the peritoneal cavity helps to bring about rapid reaction by its stimulating effects and by filling up the depleted blood vessels. The abdomen should be closed without drainage as rapidly as possible, without the time wasting layer sutures, if urgency demands rapid work. Leaving a large amount of saline solution in the abdomen will take the place of hypodermoclysis or intravenous infusions, which, when operating with limited help and untrained assistants is of no small advantage.

After the bleeding has been checked and the patient shows a tendency to rally, delay of operation until the patient has recovered from her shock and collapse, and at least to a certain degree, from her anemia, is to my mind clearly indicated; in doing so we often change a bad surgical risk into an operation practically devoid, not only of mortality, but also morbidity. The proper treat-

ment under such circumstances, instead of immediate operation, should be to keep the patient aboslutely at rest, giving her enough morphine without atropine to accomplish this purpose, applying heat to the extremities and ice to the abdomen. When we feel pretty confident that the hemorrhage, for the time being at least, is completely controlled, we should begin active stimulation, preferably with drugs that do not raise blood pressure appreciably, and then supply the blood volume by hypodermoclysis, and in extreme cases, intravenous infusion. Fortunately the patient usually responds very quickly to this treatment, proving in my mind, Hunter Robb has pointed out, that shock is generally a more serious factor in these cases than the loss of blood itself. When the pulse has become of reasonably good volume and of less frequency, and the patient is warming up and her general condition improved, we may then consider her transfer to a hospital with safety, provided she is taken on a cot, under the influence of morphine, treme care being taken not to jolt the patient and warning her against the slightest movement or straining. At the hospital she should be placed in the charge of a good intelligent nurse, who must be instructed to note the slightest change in the patient's condition, for we must always be ready for a recurrence of hemorrhage and be prepared for immediate operation in that event. For the first twenty-four hours it is best not to give anything by mouth for fear of vomiting; no attempt to have the bowels move should be made, as straining at stool or any other exertion must be rigidly avoided. Especially would I coution against repeated and unnecessary examinations. If the patient shows steady improvement, the operation can safely be postponed indefinitely for days or even weeks, until the hemoglobin is raised to at least 40 or 50 per cent. In this manner an almost hopeless case may be changed in a comparatively short time, into a very good surgical risk. In our last one hundred cases, in which we have followed the principle above described, we have lost only one patient from operation.

In many cases the convalescence progresses so smoothly and patients consider themselves so well, that they often are very reluctant to undergo an operation under these circumstances, and I have no doubt that many would eventually make a good recovery without surgical intervention. The naturally long convalescence however, necessary to a complete recovery and more especially the danger of recurrent hemorrhage, which does not entirely disappear for weeks, and that of infection, which particularly in a large hematocele cannot be ignored, all of these factors clearly favor operative treatment as the safest measure. In that manner we also remove an organ, the tube, which rarely may be expected to return to an entirely normal condition.

The abdominal incision is to be preferred in all cases and gives the best results, though some gynecologists advocate the vaginal route. Since the writer on one occasion almost lost a patient on the table from hemorrhage, which he was able to control only after rapidly opening the abdomen, he now prefers the vaginal route only in cases of infected hematocele, which are dealt with by opening freely through the cul de sac, breaking up the coagula thoroughly with the fingers and removing all the contents of the sac manually, at the same time flushing out the cavity with normal salt solution, until the fluid returned is quite clear. Drainage is maintained by a double rubber tube sutured into the incision, through which the cavity can be irrigated when so indicated until it has become obliterated.

The treatment of that rare but intercsting form of extra-uterine pregnancy in which fetal life escapes destruction at the time the tragic symptoms occur, and continues to develop until the fetus has reached a viable age, presents some interesting features differing very materially from those described in the preceding pages. The greatest difficulty and source of danger in this condition is the placenta. The hemorrhage encountered in the removal of the living placenta is truly frightful and frequently fatal. The fear of fatal bleeding has deterred many surgeons from operating

on such cases until about two to three months after the death of the fetus, when the placental circulation ccased. The laudable desire to deliver a viable child has influenced surgeons however, especially in recent years, to overcome the difficulties with the placenta in various ways. Some after the delivery of the child left the placenta and sac undisturbed, sewing the latter to the abdominal wall and draining it. Others, in view of the fact that a dead fetus and sac had been carried in the abdomen for years without any serious accidents, tried to imitate nature by leaving the placenta and sac after delivering the child without draining it, that is, by closing the abdominal cavity completely The result in over these structures. either case was disastrous, as sepsis and secondary hemorrhage almost invariably followed. The only rational treatment therefore is the entire removal of placenta and sac, which can ordinarily be done without any great fear of hemorrhage if certain precautions are observed. The placenta derives its blood supply from the ovarian artery and its anastomosing branches of the uterine artery. Now if these arteries can be reached and controlled before the placenta becomes detached, bleeding will not be ex-When these arteries are not accessible we may resort to compression of the abdominal aorta, by which means we can temporarily at least control hemorrhage until the placenta is out of the way and its principal blood supply is secured. In the three cases in which the writer had the fortune to operate at or near term, he was unable to remove placenta and sac: two of these cases made a good recovery.

In conclusion, permit me to briefly emphasize a few points which seem to be of considerable importance in the treatment of ectopic gestation. Contrary to the views of many, immediate deaths as a result of hemorrhage are rare. There is a strong tendency in most cases for the bleeding to become checked spontaneously, especially under proper treatment, but persistent watching is required on account of the constant danger of recurring hemorrhage. Shock is often an important factor, the elimination of

which should be undertaken before operation when possible, thereby reducing the operative risk. Delay of operation is, therefore, generally advisable in grave cases after rupture, particularly when bleeding seems to be at least under temporary control. This will enable us not only to overcome the attending shock, but also to gain the additional advantage of an improved circulation through the refilling of the depleted blood vessels, advantages which will greatly minimize the risks attending the operative treatment.—714 Jenkins Building.

### THE HOSPITAL AND THE PHY-SICIAN

Address delivered to the W. Va. Hospital Association, at the meeting held October 11, 1916, Huntington, W. Va., by Pliny O. Clark, Supt. Ohio Valley General Hospital, Wheeling, W. Va.

#### INTRODUCTION

In the presentation of this important subject, which may be said both as to the hospital's relation to the physician and the physician's relation to the hospital, and while much has been written upon the subject as a whole, yet there seems to be very little authority upon this intimate relation of dual, cooperative responsibility.

It is not my intention, however, to give you a comprehensive presentation of the subject, for I feel that after some ten years of hospital experience, that my knowledge of the subject is limited to such an extent that I cannot now speak with the authority which later years may bring. The subject, therefore, will be treated more as a matter of comment; of notes on the subject.

We will not attempt to speak of the hospital with its relation to the community nor of the dual relation of the hospital and the physician to the community or the reverse relations; the community's relation to the hospital and physician; rather, of that great common ground of deep interest in which every physician and every rightly conceived

hospital is deeply concerned, the preservation of the public health. Yea, more than this, for in these militant days, we would speak of our subject in a guardian sense, and call the hospital and the physician the "watchdogs" of the public health.

The hospital in its relation to the physician comes first to our mind, and we would classify the hospitals as a basis for our thought, and in a rough way, we would call them (1) private, (2) private corporations, (3) municipal, (4) state, (5) general, and for a moment think of the field of each.

## THE PRIVATELY OWNED AND MANAGED HOSPITAL

The privately owned and managed hospital including sanataria, are the usual growth in a new community or where philanthropy has been little developed, and it is a very necessary form of hospital if a physician is conscientious and wants to do his best work, provided the community is not awake to its possibilities and will not or cannot furnish him with the necessary tools.

This form is scarcely ever a good investment, as is borne out by the fact that hospitals are seldom passed down from one generation to another, so at the death of the owner, and very often early in his life, are converted apartment houses, stores and various makeshifts. You doubtless have heard the story of the great surgeon who was also a very good promoter who managed to get the ear of capitalists by reciting the fact that a patient is only in the hospital two weeks and then is too weak to eat any great amount, and that during that time he might be fed upon bread and water; that the charge for the hospital's services could be upon an average of \$15 per week; a clear matter of profit of at least \$13.50, and with a hospital to house one hundred patients evidently the return upon the investment would be a gold mine. The days of such get-rich-quick schemes, however, are practically at an end, for we recognize that in the management of a hospital, there is a science as true and as hard as in any business, and that there

is seldom, if ever, a financial dividend declared.

In the privately owned hospital, it may be hard to maintain a school for nurses, as it is not possible, usually, to give the all-round training. The owner may be an adept surgeon and so give little attention to medical or obstetrical conditions, or if to obstetrical, not to surgical and medical, and if medical, not to surgical or obstetrical, and it is often true, also, that the small number of beds prevents the complete general training which nurses should have. I will grant you, however, that many of the best nurses of the land come from just these hospitals, but they come from those where the owner gives conscientious instruction.

Aonther distinct disadvantage for this class of hospitals is the fact that they are taxed as private corporations, and no matter if a large amount of charity work is performed, still the state. county and municipality take their toll from the institution, often adding an almost impossible burden. This type of hospital is quite general in the state of West Virginia, but it is not the general type in this country at large, and the public little concerns itself about the type so long as the work is legitimately performed, hence, being little concerned about the class, it has no business to criticise and because it is really a private enterprise.

A second division of this classification might be the hospital owned by private corporations such as those provided by many of the industries of this country; railway hospitals, hospitals in industrial plants, such as in the great rubber plants or hazardous manufacturing establishments of the country. In these, the work is undertaken as a humanitarian measure and as a profitable investment for the welfare of the employees, often classified as social welfare work. We look for a rapid growth of this class.

#### PRIVATE CORPORATION

A second classification would be that of the private corporation with a general practice. The usual manner of accomplishing the incorporation is for several

physicians to take out stock in a mutual company. This is a better financial venture than the purely private, if the physicians are of the right calibre, because a larger number of physicians are interested and will draw a larger clientele, and there will be a better opportunity for nurses to train, because of the very fact that medicine, obstetrics, gynecology, pathology, and surgery will be carried out by each specialist. In this type, an executive is usually required, and that person is the mouth-piece for the stockholders or board of directors, but like the first classification, this is not the prevalent type, although there are many excellent examples in the country today.

#### THE MUNICIPAL HOSPITAL

A third classification is that of the municipal hospital. By this we mean one owned and managed by the city itself. Among the good examples of this class place the Boston City, Cleveland City, St. Paul City and County, and the Worcester, Mass., City Hospital. There are, we are sorry to say, some bad examples among which we might mention the Cincinnati General and the Louisville, Ky.

Politics should not enter into the control of the municipal hospital. In times past, and to some extent now, ward politicians made the hospital a tool, and old political debts were paid by the placing of friends in positions in the hospitals and at every change of administration, the hospital administration would also change. Until quite recently, Bellevae, New York City, employed those discharged from Blackwell's Island almost altogether; consequently a very poor service resulted.

The municipal hospital, however, is a splendid institution provided there is a perpetual board continued from administration to administration and where there is a competent executive continued through a series of years. This type has a great opportunity as a teaching force both in the instruction of physicians, advanced and in embryo, and to impress upon the community those lessons which should emanate from a source of authority such as a great municipal hospital.

This hospital should have all departments and should serve that class of patients for which it was intended to the best of its ability. The usual scheme is to accept charity cases only, but in smaller municipalities, provision should be made for the private patient as well.

Without doubt, there is a growing opportunity in the future of this class of hospitals, and we may expect great things to grow out of the properly managed and equipped institution, among the properly equipped of which probably the best example is the Cincinnati General, although doubtless the new Philadelphia Institution will have the opportunity to be the best in the world.

### THE STATE HOSPITALS

We no longer are calling our asylums for the insane by that name, but are calling them the State Hospital for Mental Cases; likewise, for chronics, for the tubercular, and our whole thought seems to be changing. Instead of having asylums (or "havens" where the community and the patient may be free from harm) we now have hospitals, places where we treat the patient as the "guest" of the state and under scientific care, try to bring him back to his normal condition and to make him a self-supporting unit rather than a burden upon the These hospitals are necessary as a preventative measure, as teaching forces, and to elevate the public thought on many of the important subjects of hygiene of the day.

In the training of nurses, this class offers some excellent advantages, but the special work obtained in any of them should be supplemented with additional training in other lines in other institutions so that the nurses' equipment may be well rounded out, even if she chooses that particular field for her life work. We, as citizens, must free these institutions, of which we have so splendid an example here in Huntington, from all political domination. We must uphold the hands of the executives, backing them in all remedial measures requested. They are the experts we must follow.

If I would venture a prophecy, it

would be that the future hospital will be state controlled and it would seem that the day is not far distant when the State will be considered the health unit and all preventive, all remedial measures will emanate from the State; not under the domination of politics, but through a sane, scientific management. It will be a matter of conservation to have our institutions State controlled, State managed and operated with physicians salaried by the State, and every citizen enjoying the right to an examination, to treatment in a hospital and to the necessary general supervision, and not because he is able or is not able to pay for his treatment, and in the latter instance a subject of "charity."

### THE GENERAL HOSPITAL

The fifth division is the General Hospital. By this we mean that institution caring for practically all classes of cases, chartered by the State as an "Association" whose business it is to care for the sick and the injured without profit to itself.

This class is usually managed by a directorate elected by an association; an association controlled through membership fees and with certain elective privileges, or it may be controlled by a self-perpetuating Board of Trustees, or it may be managed by a Board of Trustees provided by some will or endowment. This is the general type in the United States as it is also in England. In Germany, the general type is that of the municipal hospital.

This type perhaps provides the best all-around training for nurses, although in many instances additional training should be given in mental, tubercular and contagious nursing.

To make this type a success, there should be a very sympathetic public behind it, a large endowment and a well trained Board of Directors. It may have an "open" or "closed" staff. This is a matter of local selection, but the staff is an important factor, and each community must decide for itself what is its best organization. The "open" form gives a great opportunity for the young physician to prove his worth, because he

may treat his cases in the hospital upon the same footing as those who have had access to the hospital for years, and I venture that the general practitioner needs the assistance of such a hospital. He needs to rub elbows with others of his profession and to learn the most upto-date methods. To my mind, the "open" hospital serves a larger community interest and the community on the whole, receives much better treatment, because it has free access to the hospital's equipment and service.

In a "closed" hospital, on the other hand, we have much better facilities for teaching, especially when there is a continuity of service, and one or two men are responsible for each service. Especially is this true where such a hospital is connected with a medical school; here it must be remembered that the patient is to be used as a teaching tool, and may or may not be benefited by such an arrangement. Often the patient is subjected to considerable embarrassment, but is given very good attention. With so much said for the hospitals and their classification, whether privately owned, a private corporation, a municipal, a state, or a general hospital, in all we have the duty of the hospital to the physician more or less clearly defined.

Since, however, the most usual type is the general hospital, we would bear in mind this classification as we speak or "The Hospital's Duty to the Physician."

### THE HOSPITAL'S DUTY TO THE PHYSICIAN

Not long ago, a prominent hospital authority asked a large audience this question: "Who is the most important person in the hospital?" One said, "The superintendent, of course." Another said, "The surgeon, of course." Another, thinking of the diagnostic end, said, "The medical man." Another, "The obstetrician, because he brings so many new lives into the world." Another, "The housekeeper, because she works so inconspicuously caring for the wants of the patient." Another, "The nurse, because she ministers so quietly and effectively to the wants of the patient." To all of them, the authority replied, "You are all wrong. The most important per-

son in the hospital is the patient."

No hospital has any duty to a physician uncoupled with its duty to a patient. However, there are some distinct things in which it can be of signal service.

First: Adequate quarters should be provided and not merely "adequate," but adequate in the broad sense with some attention paid to art. Do not make the building a mere barn for the housing of so many cases, but an attractive fortress against disease, a "guest house for sick people," if you please. Have the proper number of operating rooms. Have them of the right size, properly lighted, well equipped. If any instruments are furnished, furnish all that can be used. Have sufficient recovery rooms so that if it is desired to watch a particular case with unusual care that this may be done away from the eyes of the general ward patient. Provide consultant rooms. Provide for the care of all classes of patients; not only for the industrial, but for the female of the housewifely pursuit and for the young child, and if possible, for the contagious, the tubercular and the medical. IfBoard of Directors in the erection of such an institution are wise, they will consult all available authorities; not one surgeon, not one physician, but all of the physicians and surgeons of the community combined, and will get their written recommendation before the final plans are accepted. They will, however, employ one who is wise in the expenditure of money and one who has had experience in the working out of other hospital problems and not an architect who has merely constructed some dwellings or school houses. To be complete, such an institution must have pathological laboratories, must have complete X-ray facilities, hydro-therapeutic, electri-therapeutic equipment, kitchens, facilities for photography, and not one of these can be well left out. We must have pathological laboratories if the diagnosis is to be complete. Certainly, the kitchen has been considered the heart of the institution for some time, but we are only beginning to see the possibilities here. Provide a trained dietitian wherever possible.

As the foreign institutions have accomplished so much for years with hydro-

and electro-therapeutic work, I am sure we will find a larger field developing in this line.

If a hospital has considered its full duty to the physician, it will also provide the proper consultant staff as a part of its organization. It will provide internes if the institution is sufficiently large to give the proper training to these young men. It will most certainly provide nurses of the proper grade and in turn provide the nurses with the proper number of paid instructors; give them the necessary class room facilities such as charts, dummies, stereopticon slides, provide them with books, lecture outlines, and then will expect the physician to assist by giving lectures.

Another very valuable assistance, (and we are coming more and more to see the importance of this function) is the anæsthetist, and be that person nurse or trained physician, they must stand upon their own feet and not depend upon the operating surgeon to guide them through the proper administration of the anæsthetic. It matters little whether Nitrous Oxide, Ether, or some other form of anæsthetsia is used, the anæsthetist should be well trained and should consider his work the most important being performed in that operating room at that particular time, and should for no single instant relax his attention or allow his patient to drift. In other words, he must be a trained anæsthetist. If possible, salaried by the hospital and the fee collected by the hospital. This relieves the surgeon of the inconvenience of having to arrange for his own anæsthetist and gives an additional sense of security by providing an experienced person.

The hospital should not consider its full duty performed until it has provided for the mental growth of its physician friends. It should provide a library, complete and up-to-date. It should provide a method of taking and filing the records of every case and if the hospital is of sufficient size, provide a clerk to care for this important department. Either the physician will grow mentally or he will stagnate. If he stagnates, the hospital will stagnate, for no hospital can accomplish any amount of good without the hearty cooperation, the steadfast

leadership of its physicians.

THE PHYSICIAN'S DUTY TO THE HOSPITAL

There need be no discussion as to whether the hospital is more important than the physician or vice versa. The truth is: each are important factors in the problem of the conservation of the public health, and so we must conceive as wholly one-sided that discussion which speaks only of the duty of the hospital to the physician and leaves out the consideration of the physician's duty to the hospital.

First it is a physician's duty to lead public sentiment in the establishing of adequate hospital facilities wherever such may be used to advantage, and it is my judgment that the future will see a remarkable growth in the small hospital unit. In some states of the west, we find each county owning its hospital, providing adequate laboratory, X-ray and operating facilities. What a boon to the isolated hamlet such an institution For emergency and generally simple work, it provides the sine quo non of existence. For the more obscure and complicated work there will continue to be available the great medical centers with elaborately equipped hospitals.

I said the physician must assist in the establishment of hospitals. He must do more. He must criticise constructively. List the desirable attributes of the new or remade old plant. Get together with fellow practitioners and discuss them, then hand the composite request to the executive or Board of Directors, who, if they are wise, will place it in the hand of an expert architect to work out. Few people can proportion a room on paper. Few can sense the proper relation of parts, few know the real value of building materials; hence, the economy of the employment of an expert.

Another duty to the hospital is that of the staff organization. Any such body of men will work in greater harmony where there is a mutual understanding. Uniform rules governing their own conduct should be adopted, for instance, that the surgical interne shall be first assistant at all operations when possible. Adopt a uniform method of taking a pa-

tient's history; standardize the giving of medicines; agree what shall constitute a reasonable allowance for each patient and what shall be charged extra.

Another distinct duty is that of teaching the internes or younger physicians. The interne is giving of his time to the routine laboratory work or ordinary dressings; he conserves the visitant's time and has a right to demand constructive criticism of his methods, be made to defend the diagnosis he has made and learn to rise or fall with his successes and failures. The physician owes it to the hospital to lecture to the nurses and to teach at a bedside clinic those young women whom he may have occasion to use on some outside case later as first assistants.

May we note parenthetically that the general method of teaching nurses today is no longer that of lectures by an already overworked physician given "weekly" (spelled w-e-e-k-l-y), but rather the regular daily classroom instruction of a paid graduate nurse teacher. Ostensibly, the nurse who has herself been through the various stages of a nurse's experience can "get it across" with more telling force to the pupils than can the physician who sees only the end desired, not the various steps necessary to reach that end.

Another duty is that the physician discharge his patients with discrimination. Be sure the home is ready for his reception. In other words, cooperate with the social welfare department if there is one, if not, then with the executive head, and so prevent many an unhappy return; and to discharge the patient the very day he should go and so make way for other urgent cases.

Still another duty is to cooperate in the establishing of "Pay Clinics" for our great middle class of people. The need for which is set forth so clearly by that great reform leader and physician of the day, Dr. Richard C. Cabot: "Patients and doctors alike have come to realize, more or less clearly in different parts of the country, that no one doctor is wise enough to make an accurate diagnosis."

"If we lead this movement rather than being forced into it, we may be able to lead it right; that is, to organize it with hospitals as the center and dynamic of the whole, so that public medical service may be of high grade, organized without the useless waste entailed by the shuttling of doctors back and forth from office to private houses; organized so that laboratories, the X-ray machines and the skill of experts may be available for the good of all."

Another duty is the inauguration of a "Follow-up System" and to back up the hospital in its conscientious following up of the follow-up system. Instead of so much hurried, slap-dash surgery and medical work, let us read the tale of what is being done in the results accomplished, and manfully own up to the readings.

Of course he will ever lead in establishing the highest ethical standards; forever he will frown upon fee-splitting and its evils.

### WEST VIRGINIA AND THE FUTURE

We have gone through all the hospitals, the duties of both the hospital and the physician have been listed, but there is one more note I want to sound, a note of optimism, of glorious possibilities, of ripe opportunity. Very briefly, let's have it.

We are citizens of one of the smaller middle-aged, centrally located, happily situated, cosmopolitan populated, undeveloped, crude, hopeful and wealthiest states of the Union. We are proud of this citizenship, but are we proud because of what we as a profession of health preservers have accomplished, and are we satisfied with doing a little patchwork here and there, instead of realizing our possibilities and pushing on into larger fields of scientific research and of magnificent equipment furnished our fellow sufferers?

Think of the State's vast natural wealth in coal, timber, and agricultural products!

Why, this little state was second in the nation in its mineral output in 1914 with 135 million dollars on the credit side; 155 million dollars represent only a part of the value of her manufacturing output. And the greatest asset of all is the public health uncharted in dollars and cents.

We, the health conservators, must advance, must build better, more complete, better managed institutions to aid in this conservation. The State has the wealth; let us claim a portion of it for health purposes. Think in big terms and big men with big capital will become interested.

This is a day of big things. The hospital-medico combination must grasp its opportunity.

Today five people go to hospitals where one went ten years ago; the next ten years will see an even greater growth. The growth is by leaps and bounds. We must lead or be bowled over in the advance.

The need for adequate hospital buildings and equipment in this State is very apparent. First, let each community secure the required funds, then engage expert advice and consolidate all the small struggling institutions into one successful central plant. Then the public has a right to demand an absolutely honest management; a wise expenditure of its money; scientific care of its sick, rich and poor alike, and a permanency of the work through endowment, or support as an enterprise of the State.

This is no longer the day of killing competition. Cooperation is the watch word. Let's have it in our profession, all through the various calsses of hospitals whether private, a private corporation, municipal, State or general; let us realize the hospital's first duty to the physician is to furnish adequate means; the physician's duty is to provide loyal, hearty cooperation and together let us serve the patient to the best of our ability, but remember, "go forward."

THE WORK OF THE DIVISION OF SANITARY ENGINEERING OF THE WEST VIRGINIA STATE DEPARTMENT OF HEALTH.

MAYO TOLMAN, Charleston, W. Va.

Paper read before the West Virginia Medical Association at the Annual Convention, Wheeling, W. Va., May 18, 1916. 1916.

I feel that it would be well for me to justify the existence of the Division of Sanitary Engineering of the West Virginia State Department of Health before attempting to describe what it has accomplished and its plans for future work.

There is apparently a feeling among many of the physicians of this State that a sanitary engineer in the Health Department is an unnecessary frill. A large majority seem to entertain the idea that the Health Department should be composed exclusively of doctors, with of course the necessary office force, but that the head of an entire division of the Health Department should be an engineer is ridiculous.

As recently as 1905 Prof. Sedwick, of the Massachusetts Institute of Technology, pointed out the fact that we should think of hygiene as composed of two great divisions, public hygiene and personal hygiene, that is, one portion dealing with the human mechanism and its operation (personal hygiene or simply hygiene), and the other dealing chiefly with the environment of that mechanism sanitation.)

The time has gone by when one person can safely undertake to deal with the whole realm of hygiene. The physician must in the future leave to the sanitary engineer such subjects as housing, heating and ventilation, water supplies and sewerage, precisely as the sanitary engineer has never presumed to deal with food, quarantine, vaccines and anti-toxins.

Practical hygiene and sanitation and especially public health work, may proceed along either of two lines, namely (a) the re-enforcement of the human organism in its struggle with disease producing microbes, or (b) the exclusion of the microbes and their destruction in the environment. The latter should be known as sanitation, and as such be distinguished from serum-therapy or medicine. Some diseases may be warded off by increasing the efficiency and vital resistance of the body, while other diseases

may be prevented by the control and improvement of the environment. may look upon small-pox as an illustration of the former condition, for by vaccination we can increase the resistance of the human mechanism to that disease. Typhoid fever furnishes a good example of the latter condition, for we may improve water supplies, milk supplies, and other external factors to such an extent that this disease may be largely prevented. Sanitation, then, deals with the control of the environment rather than with the living human mechanism, and it is with problems of this kind that the sanitary engineer has to deal.

The sanitary engineer is best fitted to control the measures that are instrumental in warding off disease, as his training causes him to study communities at large, while the physician deals primarily with the individual. The sanitary engineer must, in addition to his other qualifications, be a trained epidemiologist, for once the disease producing microbes have broken through the barriers that he has erected in the form of better water supplies and the proper handling of sewage, and made themselves manifest by an outbreak of an infectious disease, he must be able to trace their mode of entrance and repair the break.

Sanitary engineering, then, embraces the design and construction of all work contributing to the public health and all means of preventing offensive conditions due to a large number of persons living in closely built up communities. It is the duty of the State Sanitary Engineer to see that these public works are so constructed and operated that they are conducive to health and comfort, and not a menace to the welfare of the community.

The State Department of Health must have a man on its staff who can not merely step in and say you need a chlorinating or filtration plant for this water supply, but who can also say how large the plant should be, where it had best be located, what the cost would be, and so on. In other words, this man must be able to design and operate the plants he claims are necessary. But above all, the State Sanitary Engineer

must know the cost and value of these appurtenances. He must be able to balance benefits gained against the cost of these benefits. I have frequently heard doctors in small towns say, "Our water supply is bad. I hope you will force the water company to put in a filtration plant." The physician who makes remarks like the above are not engineers; they do not realize that such a plant might cost thirty to forty thousand dollars and that the water company may receive a revenue of perhaps only twelve or fifteen hundred dollars a year over and above all expenses.

On the other hand, sanitarians frequently become so enthusiastic over bettering the health conditions of a community that they lose all sight of relative values. Realizing this, the Division of Sanitary Engineering has at all times carefully weighed the benefits to be obtained from any proposed measure. We are proud of the work we have done and feel that all concerned are satisfied and are glad to have us come back to their towns, knowing that we will endeavor to help them and not work hardships.

A review of the work accomplished will illustrate the point. The division was called to West Union to check a small outbreak of typhoid fever. Careful investigation showed that in all probability the eause of the majority of the cases was the eity water supply. supply was known to be highly contaminated and was not generally used without boiling. However, there is scarcely a family that does not at some time forget the danger and use the raw water for washing green vegetables or brushing the teeth. It was plainly evident that the present water supply should be filtered and sterilized, or that it should be abandoned and a new source found. Either of these steps would have cost the town several thousand dollars, which, owing to a large bond issue for street paving, was not available at that The division realized that even the present eity water supply would be better than a lot of wells in a thickly built-up community, for the simple reason that the public knew it was bad, that it had eaused typhoid, and eonsequently they were more apt to take precautions. We would like to have put in an expensive apparatus for disinfeeting the city water supply with chlorine gas, but did not even suggest it, for in our study of the situation we saw that the town would shortly eome to a new supply, and that in all probability this supply would be derived from driven wells of such quality that a chlorinating plant would not be needed; consequently, we did not wish to burden the town with an expensive piece of apparatus that would be used for a year or two only. stead, an emergeney plant was installed to disinfect the drinking water with hypoehlorite of lime, and in order to cut the cost still more, a member of the division helped in the work of installation. Six months later, as the result of our recommendation of a new water supply, we received a request that we design such a supply for the town. I have gone into considerable detail in regard to West Union as it is typical of many cases.

At St. Albans there was an outbreak of typhoid that was apparently due to drinking water. Here again the water company could not afford a filtration plant, but this time, as there was no prospect of a new supply, a permanent chlorinating apparatus was recommended and installed. Later, when the town has grown and the revenue from the water supply is proportionately greater, a filtration plant may be creeted.

A number of such instances might be cited, but let it suffice to say that twentytwo water supplies have been examined. Reports concerning eleven of the twentytwo supplies have been sent out, with the result that conditions have been bettered in ten. Chlorinating plants for disin-fecting the water supplies of eight towns have been installed under the direction of the Division of Sanitary Engineering, and four towns have filed applications for the design of new supplies with the division at the present time. Two sewage disposal plants have been required to be constructed. A large number of nuisances, due to broken sewers, defective drainage, etc., have been investigated, and remedies. Eleven outbreaks of typhoid fever have been studied and checked. One of the most important pieces of work accomplished has been the working out of the details in connection with the ruling of the West Virginia Public Service Commission requiring that every water utility in the State submit samples to the State Hygienic Laboratory once a month.

A long list of the good that the Division of Sanitary Engineering of the Department of Health has done might be enumerated, but I believe that it would be of more interest to show what it plans

to accomplish.

In the first place, all garbage and sewage disposal plants now in use must be examined and new plants proposed where needed. There will undoubtedly be a large number of complaints regarding defective drainage and general unsanitary conditions that should be attended to. Several important investigations are under consideration, such as the study of the pollution of the Kanawha River by the sewage from Charleston; an investigation of the air in railroad tunnels, and a study of the character of river waters throughout the state. This last investigation will entail the collection of samples at hundreds of points, year after year, that any progressive increase in pollution may be noted and the cause ascertained, and, if conditions warrant it, the situation rem-Another investigation planned is a thorough study of the sources of all drinking water used in railway passenger coaches throughout WestVirginia.

Finally, and more important than all, there are ninety-seven public water supplies yet to be examined. It may not be generally known that improvement of a water lowers not only the death rate from typhoid fever and other water borne diseases, but from all other diseases as well. In 1893 Mr. Hiram F. Mills, of the Massachusetts State oBard of Health, and Dr. Reincke, the health officer of Hamburg, Germany, separately observed that after the introduction of a filtered water the total death rate of a community from all causes was greatly reduced. It has since been shown that for every death from typhoid fever that is prevented, from four to eleven deaths from all other diseases, such as measles, whooping cough, pneumonia, tuberculosis, etc., are prevented. It must then be evident to all that any improvement of the water supplies of West Virginia must cause a great economic saving to our state.

WHY WEST VIRGINIA NEEDS THE MODEL LAW FOR COLLECTING VITAL STATISTICS.

HAROLD B. WOOD, M. D., Dr. P. H., West Virginia State Department of Health.

A seriously amusing set of state records have been accumulated through the provision of the old state laws which were devised with good intent to collect records of births and deaths within this state. The framers of the old law deserve credit for their attempts, but the law has now become obsolete and The old law permits needs revision. anybody to make reports of births and deaths; the operation of the law results, in many counties, in the recording of all duplicate reports as received. The results of the law and its operation are ludicrous, and yet they are serious. This is not a criticism of those who are trying to uphold the state laws, but an exposure of the fallacies of the old methods which should be remedied at the earliest possible moment.

The present law says the county clerks shall return their reports of births and deaths to the State Department of Health not later than September first of the following year, from six months to a year and a half after these births and deaths occurred. To be of any service these records should be received as soon as possible, within a month, so the actual conditions may be known in time for service to be rendered where needed. As an actual fact not over a half dozen reports were received by the first of September and only forty-four by December first.

The reports of births in forty counties in 1915 were received as follows: From assessors, 7,626; from parents, 1129; from justices of the peace, 1. Midwives reported 394 births. Physicians report-

ed only 57.4 per cent. of the recorded births. The present law, which accepts births reported upon hearsay, encourages the filing of birth certificates by persons who were not present at the birth and whose testimony is, therefore, worthless. As a result, 7627 children have been deprived of their birthright. It is doubtful if these certificates would be accepted in any court or by any organization which requires certified copies of birth certificates. This is a serious matter from the standpoint of the child.

The death reports are equally fallacious. The law specifically defines who are qualified to practice medicine within the state and the inference is that these physicians are the only ones capable of making a diagnosis and determining the cause of death. Yet our records, as permitted by law, show that many persons are dying from conditions which are not usually recognized by the medical text books as being fatal. brief list shows how fallacious and worthless, from the statistical and preventive medicine standpoints, are these diagnoses as permitted by the present methods. These are a few of the causes of death as recorded by lay persons who signed death certificates here last year: grobacks, traslgia, hives, heplosoric corrohosion, thrash, fitz, drapsus, birth (for infants' death), cutting teeth and stomach, pantomine poisoning, feavor, spinal cord, confinement (six months), typhus, spasms, invalid and many others. These are amusing but indicate serious defcets in statistical practice of this state.

Duplications of records are common, one county reporting 257 death had 65 duplications in the list. Another, with 151 deaths, had 13 duplications and 3 triplications. The multiple reports usually come from different people. A duplicate report is better than no report, but the medical report of a layman should not receive equal significance to that of a physician. Duplicate reports tend to complicate records for those who may later refer to them. A physician made a diagnosis of typhoid fever while the parents gave a certificate with their diagnosis as liver trouble; in another instance the physician's diagnosis was sarcoma, the undertaker's, peritonitis; another, the doctor's la grippe, the undertaker's pneumonia; the physician's cardio-renal disease, the undertaker's stomach trouble. Such discrepancies are common, yet anybody getting from the local recorder a certified copy of the certificate is as apt to be given one diagnosis as the other.

Surgeons who permit laymen to declare over their signature the cause of death may subject themselves to a suit for mal-practice. The records from one county show that among 895 deaths, there were 27 which were caused by operations, "operation" being the only recorded cause. The Model Vital Statistics Law climinates this danger and protects the surgeon from possible embarrassment.

Burial permits are required by the Model Law. When there later develops a suspicion about the cause of death, the filing of a correct death certificate and the issuance of a burial permit protect the patient, the family and the physician. The adoption of these certificates and permits decreases homicide.

In the operation of the Model Law physicians will be supplied with birth and death certificates, and local registrars will be appointed at locations convenient to both the physicians and undertakers. The Model Law will be a county economy since it will prevent duplication and double fees.

The Model Law provides for the issuance of burial permits, requiring the filing of correct death certificates. cause of death shall be determined and signed by a physician or midwives, or, in the event of there being no physician or regular midwife in attendance, by a member of the family who was present at the time of birth. All original birth and death certificates shall be forwarded by the registrars to the State Department of Health at the end of each month. This overcomes the present troublesome and expensive method of double entry. All blanks, forms, envelopes, etc., are supplied by the State Department of The state is divided into districts in each of which is a local registrar who is located convenient to physicians, to hospitals and to undertakers,

and who reports direct to the state registrar.

In 1915 there were recorded in 40 counties 21,503 births and 7,145 deaths. Had the Model Law been in effect that year the various counties would have been saved the total expense of \$1367.55.

The physicians are urged to use their influence to advance the welfare of their state by having the Model Law passed by the legislature without amendment. The Model Law is the only one which has proved satisfactory; it is the only one which meets the approval of the United States government; it is designed after the successes obtained in other states; it works without friction and without hardship.

See how your Senator and your Delegate regard the bill. Anybody is welcome to apply to the State Department, to the U. S. Census Bureau, to the National Children's Bureau, or to any other state for information on the operation of the Model Law.

The State Health Department, with all respect, asks the physicians to assist in the passage of this Model Law, and in its operation and enforcement gladly accepts suggestions for improving the public health of the state.

# CLINICAL NOTES—CHICAGO CLINICS, NOVEMBER, 1916.

By J. E. CANNADAY, M. D., Charleston, W. Va.

At the Wesley Hospital, Kanavel did a puncture of the corpus callosum for the relief of in intracranial pressure. He draws a line from the nasion to the occipital protuberance then about one inch in front of the centre of this line and one inch to the left of this last point he made a trepine opening and inserted a small trocar to the depth of 7.5 c.m. before striking fluid. Normally he would reach fluid at a depth of from 5 to 6 c.m. but the cavity was displaced backward by a brain tumor and again the boy had a dome shaped cranium. patient was already blind with optic discs chocked and Dr. Kanavel will

do a subtemporal decompression in a few days in order to give him some tempor-

ary relief.

Dr. Schroeder did a breast amputation for carcinoma. He made a large extirpation and removed the glands under the clavicle as well as taking all fatty and glandular tissue from the axilla. He removed both the pectoralis major and minor muscles. He does not protect the axillary vessels from scar tissue, neither does he use a drain. The skin incision is carried well down on the arm so as to secure a flap to aid in the covering of all raw surfaces. A large dressing is applied and firm pressure is made over the entire area so as to prevent seepage of serum underneath the skin.

Next a prostatectomy was done by He says he does about half his prostatectomies by the perineal route, the remainder by the supra-pubic method. He considers the failure to hold the urine well and the associated phenomena as being largely psychological in nature and a little more pronounced after the perineal than after the supra-pubic operation. In single stage operations he says the supra-pubic mortality is about one per cent. greater than the perineal, fat cases are not suited to the perineal method. There is great danger of overlooking a stone in some sacculation of the bladder. When the neck of the bladder contracts firmly about the finger after the cnucleation there is but little danger of hemorrhage. He makes use of the Hagner hydrostatic bag in case there is troublesome bleeding. The bladder is tightly sutured about the suprapubic drainage tube and a rubber drain is inserted in the prevesical space. Two silkworm gut sutures in the bladder are left long so that after the drainage tube has been removed they can be used to further constrict the opening and to promote early closure. These cases are given tap water by rectum freely until they are able to swallow and retain fluids or until the rectum refuses to retain longer. These old and feeble patients are brought into the operating room before the anæsthetic is started and gas is usually given them.

Parker's orthopedic clinic at the Cook County Hospital was interesting. He exhibited some tubercular joint cases that were being treated with enforced rest and plaster casts. There were several discharging sinuses and it was rather shocking to an aseptic conscience to see Dr. Parker continue all through his clinic to dabble his fingers in pus when doing the dressings. I though it probably accounted for infection of some of the primarily clean operative cases he exhibited. He protects his plaster cases carefully, first with stockinette, then sheet wadding and finally with some kind of dark felt bandage and says he seldom ever has a pressure sore from the casts.

Dr. Wyllie Andrews in his work and discourse shows the master technician and the surgical scholar—unassuming and modest to a degree he has a winsome charm of manner that holds his audience. In varicocelc operations he removes most of the veins but leaves one or two of the smaller ones. The scrotum is shortened, not in the old way, transversely and with clamp, but antero posteriorly or vertically and by first quilting off the skin with plain catgut, then cutting away all redundant tissue, ligating all bleeding points in the cut edges and finally by a careful edge to edge closure with catgut. He says he has never had a hematoma when this method was followed. The patient often finds the long redundant scrotum more objectionable than the large veins.

In his hernia work he follows method of Bassini in the main. Kangaroo tendon and uses a figure of eight suture which brings the upper part of the ring also the transversalis fascia snugly and well under the shelving edge of Poupart's ligament. The needle is carefully guarded with the finger so as to protect the femoral artery and vein, also the epigastric artery. The ring is first split up a short distance over a grooved director, the sac carefully freed from the cord then opened and tied high up so that it will retract deeply. He said that Oschner's statement in regard to femoral hernia was undoubtedly the correct one and that the removal of the sac was the all important essential in regard to the cure of the femoral hernia. That the suture ordinarily placed in the pillars of the femoral hernia would not hold. Dr. Andrews uses a gilt tack to secure the fascia to the pubic bone in his operation for femoral hernia.

After operating for an inguinal hernia on one side he invariably repairs the other side, whether there is a hernia present or not, provided of course the patient is willing and his condition permits. His reason for this is that having the tendency to hernia formation it will develop on the well side with unerring certainty. He finds that hernia develops more frequently in people of sedentary habits than in those of active habits where the muscles are kept strong and tense.

Dr. Amerson at the West Side Hos-

pital did a skin grafting operation on the injured hand of a child. In removing the grafts from the father he produced a sufficient state of local anæsthesia by contact with a piece of ice. He picks up the graft with a needle and cuts them quite small. He gave a talk on the Italian operation of pocketing the hand for the repair of skin defects. When the back of the hand has been denuded it is quite easy to insert it under a packet of abdominal skin, but when the palm is the part involved it is rather difficult to get the arm and hand in an easy position and to maintain immobility. Recently, I have done two of these operations and have effectively immobilized the arm and hand with a plaster case.

At the Cook County Hospital, Dr. Kanaval attempted to repair a large ventral hernia under local anæsthesia. He used novocaine and injected the intercostal nerves, the lower four on each side, then injected around the hernial arca. The patient was irritable and made the operator so. Finally gas anæsthesia was resorted to with but little effect. Then the anæsthetist reverted to first principles and gave ether. The patient was promptly quieted and snored during the remainder of the operation. The hernia was closed after the imbrication or overlapping method of Mayo. A large fascial transplant was sutured over the line of union. He did a prostatectomy under gas anæsthesia. The gland was so indurated that it was with difficulty removed piecemeal. The amount of bleeding was considerable and Hagner's bag was used to control it. This bag is injected with water until the requisite pressure has been secured. Gauze was wrapped around the tube in front of the penis, the tube drawn down close and secured with a hemostat. In twenty four hours the hemostat is removed and the bag allowed to remain. If bleeding starts again the bag is refilled with water. If there is no bleeding the bag is removed five hours later. The urethral end being used as a carrier to thread a soft rubber catheter through the urethra into the bladder.

A case of tussesception was relieved by operation. The Cubbin's method of suturing the ileum to the ascending colon was used for the prevention of recurrence of the condition.

### TOXICITY OF THE PRESENT SUP-PLY OF SALVARSAN AND NEOSALVARSAN

OLIVER S. ORMSBY M. D., AND JAMES HERBERT MITCHELL, M. D., Chicago.

During the autumn of 1915 the supply of salvarsan and neosalvarsan in the United States became exhausted. There was not to be had except that in the hands of speculators, who demanded extraordinary prices for the drug.

In the spring of 1916, the agents Farbwerke-Hoechst Company of New York succeeded, after months of effort, in obtaining a shipment from Germany. Shortly after the arrival of this importation, we received a supply of salvarsan direct from the New York agents and resumed the use of it in the routine treatment of syphilitic patients with the same technic which we had formerly employed.

The water used is distilled in Jena glassware from distilled water furnished by the Consumers' Company. Each morning the water is distilled and collected in Jena flasks of 500 c.c. capacity. The flask is capped with gauze, then put over the flame and kept there until the boiling point is reached, after which it is set aside and allowed to cool. The

water remaining after the day's work is redistilled on the following day. The sodium hydroxid solution is prepared in small quantity, at frequent intervals, from chemically pure sodium hydroxid and redistilled water, in a sterile Jena glass Erlenmeyer flask, which is stoppered with rubber. Before the preparation of the salvarsan solution, all the glassware is carefully sterilized and then rinsed with redistilled water. Great care is taken not to add an excess of sodium hydroxid solution in neutralizing the acid salvarsan.

Formerly, we diluted the dissolved and neutralized salvarsan with physiologic sodium chlorid solution, as directed in the instructions. Later, however, we discarded this, and used water in dilutions which represented 0.1 gm. to each

25 c.c.

As soon as we began to use of the new supply of salvarsan, we were immediately struck by the vasomotor phenomena, accompanying or following the injection. Within a few seconds after the flow of the solution into the vein had begun, the patient complained of a strong and sickening odor of ether. Marked generalized erythema, and in some cases urticarial wheals, appeared. Lacrimation occurred, followed by injection of the conjunctival vessels. The patient tossed the head from side to side in evident respiratory embarrassment, and complained of a feeling of constriction about the chest. The pulse, at first full, quickly became rapid and weak, accompanied usually by pallor. In a few cases, nausea and vomiting occurred.

June 28, 1916, six patients were given injections of four different ampules, prepared in three separate solutions. control number on the package was B. B. V. All six reacted as described above in varying degrees of severity. The reactions lasted (and the patients remained in the office under observation) from one hour to three and one-half hours. All had more or less nausea for twentyfour hours following the injection. All but one had had numerous injections previously either of salvarsan, neosalvarsan, or arsenobenzol. Five patients received 0.4 gm., and one patient, his first injection, was given 0.2 gm.

As a result of these reactions, the entire quantity of salvarsan was returned to the New York agents in exchange for other ampules. In this exchange lot, none of the B. B. V. control number was found. The reactions continued with the new lot, although much less frequently; and in an effort to determine whether the vasomotor irritation was due to the method of administration, physiologic sodium chlorid solution was substituted for the water in making the dilution, as advised in the instructions in the package. No diminution of the reaction could be detected as a result of this change. When we informed the New York agents of the reactions we were having, they inquired concerning the sodium hydroxid and water employed, and emphasized the necessity of freshly prepared solutions. These precautions, however, have been routine for years with us.

After the consumption of this supply of salvarsan, its use was discontinued and neosalvarsan was substituted.

In the department of dermatology and syphilis at Central Free Dispensary of Rush Medical College, a group of sixty-three patients was given 127 injections of salvarsan. In this group, there were twenty-eight severe reactions, and a number of mild reactions, consisting of slight nausea, with occasional vomiting, after leaving the dispensary and during the night. The most toxic ampule found was marked B. M. B., and all of the severe reactions occurred with this control mark. The dosage was in all cases 0.4 gm. or less.

The technic used at the dispensary was exactly the same as that described above. Reactions occurred both with the dilutions with physiologic sodium chlorid solution and with the dilutions with water.

The package of the new shipment of neosalvarsan differed from that formerly supplied, in that the individual file was omitted and there was a notice saying that owing to the scarcity of metals it was no longer possible to include more than one file for each five packages.

There was no apparent increase, however, in the toxicity of the drug.

The neosalvarsan package is now supplied with a large flat file on which "New York" is stamped. The neosalvarsan in this package is found to be less readily soluble than the former product and tends to form a gelatinous mass when added to the water; as a rule it becomes necessary to triturate the mass before it goes completely into solution. The present product is also more toxic than the drug contained in the package lacking the file.

The reaction following the injection of the present neosalvarsan differs from that of salvarsan in that there is a marked tendency toward nausea and vomiting. In two cases, urticarial wheals have followed each injection, but the diffuse erythema, lacrimation and respiratory difficulty, with fall of blood pressure, observed after salvarsan have not occurred.

Five patients have vomited during or immediately after the injection. One patient vomited after each of four injections. Before the first injection (0.3 gm.), this patient had eaten a very light luncheon an hour previously. Prior to the other three injections, he had eaten nothing for six hours. Three of this group had received numerous injections of other arsenical preparations without reactions. One patient was also in the group of six reactions, June 28.

Nearly all of the patients now complain of the increased odor and taste which occur immediately after the flow begins, and in some cases continue for twenty-four hours. For this reason, we have had considerable difficulty in persuading a few patients to continue with the injections.

Our technic of neosalvarsan injection consists in adding a full dose to 30 c.c.

of water prepared as described and injecting by a gravity method. Higher dilution and a slower rate of flow have not diminished the reaction.

The use of cpinephrin, as first advocated by Milian, is of doubtful value. It can do no harm, however, and should be kept at hand for immediate use hypodermically.

#### CONCLUSIONS

- 1. The striking increase in the number of severe reactions following the use of salvarsan as now supplied indicates a high degree of toxicity.
- 2. That neosalvarsan, too, is more toxic than formerly is indicated by the number of cases in which immediate voniting occurs.—J. A. M. A., 12-9-16.

### A MESSAGE

To Every Surgeon in the Land

Oh thou, to whom 'tis given to lead From Misery's depths to Plains of Peace, With power of brain, and skill of hand, Givest thou thanks for gifts like these?

II.

Dost thou not feel a closer kin
To One Whose heart in deep distress,
At sight of human suffering
Reached forth His hand to heal and bless?

TTT

Ah, well I know the wish to serve,
To lift from piteous paths of pain,
The crushed and bruised that thou dost find,
Bidding them walk in joy again.

IV.

Dost thou acknowledge Him the Source From which thy gifts—thy powers descend? And offer all thy noble works In grateful spirit to thy Friend?

٧.

A thousand pities 'tis that man So oft in blind unthinking pride, Remembers not the grace of God That in all worthy work abides.

37T

O hands to which heaven gives its power—
O lips, that cheer in pain's dark hour—
O mind and heart, unite in praise
Of Him who's blessed thee all thy days!
——LILLIAN BEINKAMPEN.

### 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., Jan., 1917

TH	E J	OURNAL	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 gen-eral interest to the profession are invited from all over the State. Notices of deaths, removals from the State,

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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### Editorial

The Editor extends to each of our membership his best wishes for the New Year. May this be the very best year of our lives. Let us think of all the things which this year has in store for us; worries and trials among them, of course. Still the game as we play it is more than worth while.

That this will be the best year of the State Association goes without saying. Make a resolution to do your part in making it so. Remember that "forgotten resolutions" are only useful for paving stones in a certain place which all good physicians will never see.

Again a happy and prosperous New Year, Brethren.

During the past year we have been making an effort to have the reports from the county societies as complete and interesting as possible; also to have the state news. These are particularly valuable in a journal of the character of this one. In order to make this department worth while we have written to the county secretaries each month, for a report. It is hoped that during the coming year reports will come in from each eounty society and also that the state news will be sent in. Will the newly clected secretaries please send names and addresses the to promptly?

At this season it is necessary to "get busy" on the question of advertising for the Journal during the coming year. Some two or three months ago the attention of the owners of this Journal was called to the value of this, in a bulletin.

When I say "owners of this Journal" I mean US, not "me". The Editor is but your servant and only an owner to the extent of about one-thousandth of our capital stock. The various stockholders in any business enterprise must help if they expect the dividends to be good ones. The effort has been to make our Journal not only an interesting one, but one which we would find of help, and to which we could turn for some real information when we are "up against it."

The cost of producing it has gone up, along with the other advances in living. We have the situation staring us in the face of making it a mere pamphlet; of increasing the cost of the subscription or of facing the situation "like physicians" and never giving up. I'll give you the prescription.

Mention to advertisers that you buy because they use our Journal. Look it over and patronize these advertisers. Help the Editor to get more advertisers

interested.

It is a sure cure, gentlemen.

### TO THE PROFESSION

The State Public Health Council will ask our next legislature to pass two laws which are of far-reaching importance to the welfare of our people and not without interest to the members of the med-

ical profession.

One is a law providing for effective methods of registration of all births and deaths. Our present law on this subject has proven ineffective. This is seriously hindering our public health work. The indispensability of such a law has become clear to many of the states long ago, and what is known as the model law on vital statistics has been adopted by them with results so good that they have been recognized by... the United States Census Bureau and have been admitted to the registration area. At the present time every state around us is in this registration area. In fact, of all the states east of the Mississippi river, West

Virginia and Alabama are the only states outside of this area.

Our present medical law does not require any preliminary education. During the last three years the Public Health Council has by a regulation required a certain amount of preliminary education from all applicants for a medical license. This has produced an almost incredible improvement in the class of applicants. The authority of the Public Health Council to make such regulation is, however, quite doubtful; and, therefore, this is one reason why it is important that the requirement of a preliminary education be made a matter of law. Another reason is that unless this is done we shall not only be unable to establish reciprocity with additional states, but will lose the reciprocal relations which we now enjoy with quite a number of states. It is becoming an accepted principle throughout the country that medical requirements can be relied upon only when they are made a matter of law and not left to the discretion of the ever-changing personnel of boards of examiners. The proposed bill provides for the requirement of a preliminary education equivalent to a standard high school course and one year's work of college grade in physics, chemistry and biology. In many states and in many medical schools the requirement is much higher. In the medical department of our own university a requirement of two years of college work has been adopted.

On behalf of the Public Health Council I ask that every physician of the state make it his immediate duty to interview or write the members of the next legislature and ask them to favor the bills on the above subjects, sponsored by the Public Health Council. It is particularly important at this time to make every member of the legislature see clearly the fact that legislation of this sort should not suffer on account of partisan

considerations.

Respectfully,
WILIAM W. GOLDEN,
Pres. State Public
Health Council.

We are very glad indeed that the Christmas holidays delayed the delivery of copy to the printers. This has enabled us to receive from one of the physicians of the state, a page advertisement in a daily paper from one of the leading cities of West Virginia. Our correspondent's language is certainly to the point, and we heartily agree with him.

It is beyond the comprehension of the Editor how any publication can, for a few paltry dollars, accept such advertising matter. I am frank to confess, as previous editorials of mine will show, that advertising is a particularly important part of the journalistic profession. We feel, however, that there is a limit.

I wish to say that I extend to our State Association my congratulations, that it has not yet become necessary for "This Journal" to accept advertising matter which is not absolutely "on the level."

You will remember that more or less discussion was brought about by our statement that the Medical Practice Law was defective, in that it did not provide for the machinery for prosecuting offenders against the law. If this advertisement is not an offense we might as well dispense with our Board of Examiners for applicants to practice medicine.

Personally, we feel a very great pride in our profession; we spent a number of years in preparation; then we found that it was necessary for us to continue to study and work, and realized that we had just begun. For a number of years we have gone on striving to gain knowledge, and we are frank to say, that we have not yet discovered the miracles which it seems that the Electro-Medical Doctors system has developed. We hope that we may learn these wonders (just as we hope to learn to fly) this side of the grave.

It is our suggestion that the practice of medicine by registered physicians in this state be suspended until the licensed profession has had an opportunity to do post-graduate work under the direction of these famous specialists and our prominent state daily paper.

The communication from the president of the West Virginia Pedic Society, which appears in this issue seems to us to be one to which we should give some thought.

This will doubtless be submitted to the Committee on Medical Legislation. It is to be hoped that this committee will go into it earcfully and pass upon its merits.

### Health News

FRAUDULENT INFANTILE PARALYSIS "CURES"

The Department of Agriculture Instructs Food and Drug Inspectors to Watch Interstate and Foreign Shipments for Fraudulent Remedies.

Officials of the Department of Agriculture eharged with the enforcement of the Food and Drugs Act expect that the outbreak of infantile paralysis will tempt unscrupulous persons to offer for sale so-called "eures" or remedies for this dread malady. They, therefore, have issued special instructions to the food and drug inspectors to be particularly alert for interstate shipments or importations of medicines, the makers of which allege that they will eure or alleviate this disease, for which at the present time, no medicinal cure is known. The officials also warn the public that any preparation put on the market and offered for sale as being effective for the treatment of infantile paralysis should be looked upon with extreme suspicion. Inspectors, accordingly, have been instructed to regard as suspicious, and to collect samples of, all medicines in interstate commerce for which such claims are made. Makers of such fraudulent remedies will be vigorously prosecuted whenever the evidence warrants action under the Sherley Amendment to the Food and Drugs Aet. So-called remedies for infantile paralysis which are offcred for import into the country will be denied entry.

The food and drugs officials are particularly watchful in this instance because it has been noted in the past that whenever a serious epidemic exists, unscrupulous dealers prey upon the fear or ignorance of the public by flooding the market with worthless, hastily prepared concoctions, for which they assert curative properties which have no foundation whatever in fact. In the present instance, inspectors already have discovered shipments of a few such mixtures.

The department will do everything it can under Federal law to protect that portion of the public which is extremely eredulous in times of panic and which will grasp at anything which promises protection or relief. The sale of such products at this time, the officials point out, is particularly threatening to the public health because many persons, relying on the false statements of imposters, neglect to secure competent medical advice. As a result, not only is the safety of the patient endangered, but in the absence of proper sanitary precautions, the likelihood of contagion is greatly increased.

It must be understood, however, that the Federal Food and Drugs Aet applies only to products which are shipped in interstate commerce, that is, from one state to another, or which are offered for import or export, or which are manufactured or sold within a territory or the District of Columbia. Products which are made and consumed wholly within a single state are subject only to such state laws as may apply and are under the control only of state health officials. The Federal law does not apply, for instance, to patent medicines made within the State of New York and sold in New York City. Persons buying or using a remedy made in their own state, therefore, must rely on the proteetion accorded them by their local health authorities.

Out of 330,179 school children examined in the City of New York in 1914, 194,207, or 58.8%, suffered from defective teeth. This exceeded the sum total of all the other defects noted by nearly

80,000. Defective teeth impair general health and impede school progress. Disorders of the digestive tract, tuberculosis and various other diseases frequently are preceded by diseased conditions in the mouth. There is a direct relationship between dental development and mental development, and it is absolutely essential to good work in schools that ehildren's teeth be maintained in a healthy eondition. The Public Health Service recommends that a good tooth brush be included in the list of Christmas presents for every American child and that its use be made a part of the daily training. If this recommendation is earried out the United States will have more healthy children this year than last and their chances of growing up into useful, healthy men and women will be creased.

In Southern California several ages ago the oil escaping from a small spring formed in a depression of the earth a little pool. The lighter portions of the oil evaporated leaving the sticky asphalt. From time to time the rains covered the surface of the pool with water, animals and birds came down to drink, sank into the asphalt and were imprisoned in this gigantic animal trap. The hungry wolves saw there before their eyes fresh animal food of every sort, from the enormous mastodon to the smallest bird. They too were drawn into the trap as were also the large saber-toothed tigers which then roamed that vicinity. Today scientists are engaged in excavating the bones deposited there by indiscreet appetite.

The aim of civilization is to create inhibition, the quality which holds back and directs to useful purposes the natural appetites, preventing them from leading man into the pitfalls which beset over-indulgence. Hunger is the great stimulus of action, but when it is satisfied to satiety, sodden inactivity follows. If the natural appetite is allowed to dominate, it leads to over-indulgence and the unwary victim suddenly finds himself in a trap from which he cannot escape.

One of the great elements in maintaining health is the regulation of the bod-

ily intake to meet the appetite. The man who works with his hands requires more food than the brain worker. man who labors in the open air needs more nourishment than he who cooped in an office all day long. the sedentary worker the appetite of the day laborer and if that appetite be uncontrolled the body will become elogged with the poisonous products of its own manufacture and physical deterioration will surely follow. It is just as bad to eat too much as it is to eat too little. To indulge the appetite to too great an extent is equally as pernicious as its constant repression. The best is to be found in an average course, neither over nor under indulgence, neither the following of the inelastic dietary nor the promiseous and ill-considered use foods. Many a so-called case of dyspepsia is nothing in the world but the rebellion of an over-worked stomach, the remonstrance of a body which has been stuffed to repletion. A great deal has been accomplished in the reduction of infant mortality because we are able to eontrol what infants may eat. Adults must for themselves exercise this as selfcontrol. If this is done there will be a deeline in our adult mortality rates and an increase in health and efficiency.

Consider the automobile. When the car is going to stand still for more than a few minutes the driver stops the engine. By doing this he saves gasoline, oil, and above all, useless wear and tear on the machinery. If he lets the engine "run idle" he has wasted a lot of valuable material, shortened the life of his engine and in the meantime the automobile hasn't budged an inch.

The birds build nests for the protection of their young against the weather; the foxes dig holes for security against foes; the squirrels lay by stores of nuts against the coming of winter; and dogs bury bones against the day when bones will be searce. These are the manifestations of a normal protective instinct arising from an experience of many, many generations. So far as is known though, no bird ever tried to build more nests than his neighbor; no fox ever fret-

ted because he only had one hole in which to hide; no squirrel ever died of anxiety lest he should not lay by enough nuts for two winters instead of one; and no dog ever lost any sleep over the fact that he didn't have enough bones laid aside to provide for his declining years.

This protective instinct is also present in the human mind and when properly directed is a great source of prosperity both to the individual and the nation. In order for man to store up and lay by, to gain advancement either in honor or material things, it is necessary that he take some forethought of the morrow, but just so soon as he earries this beyond the normal point the mental process becomes an exaggerated and abnormal one. The normal protective instinct is stimulated by a normal fear of those events which are reasonably sure to happen in the future unless means adopted against them. The moment that this fear becomes abnormal or exaggerated it over stimulates this protective instinet and to no good purpose because it results in worry. This worry continues long after the necessity for the normal stimulus of fear has passed, with the result that there is an impairment in mental power and a dissipation of the nervous forces. In other words, mental engine has been "running idle" and at the same time delivering no propulsive power. In fact, worry is an abnormal state.

Not all worry is preventable, but for the most part it can be avoided. Most of our fears are never realized, and as a rule, if we meet our troubles day by day as they come, without worrying about them before they arrive, or fretting over them after they have passed, we will find that we have the strength to rise above them. Worry undermines the health to a certain extent. It really weakens the mental forces by tiring them out by doing nothing. Usually the relief from worry rests with the victim of this unhappy habit himself, but sometimes the real eauses are not the ones which seem to explain the condition and we must go deep into our lives or have the assistance of those who are skilled in unraveling mental processes.

The best antidote for worry is a change of mental occupation, a getting away from the scenes which provoke worry, exercise in the open air, a good book, a pleasant recreation, or a temporary change of occupation. As a matter of mental health every sufferer from this unfortunate condition owes it to himself to discover some simple means of getting away from this habit which is destructive to health and peace of mind alike.

### THE DOCTOR'S BEARD

The beard of a doctor goes wherever there is disease. However, we say nothing about it, because we do not want to hurt any good doctor's feelings. If it were not for that, we should advocate a law compelling all doctors to be smooth shaven, or at least to stop after each visit to a patient and have their beards washed with a mild solution of carbolic acid and alcohol.

We observe that in the hospitals doctors compel female nurses to wear nice little caps to cover up their hair—this is to keep the germs from spreading. If it were not for our great respect for doctors, we should advocate a law compelling them to wear nice little caps on their beards in active service, unless they consented to shave or to disinfect with carbolic acid.—New York American.

## Hospital News

HUNTINGTON STATE HOSPITAL EXTENDS ITS USEFULNESS

Believing that insanity and other serious diseases may be frequently prevented by early advice and treatment, the medical staff at the Huntington State Hospital offers their services free of charge to all indigent persons calling at the institution for examination.

These examinations will also include all discharged patients who may feel in need of this "after care." In this connection it is believed that many patients who have been discharged as cured, but would otherwise relapse, may continue outside the institution by keeping in touch with a medical staff experienced in mental and nervous diseases. Physicians having cases coming within the classification will be welcome at all times in consultation.

By request examinations of special cases for courts, juvenile-delinquent officers and social workers will be made; also diagnosis and advice furnished for "backward children."

As luetic infection is responsible for twenty-two per cent. of insanity among men admitted to institutions from cities on first commitments, and this per cent. seems to be constantly increasing, special attention will be given this disease. All pre- and non-hospital cases, such as neurasthenia, hysteria, chronic alcoholism, etc., will come within the scope of this service. Eugenics will receive deserving attention.

This reaching out into the community as above briefly outlined, is the first step taken in our state for the mental hygiene of a large number of people for whom "an ounce of prevention is worth more than a pound of cure." In addition to the regular staff consisting of Dr. L. V. Guthrie, superintendent; Drs. H. W. Keatley and L. S. Henley, assistant physicians; Dr. Jas. R. Bloss and Dr. R. M. Bobbitt, who were formerly connected with the institution, will serve in special cases.

A certificate of incorporation has been issued by the secretary of the state of West Virginia to the Williamson Hospital Association of Williamson, Mingo County. It will operate a hospital and training school for nurses. The authorized capital is \$50,000 and the incorporators are: Dr. Tunis Nuncmaker, W. H. Burgiss, G. T. Conley, H. R. Parker and R. A. Dalton, all of Williamson.

The City Hospital at Fairmont was swept by fire on December 18. Twenty patients were rescued with difficulty. It was thought at first that it was a total loss, but the latest information is that the insurance of \$50,000 will cover the damage done. The hospital will be rebuilt at once. Until it is done the nurses' dormitory will be converted into temporary wards. This hospital is known as the Cook Hospital.

# Miscellaneous Announcements and Communications

Editor W. Va. Med. Journal, Huntington, W. Va.

Dear Editor: Dec. 6, 1916.

The Southern Gastro-Enterological Association was organized in Atlanta on November 15 while the Southern Medical Association was in session there.

Active membership in this society will be limited to those investigators and practitioners of the seventeen southern states who confine their work primarily to diseases of the digestive tract.

It will be the policy of the association to hold its regular meetings annually, the next place of meeting yet to be an-

nounced.

The following officers were elected: Dr. J. C. Johnson, Atlanta, president; Dr. J. T. Rogers, Savannah, vice-president; Dr. Marvin H. Smith, Jackson-ville, secretary-treasurer.

Councillors: Dr. S. K. Simon, New Orleans; Dr. G. M. Niles, Atlanta, and

Dr. Seale Harris, Birmingham.

Admission and Ethics: Dr. Geo. C. Mizell, Atlanta; Dr. J. E. Knighton, Shreveport, and Dr. J. B. Fitts, Atlanta.

Trusting that you will give us men-

tion, I am,

Yours truly, Marion H. Smith, Secretary-Treasurer.

Huntington, W. Va., Dec. 22, 1916.

Dr. Jas. R. Bloss, Editor, W. Va. Med. Journal, Huntington, W. Va.

Dear Editor:-

The chiropodists of West Virginia, through their organization, known as the West Virginia Pedie Society, are preparing a bill to be introduced in the next legislature, regulating the practice of chiropody, and placing that profession under the supervision of the State Board of Medical Examiners. This is a most commendable bill, and therefore should be enacted into a law, because it purposes the protection of the people against incompetent and unskillful prac-

titioners of an important branch of medicine.

There is no denying the fact that the foot is just as important a part of the human anatomy as is the eye, the ear, the nose or any other organ, and there is no reason why the same skillful treatment should not be accorded the pedal extremeties as is given to the other organs.

The practice of chiropody is regulated by statute in the following states: New York, New Jersey, Pennsylvania, Connecticut, Ohio, Michigan, Louisiana, Colorado, Maryland and California. In each of the above states the Board of Medical Examiners have supervision and the licensing examinations for chiropody are conducted at the same time and place as are the examinations for medicine, dentistry, etc.

About four years ago, a group of chiropodists in New York City, realizing that the public was suffering because of inattention or inefficient care of ordinary foot lesions, enlisted the state educational authorities in their activities, and asked the state legislature to come to their rescue. A law was promptly enacted and a scientific teaching institution (The School of Chiropody of New York) was immediately established.

The general practitioner of medicine who is expected to attend to every part of the human anatomy, somehow or other neglected the foot, with the result, that a class of laymen devoted themselves to chiropody and perfected to such a degree, that they took the place of the doctors in treating the various ailments of the lower extremities.

In New York City the chiropodists have a clinic for the free treatment of all foot troubles of the poor. In Brooklyn a similar clinic is being started. In Philadelphia and in Boston free chiropody clinics are also being inaugurated. In Huntington a similar clinic will soon be started. This is all being done by the chiropodists themselves, and besides giving their services, they are defraying the expenses, which annually run up into the thousands.

Trusting that you will bring this matter to the attention of the physicians of the state through the columns of the West Virginia Medical Journal, I am,

Very truly yours, W. C. Viehman, Pres.

W. Va. Pedic Society.

### A PRAYER FOR PHYSICIANS

From the pay dispensary; from the health insurance; from deadbeats; from the incurable urcthritis case; from the neurasthenic who keeps a diary; from the detail man who lectures on the physiology of the stomach; from the birthcontrol crank and other professional sociologists; from the writers of unneeded text-books; from drug fiends; from the young married woman who is not strong enough to bear a child; from the laboratory that splits Wassermann fees; from breech cases in primips; from obese pigs who won't dict as directed; from nightcalls; from fool legislation; from longwinded papers; from new kinds of mouth gags and obstetric forceps; from food cranks who tell us how to live for ten days on a dollar and ten cents; from socialistic health boards; from half-baked specialists; from "practical" nurses, from New Thoughtists; from radium fanatics; from over-zealous Freudians; from the preliminary note on a new cancer treatment; from the seekers after false certificates of illness; from standardization "nuts"; from moribund journals, third-rate journals and freak sex journals—good Lord, deliver us!— Medical Times.

## Society Proceedings

CABELL COUNTY SOCIETY

Met in room 220 Hotel Frederick. Called to order by President Keatley

at 8:45 p. m.

Members present: Drs. Cummings, II. P. and E. B. Gerlach, Haynes, Williams, I. C. Hicks, LcSagc, Keatley, J. A. Guthric, Warnock, Kent, Neal, J. C. Kessler, Hogg, Garrett, Vinson, Cronin, Pickering, Yost, Schultz, Lovett, Watts, G. C. Morrison, Fitch, Steenbergen and Bloss.

Visiting Dr. H. B. Wood, Charleston, W. Va.

Minutes of last meeting read and ap-

proved.

Election of officers being next order of business the secretary asked privilege of making a few remarks. This being granted, he thanked the society for the confidence placed in him for the past ten years and asked that his friends refrain from nominating him again for this office.

Dr. Hunter moved that a rising vote of thanks be given the secretary for services rendered to the society. Carried.

Nominations for president being called for, Dr. Haynes placed the name of Dr. Rowsey in nomination. Seconded by Drs. E. B. Gerlach and Hawes.

Dr. Guthrie moved the nominations close and the secretary cast the unanimous vote of the society for Dr. Rowsey for president. Seconded and carried. The secretary cast the vote.

Dr. Rowsey made a talk expressing his appreciation of the honor conferred

upon him.

Dr. E. B. Gerlach placed Dr. Hawes in nomination for vice-president. Seconded by Drs. I. C. Hicks and LeSage.

Dr. LeSage moved the nominations close and the unanimous vote of the society be cast for Dr. Hawes. Seconded and carried.

Dr. Vinson nominated Dr. Prichard for re-election as treasurer. Seconded

by LeSage.

Dr. LeSage moved the nominations close and vote of the society be east for Dr. Prichard. Seconded and carried.

Dr. Vinson nominated Dr. Bloss for re-election as secretary. Dr. Guthrie nominated Dr. Pepper. Dr. Vinson withdrew his nomination and seconded that of Dr. Pepper. Other seconds, I. C. Hicks and LeSage.

Dr. E. B. Gerlach moved the nominations close and that the unanimous vote of the society be east for Dr. Pepper.

Seconded and carried.

Dr. Vinson nominated Dr. Campbell for re-election as censor for three years. Seconded by LeSage who moved nominations close and the unanimous vote of the society be cast for Dr. Campbell. Seconded and carried.

Secretary presented the application of Dr. J. F. Van Pelt, properly endorsed by censors and moved the rules be suspended and Dr. Van Pelt be elected by viva voce vote. Seconded and carried.

President Keatley then thanked the society for the honor of having elected him president and of his regret that he would be compelled to move away from

Huntington.

Dr. Pepper moved that a rising vote of thanks be given to Dr. Keatley for his services to the society. Seconded and carried.

Dr. Hunter asked that the committee on establishing a medical club be granted more time before reporting.

President Keatley then introduced Dr. H. B. Wood, assistant health commissioner. Dr. Wood addressed the society upon the subject of "The Model Vital Statistics Law."

After a general discussion it was requested of Dr. Wood that a copy of the porposed law be sent to this society and that we make our recommendations to the Committee on Medical Legislation of the State Medical Association.

Dr. Hunter moved that the consideration of this law be made a special order of business for the next meeting of this society. Carried.

The secretary moved a rising vote of thanks to Dr. Wood for meeting with us and addressing us upon this important subject. Carried.

Dr. Pepper moved to adjourn. Carried.

Jas. R. Bloss, Secy.

### EASTERN PANHANDLE SOCIETY

The Eastern Panhandle Medical Society met at the Court House in Charlestown, W. Va., on December 6, 1916, at 11 a.m.

The meeting was called to order by the president, Dr. J. M. Miller. The following members were present: Drs. Howard Osborn, J. M. Miller, W. W. Brown, W. E. Perry, H. P. Hirst, Wm. Neill, J. L. Myers, N. Burwell, A. B. Eagle, S. M. Sites, H. G. Tonker, A. O. Albin, Canter, Swimley, Lefferer, Wom-

ack, Huffman, R. E. Venniny, C. C. Johnson.

The secretary's report for the year 1916 shows about fifty-five members in Morgan, Berkeley and Jefferson counties. Number paid up members of the E. P. M. society forty.

The following officers for the year

1917 were elected:

President, Dr. W. W. Brown, Shenandoah Junction.

Vice-President, Dr. H. G. Hirst, Leetown.

Secretary and Treasurer, Dr. C. C. Johnson, Shenandoah Junction.

An interesting program was rendered. Dr. E. C. Stewart of Winchester, Va., read an instructive paper on "Indications for Cæsarean Section in Eclampsia, with Report of Two Cases."

Dr. H. G. Tonkin of Martinsburg, gave a good paper on "Diabetes Mellitus with Report of a Case."

Dr. Howard Osborn also gave interesting reports of two cases.

C. C. Johnson, Secy.

### GREENBRIER VALLEY SOCIETY

The last meeting of the Greenbrier Valley Medical Society was held at Greenbrier Hotel, Ronceverte, W. Va., on December 22, 1916. The meeting was well attended, Officers for 1917 were elected as follows: President, Dr. W. P. Fawcett of Alderson. One vice-president from each county comprising the society. Dr. N. R. Price representing Pocahontas county, Dr. T. L. Gilchriste representing Monroe county, and Dr. A. W. Curry representing Greenbrier County.

For Treasurer and Secretary Dr. J. A. Jackson of Ronceverte.

Visitors present: Dr. Wells of Hinton, Summers County, and Dr. Wood of Charleston, representing the State Medical Council who gave a very interesting and instructive address on the importance of morbid statistics and the Model Law as a means of obtaining reliable statistics.

Several important questions were discussed but action on them deferred to next meeting, April 5, 1917, at Ronceverte, W. Va.

Respectfully, J. A. Jackson, Secy. Ronceverte, W. Va.

### MERCER COUNTY SOCIETY

The Mercer County Medical Society met in Drs. Vermillion and Bird's office at 8:15 p. m.

The president being absent, the third vice-president, Dr. W. C. Slusher, pre-

sided.

Minutes of the previous meeting read

and approved.

Drs. present: McGuire, Horton, Hare, Slusher, J. R. Vermillion, Wallingford, Peters, H. G. Steele, Fairfax, Todd, Bird, Becker, and E. F. Peters of May-

bury.

The letter from Dr. Harold B. Wood, Assistant Health Commissioner, in regard to assisting all we can in having all births and deaths recorded, was read and unanimously it was agreed by all present that we would do our part in seeing that all births and deaths coming under our supervision would be recorded at the County Clerk's office, and that we would insist on our members of the state legislature supporting and passing bills which would guard and protect the public health of West Virginia.

The letter from Dr. Charles Hatfield, Executive Secretary of the National Association for the study and prevention of tuberculosis, dated November 6, 1916, in regard to the National Medical Examination Day, was read before the society and Drs. Steele and Hare were appointed as a committee to investigate this examination movement, and learn if possible, if it is professional for ethical practitioners to encourage or advocate such a day, and who is expected to pay

the examination fee.

The paper read by Dr. Fairfax on Erysipelas was complete, and the doctor gave us many good points in regard to the handling of such a case. This paper will appear in the Journal later. His treatment given is summed up as follows:

(a) Isolation of the patient; (b) establish good sanitary condition about the

patient; (c) Rigid prophylaxis in regard to spreading the infection by soiled dressing, should be practiced; (d) application of Ichthyol Ointment 20% or Benzoated Oxide of Zinc Ointment; (e) when abscesses have formed they should be opened and drained; (f) during convalescence tonics and supportive measures should be administered.

He reported two interesting cases he

has had in his practice.

The question of immunity in patients who have had Diphtheria was freely discussed and proven by practical experience in the hands of some members present, that one attack of Diphtheria did not immunize some patients from another attack.

Dr. Hare reported a case that had had a pigmented mole on his heel, which had been diagnosed as a Sarcoma by two good authorities, and a Carcinoma by three other authorities. The mole along with the enlarged glands in the popliteal space were removed. Coley's Serum was used, for five or six months, four years ago, and now the patient is in perfect health.

Board of Health Diphtheria Antitoxin was freely discussed, and the Secretary was appointed as a committee of one to write to the several manufacturers of Antioxin and find out if there is any difference in the strength of the Board of Health and the Standardized Diphtheria Antioxin.

The committee on the resolution to be presented to Dr. Wood in regard to the death of his child was discharged.

A resolution was presented to the society and accepted saying, "We very much regret the absence of Dr. S. R. Holroyd at this meeting."

The December program was read; we adjourned at 9:30 to the turkey supper which we very much enjoyed.

Yours fraternally,

H. G. STEELE, Secy.

### State News

A rule has been made effective by the State Department of Health requiring county and city health officers of the state to make weekly reports of all communicable disorders coming under their observation.

The Charleston city council is considering an ordinance to regulate the cleansing of milk bottles after they have been emptied. The proposed municipal law will require dairymen to exercise great care in the exchange of bottles at homes where there are infectious diseases.

Dr. Harry W. Keatley, senior physician at the Huntington State Hospital, has resigned his position, effective the first of the year. Dr. Keatley was president of the Cabell County Medical Society, and business manager of the State Journal. He will be located in the Cabin Creek district.

Dr. James Ferdinand Gardner of Capon Bridge, was killed by the over turning of his automobile near Winchester, Va., November 11. He was also formerly a member of the West Virginia legislature.

Dr. J. E. Rader of Huntington, has spent some time in the east attending lectures and doing special work.

Dr. Thomas Law of Jane Lew, was operated on for appendicitis at St. Marys Hospital, Clarksburg.

Dr. William A. White, superintendent of St. Elizabeth's Hospital, Washington, D. C., addressed the meeting of the Ohio County Medical Society at Wheeling in December. Dr. White's subject was "The Growing Importance of the Psychological in Medicine." Dr. Charles A. Wingerter opened the discussion.

Dr. J. E. Cannaday of Charleston, attended the meeting of the Southern Surgical and Gynecological Society held at White Sulphur Springs, West Virginia, December 13.

Dr. C. R. Peck of Clarksburg, has recovered from an operation for gall stones and is looking after his practice again.

Dr. S. L. Jepson, state health commissioner, has completed arrangements for a conference to be held preparatory to making a complete inspection of all dairies in Kanawha County to determine whether any cows are afflicted with tuberculosis.

The West Virginia Anti-Tuberculosis League designated Friday, December 7, as Children's Health Crusade Day. Dr. Harriett B. Jones, executive secretary of the league conducted a campaign to have this day devoted to interesting children in health plays, essays and orations on the matters of public health.

An official mandate requiring the report of births and deaths in Cabell county for the closing year has gone forth from the offices of the county clerk. A. E. Salmon, deputy, in discussing the matter of vital statistics yesterday stated that all reports for the year ending January 31, 1916, must be filed with the clerk by February 1.

The statutes of West Virginia fix a penalty of \$10 fine for all physicians who fail to file reports of births and deaths within thirty days of the event.

In many cases the accurate compilment of vital statistics proves invaluable, the deputy stated. The exact date of a birth or death is demanded many times of the county clerk by the federal department, in the matters of pensions, federal litigation and similar cases. Without the prompt compliance of physicians with this phase of the law it is declared impossible to maintain a complete file.

All reports received after the allotted time will be vitiated by the negligence involved. It was stated that the county authorities will take measures to insure the compliance with the law and impose penalties for failure thereof.

Dr. Weltner of Bluefield, has received a licutenant's commission and has gone to the border as a surgeon. The offices of the State Health Health Commissioner will be moved to the Masonic Temple from the State House while the legislature is in session.

Dr. T. W. Moore, eye, ear, nose and throat specialist of Huntington, recently attended the meeting of the American Academy of Opthalmology and Oto-Laryngology at Memphis, Tenn. He read a paper on "Pressure Changes in the Curvature of the Cornea, due to Chalazion and other Lid Tumors."

Dr. L. V. Guthrie, superintendent of the Huntington State Hospital, has recently returned to his office from Greenbrier County, where he had been called in an important hearing before the Lunacy Commission.

Dr. J. W. McCullough and wife of Charleston, spent the holidays visiting in Huntington.

The Southern Surgical and Gynecological Association met at White Sulphur, December 11, 12 and 13. The program was a very interesting one. Of the two hundred members of the association ninety-five were present. This associa-tion includes in its membership a large number of the leaders of the surgical profession. The name of the association was changed to the Southern Surgical Association and a by-law was passed giving the council the power to remove any member who fails to attend for three consecutive meetings. The membership being limited, there is a waiting list of about eighty-five applicants. No one is considered eligible unless he specializes in surgery and has been in practice for more than ten years.

The engagement of Miss Esther Cohen to Dr. Morris I. Mendeloff of Charleston has been announced.

Dr. G. C. Schoolfield of Charleston, has just returned from Cincinnati, where he was called on account of the illness of a relative.

At the last meeting of the Kanawha

Medical Society the following officers were elected: President, Dr. W. A. Mc-Millan; Secretary and Treasurer, Dr. H. D. Hively.

Dr. and Mrs. L. L. Barber Jr., of Charleston, have announced the birth of a ick! ick, born December 13, 1916.

# Medicine and Surgery DRS. ENSLOW AND RADER

### **MEDICINE**

To disguise Epsom Salt add to each teaspoon of salt one-fourth teaspoon of cream of tartar and a little sugar. Dissolve in a little hot water and add cold water. A smaller dose of salt is required when the cream of tartar is used, since it hastens the action of the magnesium sulphate.—Ex.

Suitable formulas for—

### ENEMAS

One pint of normal Salt Solution. Temperature 102° F.

Two ounces of magnesium sulphate in one pint of water at 102° F.

Two ounces of glycerine in one pint of water at temperature of 102° F.

Two ounces of Castor Oil in gum arabic emulsion (3ss of gum arabic to the pint of water.)

One-half ounce of turpentine in gum arabic emulsion one pint.

-Exchange.

### TOXICITY OF SALVARSAN

John D. Ellis, M. D., Chicago.—In the great majority of cases in which I have used the salvarsan purchased during the last three months, I have noticed some toxic symptoms. Fully half of these patients have suffered from repeated vomiting after an intravenous injection. Intravenous injections of salvarsan purchased prior to that time rarely resulted in vomiting or any toxic symptoms.

In one case, in a man, aged 22, who came to the office with a chancre of three days' duration, but with a positive Wassermann reaction, I administered gm. neutralized in 180 c.c. of freshly distilled water. No symptoms occurred until three hours after injection, when the patient had an attack of vomiting lasting three or four minutes, with retching and severe nausea continuing for about an hour. For six days thereafter his nausea was relieved only on his assuming a supine position. He was unable to retain anything in the stomach, even water being promptly vomited. Any attempt to rise was followed by severe nausea and vomiting. Emesis for the first day consisted of bile-stained mucus. Enemas were administered, and proctoclysis was done. The urine became highly acid, but no casts, albumin or blood appeared. The blood pressure ran from 105 to 115 systolic; the white blood count was 8,500. Physical examination revealed nothing except considerable tenderness over the liver, which, however, was not cularged, and some slight tenderness over the epigastrium. There was no rigidity determined.

One week after the patient recovered from this attack I administered 0.4 gm. of salvarsan intravenously in 100 c.c. of water, and this was followed by attacks of vomiting and nausea lasting two days. At the end of this time the patient recovered, and I have been unable to detect any injury to the kidneys since that time.—Jour. A. M. A., 12-9-1916.

## SYMPSOMS FOLLOWING INJECTION OF NEOSALVARSAN

A. M. Moody, M. D., Chicago.— For some time intravenous injections of sal-

varsan and neosalvarsan have been given with scarcely any ill effects. More recently, however, the results following injections, especially with the present available product of neosalvarsan, but occasionally also with salvarsan have been such as at times to keep the patient somewhat worried. This condition is of a transitory nature, although slight symptoms may occasionally persist for a few days.

In several cases, chills with headache, nausea, diarrhea, and in some instances vomiting have followed a single injection of neosalvarsan. The onset of these symptoms may be immediate or delayed from one to twelve or more hours. few instances have the symptoms persisted for any length of time. Another disagreeable symptom which I have been twice is a feeling that one is going to This seems to carry with it a large element of fear, which rapidly disappears in from fifteen to thirty minutes. Physically is has been impossible to detect any anatomic alterations during such attacks. The symptoms are purely subjective. Sncezing is another phenomenon occasionally seen.

We have records of only one death following intravenous injection of neosalvarsan. This patient, a woman, was injected Thursday at 3 p. m., receiving 0.9 gm. of neosalvarsan. The patient was in poor condition when the injection was made, she later developed headache, chills and backache, Friday night went into coma, and died at 10 a. m. Sunday, with what the physician described as symptoms of arsenical poisoning. These findings were not confirmed by postmortem examination.

It is our custom to give the salvarsan and neosalvarsan by the gravity method, in quantities of solution varying from 100 to 150 c.c. All solutions used are made up daily with freshly double distilled water. The water is distilled over glass. These precautions we believe are absolutely essential to avoid the more violent reactions which so frequently follow the giving of such substances in small bulk and rapidly, as usually occur following the intravenous administration by syringe.

We have also observed that those persons who have had a meal just prior to receiving the injection are the ones who almost invariably have some toxic symptoms.

About 2,000 doses of arsenobenzol—Schamberg's preparation—have been given here without any of the toxic results seen following the use of neosalvarsan and salvarsan. Unfortunately the manufacture of this product has been discontinued.—Jour. A. M. A., 12-9-1916.

## TREATMENT OF SYPHILIS OF THE CENTRAL NERVOUS SYSTEM

Dr. Homer F. Swift (American Journal of the Medical Sciences) calls attention to the importance of prophylaxis of syphilis of the central nervous system. The best preventive would be prophylaxis of syphilis itself, but this problem is not yet solved, and the next best is the proper treatment of the disease in its early stages. No case of syphilis should be released from treatment until the cerebrospinal fluid has been shown to be normal, in so far as pleocytosis and Wassermann reaction are concerned. Even with the present diagnostic methods and effective therapeutic agents, a fair proportion of the patients are poorly treated, and probably a majority of them are released without lumbar punctures The failure of many patients to be followed until cured is due to several causes: 1. The patients fail to realize the importance of proper treatment in the prophylaxis of later disease and discontinue treatment; 2, there is still a surprising lack of facilities in dispensaries for the proper treatment of syphilis; 3, many physicians fail to realize the long systematic course that is required to eradicate the disease completely; 4, there are many cases of innocent syphilis and syphilis with slight, if any, early manifest ations which go untreated and later develop into nervous lesions. A table is presented to show the percentages with which tabes, paresis, and cerebrospinal syphilis have developed under different conditions of treatment. In practically a quarter of the poorly treated cases paresis developed, contrasted with a little over three per cent. of those who were

well treated. In from cleven to twelve per cent. of the poorly treated ones tabes developed, and in only about one-fifth as many of those who were well treated. A single course of treatment seemed to increase the liability to the cerebrospinal form of the disease. Hence the modern intensive treatment of early syphilis is particularly indicated to prevent the involvement of the central nervous system. In many cases of the early forms of syphilis of the cerebrospinal axis, mercury, iodides, and salvarsan affect the course of the disease favorably, but they are apt to fail, and the disease tends to relapse. Intraspinal therapy then comes into play, and the problem has been to find some beneficial therapeutic substance which could be introduced peatedly without injury to the nervous tissue. The four preparations mentioned as having stood the test of time are: 1. Serum obtained from patients shortly after intravenous injections of salvarsan; 2, serum to which small quantities of salvarsan have been added; 3, neosalvarsan in small quantities and weak concentration; 4, mercurialized serum. These are discussed at length, together with the technic of preparing and using autosalvarsanized serum. Treatments seem to be better borne if not repeated oftener than once in two weeks, especially in patients with tabes or spinal syphilis. In those with paresis or cerebral syphilis the intervals may be short-At times the interval should lengthened. A certain amount of irritation always follows the introduction of any foreign substance into the subarachnoid space and the effect of this should disappear before the treatment is The treatment must not be repeated. pushed hard enough to depress the general health. Salvarsan treatment should always be preceded by a short course of mercury to prevent a possible Herxheimer reaction in the region of vital nervous centers.

### LOCAL TREATMENT OF BURNS

Dr. R. J. Williams (British Medical Journal) gives out the following satisfactory method of treatment on a series of twenty-eight cases of burns. The most

essential single measure was the prevention of sepsis, which was found to be very fatal in burned persons. This was accomplished by the strictest observance of antiseptic precautions. The first step was the puncture and drainage of all blisters after sponging the surface with a five per cent. solution of phenol. first dressing was one of a solution of pieric acid, which was left on for two days if there was no infection. In the absence of sepsis the picric dressing was removed after two days, the new blisters, if any, punctured, the wound covered with a mixture of equal parts of boric ointment, and petrolatum over which surgeons' lint was spread, and the whole enclosed in an ample dressing. In the presence of sepsis the wound was treated every four hours by hot boric acid fomentations under jaconet, loose skin cut away and a dressing applied containing a small amount of bichloride of mercury. When the wound was rendered healthy the dressings were changed to those already described for non-septic cases.

THE FORM OF THE REFLEXES IN CHOREA. By Walter W. Swift, A. B., M. D. Albany Medical Annals, Sept., 1915.

Summary: Shaw is confirmed in his observation on a single reflex in chorea the knee jerk. The present contribution shows a reflex form that may appear during the elicitation of any of the normal reflexes. This form of reflex is really so peculiar as to amount to a sign of chorca of equal dignity with the respiratory signs of Graves and the new voice sign in chorca. The form of the reflex consists in an enhancing, retarding, or otherwise varying of the normal form of the reflex. It may therefore in brief, be described as the jerk-flop-wabble form of reflex response. It is any change of reflex motion caused by a choreic contraction.

It occurs most frequently in the medium severe cases; and as a whole probably about once in five cases. In previous literature it was first observed in the knee jerk alone by Shaw. My contribution portrays its form in detail; and shows it may be present in all the other normal reflexes.

INTESTINAL STASIS AND INTOXICATION. Dr. Paul G. Woolley, Cincinnati, O., in The Jour. of Laboratory and Clinical Medicine, October, 1915, does not agree with the ultra-surgical view regarding these conditions, and he says that absorption of poisonous materials from a healthy bowel has not been shown to produce symptoms of disease; but that absorption of bacteria and other substances from an unhealthy bowel may produce serious symptoms. A surgical operation for intestinal stasis must be viewed as a last resort; it is seldom more successful than medical and hygienic measures. Indeed, many cases in which symptoms are attributed to intestinal stasis are suffering from focal infections entirely outside the intestinal tract; such as pyorrhea, infected tonsils and sinus or antrum troubles.

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MEDICAL ASPECTS OF EMPYEMA AND PULMONARY ABSCESS. By Frederick T. Lord.

An immediate and free drainage of the plcural cavity is essential for prompt and permanent cure of a purulent effusion, except in cases in which the pus is sterile on cultivation, or contains tubercle bacilli alone, when an open incision is likely to be followed by a persistent sinus. When the patients are gravely ill, evacuation by thoraccntesis may well be undertaken as a preliminary to operation, or as a life saving measure. In pulmonary abscess the clinical aspect of the patient is of prime importance in deciding between expectant and operative treatment. The general appearance and the degree of sepsis, measured by the temperature curve, the pulse rate, sweats, chills, and the white count, are valuable guides. sistent septic features with an increasing amount of sputum and abundant elastic tissue or lung shreds, indicate an advancing lesion. The chances of surgical relief diminish with the lapse of time.—Boston Med. and Sura. Jour.

THE "SCHICK TEST." Schick, in 1913, announced the intradermal skin test as a means of controlling both the prophylactic and therapeutic application of

diphtheria antitoxin. A great deal of interest is being taken in this reaction, and it is rapidly acquiring recognition as a practical method for determining susceptibility to diphtheric infection. Susceptibility to diphtheria is subject to wide variations, and only those individuals who have little or no antitoxin in their blood and tissues contract the disease. This has been clearly established by clinical and laboratory investigation. The greatest susceptibility appears between the ages of one and four years, at which time 60 to 70 per cent. of cases show absence of protecting immunity. After this time there is a more or less constant increase in resistance, and according to Schick's results only about 10 per cent. of adults are susceptible to the disease.

Various procedures for estimating the antitoxin content of the blood, and thus separating susceptible form non-susceptible individuals, have been suggested, but no practical method was developed prior to that of Schick. The test which he described consists of the intracutaneous injection of small amounts of diphtheria toxin, a positive reaction being indicated by a characteristic inflammatory zone at the point of injection.

### TECHNIQUE OF THE SCHICK TEST

The injection of the toxin in Schick test is made intracutaneously, that is, into the skin between the epidermis and the cutis vera.

If the injection has been successfully carried out the epidermal layer should be raised and sharply defined. If this does not occur the injection has been made subcutaneously, and absence of reaction will probably be observed regardless of the susceptibility of the patient. For carrying out the injection a shortpointed, fine needle is required, and the injection is best made in the anterointernal surface of the forearm. The dose of toxin injected is one-fiftieth of the M.L.D. (minimum lethal dose) for a 250-gm. guinea-pig, in 0.1 to 0.2 Cc. of sterile water or salt solution.

CANCER STATISTICS. The United States Bureau of the Census has instituted radical improvements in the collection and publication of the statistics of deaths from cancer. A special report is in preparation and will be issued shortly after the first of the year, which will give important additions to knowledge of cancer and constitute a noteworthy advance in the registration of American vital statistics.

The Census Bureau has not undertaken special research work that will in any way duplicate the studies of existing institutions and laboratories. On the other hand, there should result a marked improvement of our national mortality statistics of this disease in the direction of greater accuracy and more detail. The special monograph on cancer will consist of tables showing the deaths from cancer during 1914, according to the site of the disease, age, sex, color, nativity and marital condition, for the registration area, the several registration states and the usual subdivisions. The plan subdivides the seven titles for cancer in the international list of the causes of death into twenty-nine headings referring to the exact site of the disease.

The Bureau will increase the accuracy of the statistics by tabulating separately the returns in which the diagnosis was "reasonably certain" and those in which it was "uncertain." In arriving at this distinction a report is classed as "certain' if the diagnosis was confirmed by microscopical examination of tissues, or by surgical operation, or by autopsy. All cases of internal cancer in which the diagnosis was based on clinical observations alone are classified as "uncertain" regardless of any strength of assertion by the physician that the diagnosis was

The improvement of cancer statistics has practical bearings of great consequence. Much of the valuable knowledge of the disease which we possess today has resulted from the collection and comparison of statistical data, and this method must be relied upon; side by side with experimental research and clinical observation, to elucidate the baffling problem of the nature and cause of this disease. The publication of this report by the Bureau should bring out new and useful information as to the prevalence

correct.

of the disease in the United States and thereby contribute to the better understanding of its controllable features. Such a study, if continued, should also throw clearer light on the question of whether or not cancer is really increasing.—St. Paul Med. Jour., Jan., 1916.

Somnoform. This was originally composed of ethyl chloride 60 per cent., methyl chloride 35 per cent. and ethyl bromide 5 per cent. Now it is said to contain but 1 per cent. ethyl bromide. Like ethyl chloride, Somnoform has been used as a substitute for nitrous oxide before ether anesthesia and for short operations. It is doubtful if the mixture has any advantage over ethyl chloride. The mortality is less than that of chloform, but twice that of ether and four times that of nitrous oxide.—Jour. A. M. A.

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THE BILE ANE CHOLESTEROL EXCRE-TION. There appears to be little doubt at present that cholesterol (or, as it is sometimes designated, cholesterin) can be absorbed in the alimentary tract from such food intake as may contain it. This has been ascertained in particular from the fact that after suitable feeding of foods rich in cholesterol, the content of this substance in the blood may be increased. Cholesterol is found, among various tissues and fluids of the organism, in the bile. The origin of the biliary cholesterol, which betrays itself in a familiar pathologic way in the formation of gallstones, is by no means certain as yet. It may be derived from disintegrating red blood cells, or it may represent food cholesterol that is being eliminated in the only secretory fluid that contains a suitable solvent for it. Whether the bile presents a normal or physiologic mode of excretion for cholesterol has been much debated. In so far as the evidence on this subject is derived from an examination of bladder or bile, it must be remembered that the cholesterol thus found may have its origin in the walls of the biliary passages. Naunyn always defended the view that this is the case. Inasmuch as bile from the gallbladder is much richer in cho-

lesterol than that from a fistula it was contended that this substance is added to the bile largely by the epithelium of the bladder. The evidence is, however, by no means conclusive. A number of feeding experiments have been undertaken by various investigators at different times to ascertain whether an abundance of cholesterol in the diet would be attended with an increase of the substance in the bile. The results, from which it was hoped to learn whether absorbed cholesterol would be excreted again in the bile, have been rather conflicting or indecisive. In the newest experiments conducted by D'Amato at the University Medical Clinic in Naples, on dogs with biliary fistulas, it appears that a diet rich in food containing cholesterol does increase the content of cholesterol in the bile. But the increment is so slight and insignificant in comparison with the quantity of cholesterol fed that there is no real justification for the contention that the bile forms a prominent mode of excretion for the substance under discussion. Furthermore, there is no convincing evidence that cholesterol is converted, as some have assumed, into cholic acid, which enters so largely into the makeup of the bile salts.

Incompatability of Quinine with Aspirin. Experiments have shown that weak acids, such as acetylsalicylic acid (aspirin), citric, malic, acetic or tartaic acid under the influence of heat may convert quinine into its poisonous isomer quinotoxin and cinchona into cinchotoxin. The danger of the formation of quinotoxin in the body cannot be great. Ready-made mixtures of quinine of cinchona preparations with weak organic acids should be avoided.—Jour A. M. A.

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Salvarsan Made in U. S. Because of the shortage due to the war, salvarsan is made and offered for sale under its chemical name to physicians and hospitals urgently in need of it by the dermatologic laboratories of the Philadelphia Polyclinic. Dr. Jay F. Schamberg, the director of the Department of Dermatological Research, states that the product made by the dermatologic laborato-

ries has been employed on hundreds of cases with excellent therapeutic results and with no reports of accident or untoward complications.—Jour. A. M. A.

### Surgery

Dr. Robert C. Bryan (Virginia Medical Semi-Monthly) describes the care of wounds by Carrel's method, as practiced in France. Tetanus antitoxin is administered when the patient is first treated and about ten days later at the base hospital a second dose is given. The details of the wound management we

quote:

On admission X-ray examinations are carefully made and, with the plate as a guide, foreign bodies are located, their size noted, and operation undertaken. The incision, or incisions, are generous and of sufficient size to give free access to all foreign material, cloth fragmented bone, or to an injured viscus. It would be well to note the clothing of the soldier for holes and loss of cloth which may be later located in the wound. The wound is gently, but thoroughly, cleansed of devitalized tissue and foreign bodies; comminuted bone particles devoid of periosteal attachments are taken away, but no fragmented piece of bone is removed that possesses a periosteal bridge; small pockets and pendent cavities must be given free drainage, and counter openings made if necessary; hemostasis should be perfected; gentleness, thoroughness, and complete wound eversion should be adopted in every case. The establishment of continuity of a severed nerve may be attempted at this time; usually, however, this operation is deferred to a later date. There is no attempt to remove minute particles of shell or stone which the X-ray may show to be dotting the plate. The crushed bone is placed in proper alignment, an appropriate splint applied, and the Carrel solution is now directed to every square centimeter of the wound surface by means of tubes, which are perforated with many holes, tied at the end, and enveloped in Turkish towcling. I have seen as many as 25 tubes used in one case. It is not the intention to use the solution

as a means of irrigation, but by simple contact. The tubes also act in a measure for drainage tubes. There is no attempt to close the wound. Gauze wet with the Dakin's solution is applied to the raw surface only, the skin surface being protected by yellow vaseline because it has been noticed that this preparation may produce considerable irritation to the skin. Carrel's solution is simply hypochlorite of soda and must not be stronger than 45/100 to 50/100 of 1 per cent. It is probably the nascent chlorine, or the liberation of oxygen which exercises the beneficial effect. There is no supersaturation, there is no overflow of the fluid from the wound, the linen and bed is never soiled. If there is any excess it is attracted into the dressings. Frequent microscopic examinations to note the progress of the wound are made by means of a platinum needle, the smear being fixed in the flame, stained, and when one germ is found to four fields of oil immersion lens, the wound is considered to be ready to be sewed up. This usually obtains in from four to six days. In bad compound, comminuted fractures, with much loss of tissue, it may take 10 to 12 days. The wounds are dressed every day, new tubes and gauze applied. The flow of the solution must be stopped four hours before the microscopic investigation, as its antiseptic properties may misrepresent the result. The character of the germ found upon investigation carries no individual significance whether it is staphylococcus, streptococcus, gas bacillus, or any other germ,it is the number and not the variety to which importance is attached.

## THE TREATMENT OF GUNSHOT WOUNDS

The treatment of wounds in war has naturally been the subject of much discussion. Some of the discussion has verged on the acrimonious, and it is really somewhat astonishing that so divergent views should be held with regard to the treatment of gunshot wounds and of the best means of rendering them as sterile as possible. The conditions presented by the present modes of warfare have never been witnessed before,

and treatment has been profoundly modified, if not actually revolutionized, by the knowledge already gained. As pointed out by Sir Berkeley Moynihan in a paper read by him at the opening of a discussion on the treatment of gunshot wounds at the Harveian Society of London, February 24, 1916 (British Medical Journal, March 4th), the damage to tissues was far greater than any that has come within the ken of surgeons of the present generation. In consequence, at first, they were unable to cope efficiently with the unprecedented situation and the efforts to check the activity and malignity of suppuration, surpassing anything ever seen in civil practice, met with comparative failure. It was recognized that aseptic measures, in the circumstances, were of little or no avail, that the antiseptics in use possessed certain countervailing disadvantages which robbed them of a great deal of their value, and more powerful antiseptics must be discovered. Doctor Dakin's calcium hypochlorite solution was one of these, and possibly the most successful but as the preparation has already been fully described in our columns, it is superfluous further to elaborate upon it.

According to Moynihan, however, another preparation has been brought out by Dakin known as "chloramine," which is thought to be in some respects superior to the hypochlorite solution. It is used in the form of a gauze in whose meshes powdered chloramine is held. Moynihan and his colleagues in Leeds and elsewhere in the Northern Command in Great Britain have employed it with great success, and it is suggested that it may prove to be one of the most powerful of all known methods for aborting grave infection.

The great Leeds surgeon, from his experience of the treatment of gunshot wounds, is of the opinion that the first attack made by a surgeon on a wound received in battle should be by an antiseptic, and the most powerful that it is proper to use. He does not think that Wright's method is applicable in the worst cases, at any rate. While Moynihan concludes that probably Dakin's solution or gauze is the most efficient means of treating infected wounds, he lays particular emphasis on the immense

advantage of keeping the patient out of doors. He remarks that "many years ago he learnt at Johns Hopkins Hospital that a high septic temperature was an indication for moving the patient on to a balcony rather than a reason for dreading the effects of exposure." Vaccine treatment of patients suffering from septic wounds has not been given sufficient trial in this war to warrant the expression of any decided opinion.

On the whole, judging from the experience of Moynihan and others, the efficacy of the antiseptic mode of treatment of septic wounds has been re-established, that is, at least, so far as the conditions of warfare are concerned.—

N. Y. Med. Jour., 4-25-1916.

## ERRORS IN DIAGNOSIS OF RENAL AND URETERAL CALCULUS

By Hugh Cabot, Boston

In a study of 153 cases, it was noted that 26 abdominal operations had been done without relief of symptoms which were clearly due to an overlooked calculus in the kidney or ureter. To avoid such errors Cabot lays down the following rules: (1) In all cases of abdominal pain of a chronic or recurring type, careful, repeated examinations of the urine are imperative, including diligent microscopic examination in all instances whether albumen is present or not. In all female patients a catheter specimen should be examined. X-ray plates are essential nearly always.

(2) The possibility of mistaking kidney or ureter shadows in the x-ray for other foreign bodies should be excluded by the use of the ureteral catheter, sterescopic plates, injected radiograph or the

wax-tipped catheter.

(3) The wax-tipped catheter may lead to a correct diagnosis where the x-ray is negative and the urine is normal.

(4) In doubtful cases, if the ureter cannot be cathetrized, the decision for or against operation must depend on the severity of the symptoms.—International Journal of Surgery.

### OLD ANTISEPTICS AND THEIR NEW APPEARANCE

The most interesting experiment of all in the energetic surgery of the day is the raising of a crop of antiseptics which the promoters hope to show are the best in an epoch. In the working of a new antiseptic, recently reported from Paris, there is to be no excess of by-effects and their waste. All is pure antisepsis. This imaginary novelty is criticised freely, but not too freely, in the Lancet for August 14. "Some accounts stated that the new antiseptic was chlorinated lime (calcium hypochlorite), to which boric acid had been added, and subsequently chalk to neutralize the acidity of the mixture. Later it was stated that the new antiseptic was prepared by adding to a solution of sodium hypochlorite, boric acid until the mixture was neutral. In both cases it seems fairly obvious that the net result would be a solution of hypochlorous acid, a well known and powerful antiseptic, probably more efficacious than chlorine itself. But the claims to novelty for this antiseptic are ill founded." In this instance, happily, the novelty is grounded in real merit.--N. Y. Med. Jour.

### MAGNESIUM HYPOCHLORITE IN SURGERY

Dubard commends in high terms a 1 or 2.5 per cent. solution of magnesium hypochlorite as absolutely harmless while its bactericidal power is considerable, and its preparation simple and inexpensive. As a disinfectant for the wounded it is proving superior to any others yet known, including Dakin's fluid. He commends it especially to obstetricians and midwives.—J. A. M. A., 10-7-1916.

### MOTION PICTURES APPLIED TO TEACHING OF SURGERY

For the first time motion pictures have been applied as an aid to the most difficult operations in surgery. These pictures cover thirteen distinct operations, and were made by a Pathe camera man under Doctor Schapira's direction. In the past surgical lectures have been illustrated by still pictures or drawings and much of the detail has been lost; in these motion pictures every movement is clearly shown. Among the operations shown are nephrectomy, nephrotomy, nephrolithotomy, nephrorrhaphy, nephropexy, pyelotomy, ureterotomy, suprapubic cystotomy, suprapubic prostatectomy, external urethrotomy, orchidectomy, varicocele, hydrocele, amputation of penis, and cystoscopic operations.— N. Y. Med. Jour., Sept., 1916.

TREATMENT OF UTERINE CANCER. Allman (Zentralbl. f. Gynack., No. 6, 1916) advises in place of hysterectomy the ligature and division of the internal iliae arteries through an abdominal incision. This treatment is based upon the idea that cancer cells require for their growth an abundance of oxygen, and that this is withdrawn by ligature of the arteries. In combination with this procedure he employs radium. To facilitate the removal of the broken down masses of the tumor the author recommends peroxide of hydrogen followed by application of a dusting powder, a mixture of calx chlorata and bolus alba being preferred if the discharge is very purulent. Internally, he gives potassium iodide and neosalvarsan. Of twelve patients thus treated seven were improved, but as none of the cases date back more than one and one-half years it is impossible to tell whether cures can be effected. The results are claimed, however, to be superior to those from any other method, particularly in advanced cases.

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### A PLEA FOR MOTHERS '

By Dr. E. Herbert Thompson, St. Luke's Hospital, Bluefield, W. Va.

Read at Annual Meeting, Wheeling, W. Va., May, 1916.

My purpose in writing this paper is not to condemn the methods of any general practitioner in caring for his obstetrical cases, but to call your attention, as I see it, to a few of the many important factors in the practice of obstetrics. I shall not deal with the treatment of any of the complications that arise during the maternal period, but try in a brief way to at least suggest some methods to prevent them.

It seems to me that in the rapid stride and fast advancement in all departments of the medical profession, that except from a comparatively few men, we have made the least advancement in the practice of obstetrics. This, perhaps, might be due in a measure to the insufficient training in this particular department in our medical schools. Since many physicians believe that labor is a normal physiological function, and that we need no special training in the arts of treat-

ment or managing of our obstetrical patients. If this be true, I wish to condemn it and say that I believe that there is no branch of medicine or surgery that in my opinion requires a more adequate efficiency and special training than that of Obstetrics, since a great many of our cases are pathological.

Dr. Finley Ellingwood has stated, and I think wisely so, that the greatest mystery in science is the mystery of Life; its origin; its perpetuation. Motherhood is the working together of the woman with God in such a manner that the physical life of the mother, together with the spiritual essence of God shall be put into a new being that is to be newly started upon a course of human existence. Surely then we cannot devote too much time and thought to our mothers.

For convenience and simplicity in the presentation of this subject, I deem it advisable to divide it into three parts; namely:

First: The care of the mother before labor.

Second: The care of the mother and child at labor.

Third: The care of the mother and child after labor.

First: Maurico, a famous French Obstetrician, has said that pregnancy was

a disease of nine months' duration. Assuming this to be true, we will have many obstacles to overcome in the practice of obstetrics, and should begin our supervision and treatment from the date of impregnation, or as nearly so as pos-This can only be accomplished by instructing our patients how very important it is for us to be notified as soon as they are aware or believe that pregnancy exists, for if we are to assume the responsibility at delivery, is it not due us that we should be familiar with the physical condition of the moth-We have all been called to attend confinement cases in which we have not had the slightest knowledge of the physical or pathological condition existing in the mother or child. From this lack of knowledge, we frequently obtain very bad results, and it is directly attributed to our lack of knowledge and inefficiency by the laity. Very often in the absence of instruction of the physician regarding pregnancy and labor, the life of the mother and child is jeopardized by a meddlesome and lying mid-wife. It is to the interests of our patients and ourselves, that we should condemn them when in possession of the facts. I am not after the good old granny who has come to our rescue in many instances, and who would not dare to take steps without orders from the physicians, but the other class of mid-wives who are constantly meddling and making vaginal examinations, producing and advising how to produce abortions, which are a constant source of danger to our patients and cause us no little worry, for in advent of any serious trouble or complication, we are called upon to assume the responsibility. We can remedy this evil by early advice to our patients with instructions that we can assure them of a safe and proper delivery, providing they follow our advice and instructions.

We should instruct our patients to visit our office from time to time for the necessary physical examination and to ascertain the condition of the pelvis. If it is not convenient for them to visit our office, we should then attend them at their homes. Regarding the diet, some authorities advise us that it plays a very important part in the physical condition

of our patients during the maternal period. I think it advisable for us to study the needs of our patients and advise the diet most suitable for them, as no definite routine can be followed. Dr. Franklin Newell has said that no two patients are exactly alike and do not require the same treatment and advice. Our instructions for dress should receive proper attention, as it is a known fact that tight skirts and corsets are very injurious to the mother during pregnancy. The clothing should be suspended from the shoulder, but never from the waist, but in case the abdomen needs a support, there are maternity corsets and binders on the market which answer the purpose very satisfactorily. The patient should be advised to take daily systematic exercise, but never to the point or state of becoming fatigued. The pregnant woman should lead a quiet, placid life avoiding any undue excitement or strain. If possible, she should be prevented from reading literature concerning or relating to her condition, furthermore you should gain her confidence and advise her to pay no attention to neighborhood gossip relating to her present and future condition. It is well to instruct them in regard to constipation or diarrhea, and have them to seek your advice if either exist.

The kidneys are considered the weak spots in pregnant women, since they are called upon to do a greater amount of work. Therefore, we should watch them and frome time to time examine a specimen of urine. This specimen should be examined both chemically and microscopically; furthermore see that she is drinking the proper amount of water and voiding the proper amount of urine. We should not overlook abnormal conditions existing in the genitals or breast, also giving proper instructions for their care.

Second: We come now to delivery, which is the crucial period of all young mothers' lives, not knowing whether she or her child will survive the trials she will undergo. She most likely has been told the excruciating pain and the horrible details accompanying labor, but all of this horror and fear, or a greater portion of it, can be eliminated by prev-

ious and proper instructions by the physician. The multipara knows by past experience the pain which she must undergo, and therefore requires but little instructions. DeLee's statistics show us out of every two hundred and fifty pregnant women, at least one dies. Seven per cent. of the deaths of pregnant women are due to puerperal infection, consistently estimated that twenty thousand women die every year in the United States from the immediate or remote effeets of childbirth. Is this not enough to stimulate us to prepare ourselves more efficiently for obstetrical service? Thousands of women enter our hospitals annually seeking relief from injuries and diseases resulting from child-birth. Authorities tell us that about one-third of the blindness in the world is due to the inefficiency and lack of the proper attention at ehild-birth.

The laity is asking the profession why these evils exist. If we give them an honest answer we would be forced to tell them that it is due to the low standard of obstetrical care. I have often thought of the responsibility of the obstetrician in private practice as compared with the surgeon in his eapacious operating room with good lights, sterile utensils, plenty of nurses and assistants; in many homes we find nothing sterile except what we take with us, poor light, no assistance, lack of mode or methods of sterilizing utensils. this not offset our bad results in many eases? What are the remedies to these conditions/ If we take an inventory of our obstetrical bag before starting to our patients, assuring ourselves that we are preparing for any emergency that might arise, we would save ourselves of a great deal of embarrassment at times and no little anxiety or worry. In private practice the best room in the house should be chosen, with instructions how to prepare it. If we are not fortunate enough to have a trained nurse in attendance, I deem it advisable to instruct the under-graduate as to the proper preparation of the room and patient; also the symptoms and signs of true labor, so we may be notified in the early The obstetrical technique is of the greatest importance, as we have the

life of two to be considered. The vagina or pelvic outlet should be prepared with the same care as for a vaginal operation. I think it advisable in every instance to use sterile rubber gloves to protect the obstetrician and the mother. If you are not fortunate enough to have a nurse in attendance, it will be of but little trouble to carry a small sterilizing tray with you to sterilize your gloves and necessary instruments. Frequent vaginal examinations are a source of great danger and very annoying to the patient. After determining the presentation and condition of the child, which is not always possible in the early stages, it remains for you to decide what course to pursue. Should you find what you believe to be an impossible normal delivery, I think it advisable to summon assistance, or place your patient in the hospital where you can proceed with the delivery in an adequate and efficient manner without subjecting your patient to undue danger.

Third, and last: The care of the mother and child during the puerperium.

During this period your advice for strict asepsis is very important, as it prevents complications and hastens convalescence. The genitals and breast should receive close attention. The breast at times has given the physician and patient no little trouble and anxiety during this period, but if they receive strict attention, we can many times prevent an abseess, fissure or cracked nipple. If we maintain a close observation of the genitals, we would at times be alarmed at the conditions which exist. Especially are these conditions found in private practice. In hospitals where we have every eonvenience and proper facilities for caring for the patient, these horrible conditions of the genitals are least often found. In perineal repairs, the attendant should receive instructions and enforce strict asepsis, if we are to obtain the best results. During our subsequent visits, the eye, nose, mouth, navel and bowels of the child should receive attention. Next. we should inquire about the condition of the bowels of the mother. Quite frequently we observe symptoms of infection in the mother, but upon free purgation the symptoms disappear, in a large majority of cases.

iodine.

In referring briefly to the diet, I find it a good plan to write out a diet list you think most suitable for the patient with strict instructions that it be followed as ordered; very often indiscretion in the diet retards the convalescence of the mother. If we are to maintain the friendship and confidence of the family we should keep the mother and child under close observation and be the first to detect anything abnormal in their progress.

In conclusion I wish to emphasize that if we are to make marked progress in the practice of obstetrics, we should care for our patients individually and not in groups, by giving them a little more time and careful study; prescribing and advising things we think most suitable for their welfare during and after the maternal period. By so doing, we at least feel that we have made an honest effort to overcome the evils and complications that exist during this period, and the trust and responsibility placed in our hands, will, by the laity, be appreciated; and if it were in the power of the good mothers, they would say, "Well done, thou good and faithful servant, enter thou into the joys of my kingdom forevermore."

PREPARATION OF THE PATIEN'T FOR OPERATION AND FOR POST-OPERATIVE TREAT-MENT

By Dr. J. A. GUTHRIE

Delivered before Ohio Medical Society at Wheeling, W. Va., Dec. 29, 1916.

Patients entering the hospital are of three classes. First; those who have decided, after due consideration, to be operated upon; second, the emergency cases and, third, accident.

The first class of patients I advise to remain on liquid diet for two or three days previous to entering the hospital. Acting on the theory of Dr. Crile we recommend that the patient drink alkaline mineral waters for several days be-

fore entering the hospital to reduce any possible acidosis. We advise them to enter the hospital at least 18 hours before the operation. Upon entering they are given a warm tub bath and put to bed. The parts are prepared by shaving and scrubbing with green soap followed with alcohol. The patient is then given an S. & W. enema and is allowed to use the commode. The S. & W. enema is repeated three hours before the operation. The patient is given nothing in the way of nourishment during the 18 hours except a cup of hot tea or a glass of milk twelve hours previous to the operation, but he may have plenty of water up to the time of the operation.

The second class of patients are those in which the nurse has one or two hours in which to prepare the patient for the operation. These cases are given an S. & W. enema providing the trouble is not acute appendicitis or some other intestinal trouble. They are then shaved dry and painted with 3½% tincture of

Accident cases are usually placed upon the operating table as soon as they enter the hospital and we have no opportunity of making any preparation. The patient is usually anesthetized and the parts are shaved dry and painted with iodine.

For a number of years I have not given purgatives or laxatives by mouth. In the first place it sets up peristaltic movement which interferes in all abdominal operations, causes irritability of the stomach, increases the tendency to nausea after the operation, lowers the patient's vitality, and sends the patient to the operating table half sick and miserable.

Thirty minutes before the operation the patient is given ½ gr. morphia and 1-150 of atrophia. The practice of giving this hypodermic before an operation has been condemned by a number of surgeons and writers, but I have found it of great benefit. All fear of the operation has been removed, the patient goes willingly to the operating table, takes the anesthetic with much less trouble, requiring only about one-fourth as much ether. The anesthetist is not bothered with mucus, not having to stop to remove

the cone from the patient's face to swab out mucus from the mouth and throat, and the patient does not come from under the influence of the ether easily, thus requiring the operator to stop while the anesthetist brings the patient again under the influence of the anesthetic. Also more complete relaxation can be secured through morphia than can be secured without it. There is less likelihood of pneumonia due to a smaller amount of ether being used.

As soon as the surgeon has started to close the incision, the stomach is pumped in the following manner: The stomach tube well oiled, is passed through one of the nostrils into the patient's stom-We have found this method of introducing the tube much better than introduction through the month. The tube, passing down through the posterior naris enters the oesophagus easily. The stomach is now washed, using three gallons of warm water to which has been added one teaspoonful of bi-carbonate of soda to the gallon. About a quart is introduced at a time and siphoned back. We use stomach lavage in about 90% of our cases and particularly in cases that have had no preparation as emergency or accident cases. In these cases we often remove large quantities of food which would otherwise lie in the stomach and cause nausea, fermentation and pain.

The patient is then removed to his room and placed in the usual ether bed. and a thirty-minute chart is kept by the nurse of the temperature, respiration and pulse, for the first six hours. We let the patient strictly alone, but if he is suffering to any extent he is given 1/4 gr. morphia and it is repeated when necessary during the next twenty-four hours. He is not allowed any water for the first six to ten hours, then he is given a few pieces of cracked ice every thirty minutes if desired, gradually increasing the frequency and at the end of twentyfour hours he is allowed water to drink in moderation providing there is no nau-

We do not recommend cold applications to the forehead or sponging the face and lips. In fact we do as little to the patient as we can possibly get along with for the first twenty-four hours. We allow the patient to assume any position in the bed most comfortable but do not allow tossing about.

The first nourishment given the patient is usually a cup of hot tea eighteen hours after the operation, providing he is not nauseated and then every four to six hours for the next three days he is given strained broth and clear soups.

If he does not have a bowcl action within three days we give an enema consisting of half ounce of glycerine and half an ounce of hot water in the lower bowel. This usually gives satisfactory results.

Before the patient enters the operating room he is requested to void and if he cannot he is catheterized. After the operation, if the patient does not void he is allowed to go twelve hours or until he has become uncomfortable and all simple methods have been tried. Thereafter catheterization is necessary every eight hours until the patient is able to void.

Gas is one of the most uncomfortable things to the patient. We have not found a specific for gas. We have found the insertion of the colon tube and the glycerine enema mentioned above to be the most effective treatment for gas; at the same time the patient is given nourishment free from acids and acid forming foods such as heavy starches. Such things as lemonade, ginger ale, pop, and beer are kept out of the patient's stomach.

In other words we leave the patient alone. Too many times physicians think they must be doing something for the patient and insist upon giving courses of calomel and other physics.

We have found in the above preparation and after treatment that only 5% of our patients suffer from nausea and that gas pains have ceased to be a bugbear.

I will not take up hemorrhage, shock, drainage, position and such things as I consider each a subject in itself.

Dr. C. C. Hogg and Dr. James I. Miller of Huntington, have gone south. They will visit Florida, Cuba and the Bermudas. Dr. Hogg is suffering from the after effects of a severe attack of grip,

### ERYSIPELAS

Read by Dr. H. R. Fairfax, McConnor, W. Va., at the meeting of the Mercer County Medical Society, November 16, 1916.

WILD FIRE, ST. ANTHONY'S FIRE AND A FEW OTHER SYNONYMS

An inflammatory disease of the skin or the adjacent mucous membranes attended always with redness and swelling, beginning with a chill and often with vesicles, bullæ, pustules, diffuse suppuration and gangrene, and characterized by a tendency to spread at the periphery and by fever. One attack affords no immunity against recurrences in the same or another locality.

From a careful study of cases as well as experimental inoculations the period of incubation is estimated as being not less than fifteen nor more than sixty hours.

At present no difference in character or nature is recognized between erysipelas of the face (so called spontaneous or medical erysipelas) and erysipelas following wounds, (traumatic or surgical erysipelas.)

The constitutional disturbance, fever, etc., accompanying the disease is probably due to the presence in the blood of the toxic products of the specific germ of the disease, namely, the streptococcus ervsipelatus.

Certain individuals present an unusual susceptibility to erysipelas, suffering an attack whenever they are subjected to a fresh exposure.

### SYMPTOMS

The outbreak of the disease is usually preceded for a day or so with malaise and the attack is ushered in with a chill, pyrexia and vomiting. The fever is present throughout the whole course of the disease, except in the most mild type when it may subside. The thermometric range is from 101 F. to 105.5 F. There will be other signs of constitutional disturbance, such as a coated tongue, quickened pulse, headache and in bad cases, delirium. The most fre-

quent location is on the head or face, but may occur anywhere on the body. The subjective symptoms are burning, itching, tingling and tension. One attack seems to predispose the individual to other attacks. It is more frequent in women than men and in winter than summer.

Intemperance, Bright's disease, parturition and a lowered state of nutrition predisposes to it. The variety of Erysipelas which is called the phlegmanous is characterized by the spread downward of the disease into the deeper subcut-The infection is much aneous tissues. more extensive than in ordinary erysipelas, consequently the local symptoms are distinct. The pus burroughs rapidly to considerable distance under the skin causing extensive sloughs. In the extreme forms of this type, large masses of tissue may become gangrenous. The simplest cases of erysipclas may without apparent cause assume the phlegmanous form and be followed by the most disastrous consequences. The disease may extend to the orbital cavity with infection of the eye itself. Blindness is not an infrequent result of this complica-Pericarditis, endocarditis and lesions of the kidneys may occur. There is no regularity in the temperature curve of erysipelas. The critical fall may occur at any time between the fifth and tenth day. In severe cases the fall is usually by lysis. The prognosis on a whole is favorable, but depends on the location and severity of the infection.

If the disease attacks the throat it will probably be severe and if the vagina is the point of origin as in puerperal cases, there may be great reason to fear pyæmia or septicæmia. The late Oliver Wendell Holmes was among the first to recognize the frightful condition arising from puerperal infection and openly laid the tremendous mortality of that disease to the introduction of erysipelas into the system of the parturient woman. The deeper-seated types of the disease, such as the phlegmanous or gangrenous have undoubtedly a much higher mortality than the cutaneous form. In individuals enfeebled by long standing suppuration and in alcoholic subjects the disease may prove to be a formidable

complication. The same may be said of Bright's disease, diabetes and a number of organic diseases, particularly in ad-

vanced life.

The ordinary duration of erysipelas varies from a few days to two or three weeks, according to the extent to which it spreads over the body. The tendency is notably toward recovery, but occasionally patients succumb from exhaustion from the systematic poisoning caused by the toxins of the disease or from meningitis when the infection extends to the membranes of the brain from the ear, the lining of the nose or the frontal sinus. Erysipelas of the new born is generally acquired by infection from the navel and usually leads to a fatal result.

The curative influence of erysipelas when it occurs in the course of other diseases has been already noticed. Chronic inflammations of the skin, particularly those of tuberculous or syphilitic character have been reported as benefitted by an intercurrent attack of erysipelas after resisting all other modes of treatment. Sarcoma and carcinoma have also been relieved or cured by the same influence. (Dr. Coley.) Old and refractory neuralgias have been cured or greatly relieved by the same means. In the insane likewise temporary improvement has been noted. This effect is supposed to be due to a change in the nutrition of the cells of the morbid tissues or to a direct destructive influence upon the elements of the foreign growth by the streptococci of erysipelas. This ingenious theory needs the support of more extensive observation for its entire confirmation. In like manner the effusion of fluid within the thorax, following an attack of pleurisy, has been observed rapidly to diminish and times to undergo complete absorption as a consequence of the invasion of the skin of the chest and trunk by erysipelas.

### TREATMENT

The patient should be completely isolated from all other sick persons and the employment of all possible means of establishment of good sanitary conditions about the patient. The most rigid prophylaxis should be carried out to prevent the spread of the disease by soiled dressings, infected linen or other articles.

The general treatment is that commonly employed in other infectious maladies. The large number of remedics which have been recommended for erysipclas may be of scrvice in ameliorating certain symptoms, but they are in no sense a specific for this diseasc.

As regards local treatment, there are various procedures which may be used to advantage. I have found the application of Ichthyol ointment 20% or Benzoated Oxide of Zinc Ointment, U. S. P. night and morning very satisfactory. This may be supplemented by the application of some soothing and cooling lotion as compresses saturated strong solution of Magnesium sulphate. When sloughing or gangrene occurs the case must be treated according to general surgical principles, i. e., by free incision, drainage, etc. During the period of convalescence the treatment should be tonic and supportive. So long as desquamation lasts, isolation should be continued.

### RAYNAUD'S DISEASE

E. S. DuPuy, Beckley, W. Va.

Read before the Raleigh County Medical Society, December 15, 1916.

If I have a hobby in medicine, it is to be able to make a correct diagnosis. That, I think, is the most important thing, and perhaps, the hardest task a doctor is ever called upon to do, and indeed how few correct diagnoses are made. We are too prone to treat symptoms and trust to God and drugs to do the rest.

My subject for this paper is Raynaud's Disease, and the thing that prompted me to write on this subject was the fact that I thought I had a case a few years ago. My patient was an old man with symmetrical gangrene of the toes. I sent him to the Sheltering Arms Hospital, where Dr. J. E. Cannaday attended him, amputating the affected toes; soon after leaving the hospital he died. Dr. Can-

naday was of the opinion that he had senile gangrene. Another good physician up my way had suggested Diabetic Gangrene, so I am sure I am at a loss to know just what form of gangrene my man died from, but at any rate, it caused me to look up the subject extensively. I have seen three cases of Raynaud's Disease, all in the Cincinnati Hospital. The first case I saw was with Dr. A. Ravogli. The patient was a young man aged eighteen years, had enjoyed fairly good health; at this time he commenced to suffer from neuralgia of the legs and arms, which after a while ended with swelling and asphyxia of some of the fingers and toes. The affected parts returned to their normal condition, but finally grew worse and the asphyxia resulted in gangrene; some of the fingers and toes were amputated and his condition improved somewhat. After some months he suffered another attack and finally died. The second case I saw was with Dr. Robert Ingram, this was in a woman. I remember quite well that the asphyxia was marked, her skin was cold and blue. I only saw her the one time, so do not know how her case terminated. My third and last case came under the service of Dr. E. W. Walker; a brief description of this patient follows: Male, age 27, complains of itching and pain in little toe of the left foot about six years ago. The end of small finger on right hand began to itch, then turned red. blue and black in order and was amputated at distal and medium phalangeal joint. Two years ago had same trouble in fourth toe on left foot and had it amputated. About three months ago end of small toe on left foot began as did adjoining toe two years previous. First itching, sensitive, reddened and turned bluish. Was in hospital about that time and had local treatment which temporarily relieved it. Later began to cause him a great deal more trouble, so came to hospital. Small toe on left foot much discolored—red, bluish in color small ulceration on ball of toe—painful to touch-complains of a great deal of itching and some pain in toe—this continues all the time. Toe not much swol-Mother died of same trouble he

had; in her case it having extended above knee.

#### DIAGNOSIS

Asphyxiating conditions of tissues preceding gangrene, fingers and toes mostly affected, sometimes ears and nose. Gangrene symmetrical.

#### DIFFERENTIAL DIAGNOSIS

- 1. Endarteritis.
- 2. Thrombosis.
- 3. Senile Gangrene.
- 4. Diabetic Gangrene.
- 5. Frost bite.
- 6. Ergotism.
- 7. Carbolic Acid Burn and Gangrene.
- 8. Dry Gangrene.
- 9. Moist Gangrene.
- 10. Hospital Gangrene.
- 11. Embolism.

In the second stage of syphilis you may have, as a complication an obliterative endarteritis resulting in gangrene. Hunt for the various causes of Thrombosis, it very often occurs in old people and in syphilities. If your patient has a heart lesion suspect, at least, an embolus; senile gangrene does not always occur in the aged. Oliver Wendell Holmes truly said that "a man is as old as his arteries." Feeble action of the heart plus obliterating end-arteritis or atheroma of peripheral vessels result in dry gangrene, this form almost always occurs in the toes or foot, in an alcoholic; a syphilitic or tuberculous dry gangrene may occur in quite young persons. Diabetic gangrene resembles senile gangrene, except that the dead portions remain somewhat moist and putrefy. It mostly occurs on the feet and legs, but may affect any part of the body. It usually comes on late in the disease, but may come on at any stage, but more rapidly than senile gangrene. To find sugar in the urine will clear up the diagnosis. In gangrene from frost bite you will get a history of exposure. This form of gangrene is dry, provided the parts have been badly frozen, but if only mildly frozen, then you will get

the moist form of gangrene. Gangrene from Ergotism is of the peripheral dry form: it is preceded by anesthesia, muscular cramp, tingling pains and itching. This form of gangrene occurs in epidemics, where rye-bread is largely used, but is very rare in the United States. It usually affects the fingers or toes, but may involve an entire limb and can be symmetrical. Dr. Thornhill of this county, reported a case of gangrene in a woman who had taken an ounce or two of Ergot to bring on a miscarriage, but I do not know the extent of the disease in her case. Personally I have not seen a case. Dr. Thornhill took his case to McKendree Hospital. You can get a sloughing and gangrene from carbolic acid (although it would be a very expensive burn at the present price) and sometimes from a not very strong solution. The history of the case would clear up the diagnosis. Dry gangrene is caused from a blocking of an artery, either by an embolus, ligation or laceration; sudden severe pain at the seat of impaction, tenderness, pulsation above, but not below; limb blanched, cold and anesthetic, points to a diagnosis of embolus; it almost always occurs in the diseased arteries of the aged. Within forty-eight hours gangrene is evident and the limb becomes black. Dry gangrene affects the leg oftener than the arm. Thrombosis may cause gangrene in the aged. It comes on more slowly than from embolus. Moist gangrene occurs when both vein and artery are destroyed, the leg swells and is pulseless below the obstruction. The skin is cold. livid and anesthetic; blebs occur on the skin and contain sero sanguinous fluid; the fetor is horrible; the extremity swells enormously. You may have moist gangrene following inflammation. pressure of the exudate cutting off the circulation, the sudden cessation of pain is very suggestive of gangrene. Hospital gangrene, thank goodness, is a thing of the past. It formerly occurred in crowded and ill-ventilated hospitals. It is a form of low sloughing phagedena, probably due to the streptococcus. Embolism may be caused by a blood clot, fat, micro-organism, air, or a portion of a tumor. It may arise either in a vein

or artery; an embolism is more serious than a thrombus. Look for the various causes and differentiate accordingly.

### PHYSICAL METHODS OF TREAT-MENT

By Oscar B. Beer, M. D., 14 Chancery Street, Buckhannon, W. Va.

It is not the writer's intention to go into this subject in a lengthy manner nor discuss the physics of the different modalities used in the treatment of diseases, all this can be learned in any good text book or better still, in post-graduate work in some good clinic.

This article is written after fifteen years' study and use of these methods in every-day practice and the cases reported as examples are taken at random from a great many hundreds treated.

The most important forces recognized under the head of physical therapeutics are Electricity, X-ray, Vibration, Light, Heat, Massage and Water. These things are not held up as cure-alls, but surely do constitute a very important branch of medicine. They have long passed the experimental stage and are being recognized and used more and more by the up-to-date physician. The author is not a drug nihilist but a strong believer in their use and has seen many lives saved by medicines. But the use of drugs has been and is greatly abused. Why do so many of our patients drift to the drugless healer? Simply because we cannot give them what they want, cure them without making a drug shop of their stomachs. What have we to offer when medicines fail? The majority of us have nothing. We have become so set in our ways that the advance in therapeutics has long since passed us. We still stick to the prescription pad and the nauseous concoctions of the past, while our friends the Faith Healer, the Osteopath and the Chiropractor get the business. And why? Simply because we are too lazy or too stubborn to advance in methods of treatment. The fellow who condemns these advanced methods is the one who knows nothing about them and to mention the use of electricity in the cure of diseases to him is like waving a red flag at an angry bull. He would not know the difference between the positive and negative poles of the direct current or whether it had any poles.

Do not understand me to say that drugless methods will ever supplant medicine and surgery, this will never be, but I do believe they will to a great extent. Speaking of surgery, we all know that surgery has made greater strides within the last deeade than therapeuties. but every thing has gone wild on surgery, every doctor thinks he is or should be a surgeon. Surgery is all right and has done some wonderful things; our hat is off to the surgeon. But the pendulum has commenced to swing the oth-How many eases of surgical er wav. junk do we see coming to our offices praying for relief from the effects of some ill-timed surgical operation? Surgery is over-worked; many needless opcrations performed. What has the avcrage hospital to offer in the way of treatment? Most hospitals are splendidly equipped for surgery and arc eapable of taking eare of the usual run of acute diseases, but outside of this the majority are lacking in facilities to treat that vast army of ehronics who by proper methods could be cured or at least The surgeon as a made comfortable. rule when he finds nothing for which to operate usually loses all interest in the patient.

### MEDICAL ELECTRICITY

I shall not attempt to go into the physics of electricity lest this article become wearisome. No one can tell what the force we call electricity is. We see what it can accomplish in many ways, run a street car, make a light, etc. Its effects on the human body are just as definite and can be proven just as easily as can its effects in a commercial sense. The current has a certain definite action on the cells of the body and a knowledge of this action gives us a powerful curative agent. We use several manifestations of this force in the treatment

of disease; namely; eonstant eurrent, induced current, sinusioidal current, high frequency eurrent, static current, and de Arsonval current. Each one of these has its own peculiar action and place and one must familiarize himself with these modalities in order to use them with success.

Perhaps the best way to illustrate the use of electricity will be to hold a short elinic on paper. These are not imaginary eases, but taken from my records.

Case 1: Has almost complete paralysis of the external rectus muscle; eye rolls into nose, marked diplopia; been in this condition for weeks, has had all the medicines known to benefit this trouble; looks like a hopeless case. Used the constant current interrupted, neg. pole to temple, pos. to neck, treated daily for three weeks, discharged cured. Patient has remained well.

Case 2: Neuritis from injury to museulo-spinal nerve. Patient cannot use arm and suffers great pain, has had all kinds of local applications and internal treatments galore. Daily use of the sinusiodal eurrent for one week; pain is all gone in three weeks and patient has perfect use of arm.

Case 3. Sub-involution; prolapse of the second degree, with endometritis. Patient confirmed invalid. Had been treated by several physicians and advised that nothing short of the removal of the uterus and adnexa would relieve Gave her the constant current. Large sponge electrode over lower abdomen attached to negative pole. Large copper electrode amalgamated with mereury attached to positive pole applied inside the uterus; let eurrent flow for five minutes using 25. mil.; then changed to induced rapidly interrupted current for five minutes for tonic effect. Three weeks daily treatment and two weeks bi-weekly eured her. This was three years ago. I see her every few days on the street, rosy eheeks and no trouble. She has thanked me many times for saving her from the loss of her vital organs, besides she paid a generous fee.

Right here in connection with this case I want to raise my voice in protest against the indiscriminate cutting, sewing, seraping and removing the female

organs of generation. Of course there are times when operative procedure is imperative and all right, but the vast majority of diseases of the pelvic organs of women are amenable to conservative methods. There is nothing that will do more for diseases of women than electricity properly applied.

Case 4: This man has had his prostate gland removed; supra-pubic route, by a competent surgeon. Did well for awhile, then could not empty bladder. Suffered great pain. Was at Johns Hopkins Hospital for six weeks; got no relief; could not get sound or catheter into bladder; too weak to stand another operation so he was sent home. Patient is very emaciated and has been under an opiate for weeks; passes a small amount of urine every half hour with great suffering. Dense stricture at bulbous urethra.

Large sponge electrode is placed over lower abdomen attached to positive pole of constant current. An olive tipped copper electrode attached to negative pole which is solvant in its action, is passed down to stricture. Fifteen mil. current is let run for five minutes when sound slipped through, then passed catheter and emptied bladder. This was repeated daily for four days, then every second day for a week when patient could empty bladder and suffered no pain. Five months have passed and he is doing well at this writing.

Electricity is a God-send to victims of stricture and prostatic troubles.

### THE X-RAYS

Volumns have been written on the X-ray. It is styled one of the seven modern wonders of the world. Most of us have a vague notion of what can be done with it in the way of diagnosis and treatment. The writer has had fifteen years' experience with its use as a curative agent and has given more than 2000 treatments. I will not burden the reader with more case reports, but will say the X-rays will work wonders in skin cancers, tuberculosis, and chronic skin diseases. It is almost a specific in Acne.

### HEAT AND LIGHT

Heat and light have been used from time immemorial in the treatment of disease. The American Indian used the sweat bath. He built an inclosure with branches and skins, digging a hole in the ground near the center. This hole was filled with water, into which hot stones were placed; steam was thus created. After coming out of this and while perspiring freely he took a plunge in a nearby stream.

A sun bath is highly beneficial. Our bodies are too much excluded from the light. Custom and a rigorous climate decree the use of clothes, so we load the body with clothing from head to toes and grow corns and get bald at our

leisure.

In 1891 the attention of Dr. Kellogg of the Battle Creek Sanitarium, was called to the electric light bulb as a means of applying heat to the body. Since then the modern electric light bath has been perfected. With the light bath we get the combined effect of light and heat. This has practically taken the place of all other baths where the current is available. It is pleasant and not depressing. Where we have faulty elimination from whatever cause there is nothing which can be of more benefit than a course of these baths.

This is not meant as a scientific paper, nor have I gone into the technic of the application of these methods. Much has been left out that could have been said on the subject. It is intended as a plea for the use of any method that will get results regardless of schools or so-called authorities. Results are what our patients want; and we must get results or our patients will leave us.

A FEW SUGGESTIONS FOR THE CONSERVATION OF THE HEALTH OF SCHOOL CHILDREN

By R. H. Edmondson, M. D., Morgantown, W. Va.

The state undertakes to educate the child for the purpose of making out of

it a better citizen than it would become without an education. It is manifest then, that the type of citizen most desirable is one who is strong minded. strong bodied and strong souled. a citizen can not be produced if our system of education takes into account the training of the mind only. It must provide for a sound mind in a sound body. The knowledge which many of our present citizens possess has been obtained at fearful cost—the price paid being impaired eye-sight, weakened vitality, spinal curvature, nervous troubles or some other defect which lessens their real value to the community and to the state.

School-life, is to a certain extent, an artificial one, and the child who enters an ordinary school, undergoes a physical as well as a psychical depression. The normal development of the growing child depends considerably on his muscular development and activity which schoolroom discipline naturally tends to check, this in turn develops muscular fatigue which results in bad posture, nervous strain and exhaustion, and when we realize that about 27% of the population of the United States spend from three to five hours a day in school we should also appreciate the necessity of doing all in our power to conserve the health of the child. In the year of 1912, 17,300,202 children attended school in the United States and but a very small percentage of these sat upon or had adjustable desks; children differing in age height are assigned to the same sized In many instances the desk is too high or the seat too low or vice versa. Many children are unable to reach the floor with their feet, and others are unable to draw up their feet because their knees strike the bottom of their desks, and a slouching position results. To overcome these conditions all desks should be adjustable to height: the desk top should have a slope of twelve to fifteen degrees and should be wide enough for the whole fore-arm to rest upon it when writing. Children should not be required to remain sitting for long periods. An exercise period of three to five minutes should be had at the end of each hour. Physical culture movements advised.

That we should lay emphasis upon hygiene of the mouth will be realized when you know that 75% of the children of Morgantown have defective teeth. A foul, unclean, unhealthy mouth and throat is always found where the teeth are decayed and uncared for, and no greater breeding place for disease germs can be found than such a mouth. This Fall, pledge cards emphasizing clean teeth and good health, and a portion of dental cream will be given to every child; the Board of Education has been asked to establish a dental clinic in the new high school.

Personal hygiene of the hands, ears, hair and the entire body should be more persistently insisted upon by the teacher. It is generally accepted as a trueism that the hygiene of the home is reflected in the child at school, but can we not reverse this by our teaching, and have the hygiene of the child at school reflected to and influence the home? We should impress the mind of the child of the benefit and healthfulness of fresh air in the bed-room, the spread of contagion and disease by flies, careless spitting and the family towel, the exchange of pencils and "suckers", the benefit of sunlight, simple food and early bedtime, for sleep ranks with food as one of the most imperative needs of the human organism, and like food, it has its educational and economical aspects as well as its physiological, and the teacher's influence could be made very effective by her teaching, for you all know that the average parent is too indulgent to enforce early retiring.

The subject of accident prevention is not new, yet it is only in recent years that we have noticed any constructive work being done in this direction, but in the industrial world today every precaution is being taken to prevent accidents to employees; now-a-day we see full page advertisements of street railways advising patrons how to avoid accidents. "Safety first" has become the motto of steam railroads. entrance gate of all large manufacturing plants such mottos as this stand forth, "Be Careful! An ounce of prevention is worth a pound of cure;" so, if the industrial world is alive to this subject

protecting the workers of today, should not the educators of the workers of tomorrow lend their influence and do their part towards the prevention of accidents especially when statistics are considered. According to the Inter-State Commerce Commission in the past twenty years, 86,733 persons were killed and 94,646 persons were injured while trespassing on the railroads of America; 120,000 of these were citizens, fathers and brothers, the wage earners of families; 25,000 were children under fourteen years of age and 25% of the total were tramps. But the railroads do not furnish all the fatal accidents. In New York City during 1912 there were 226 children killed and 79 seriously injured while playing in the streets. In New York state and New Jersey during the same year there were 164 children killed by automobiles and 935 injured from the same cause; there were 77 killed and 171 injured by trolley cars; 110 killed and 249 injured by wagons and other vehicles. It is interesting to know that of these accidents 75% were boys and 25% girls.

When we are confronted with these facts is it not well to "stop, look, listen and think" about these figures and then endeavor to implant in the mind of every child an emphatic "don't" and "never" as important words of wisdom with respect to walking on railroad tracks; loitering about stations; flipping on and off cars, automobiles, wagons and other vehicles; crawling over and under freight trains; playing with matches and around bonfires and indulging in other hazardous passtimes.

The question of all contagious diseases is too extensive to consider in this paper but there is one that I wish to direct your attention to, the common cold. It has been pretty definitely settled that the public school presents one of the greatest means for the dissemination of communicable diseases. Children coming from all sorts and conditions of homes, bringing with them all sorts of infections, make of the public school the great distributing center of infection for the whole community. Acting upon this knowledge, it has been the practice of health authorities to close whole schools when it has been discovered that some

especially dreaded form of infection is prevalent. The amount of schooltime lost in consequence is very great. With the development of more advanced ideas of etiology it has come to be understood that it is both from a sanitary and an economic standpoint unwise to suspend the sessions of an entire school for the purpose of eliminating a few pupils who are the real distributors of infection.

It has been found much more rational and practical to detect the sources of infection and exclude them from contact with the others, and this process of elimination by exclusion is the key to the efficient control of infectious diseases in any community.

It is not long since, in the mind of most people, that all disease was a mysterious dispensation of Providence; to be endured and not impiously prevented. Even today many intelligent people, regard measles and whooping cough as diseases to which childhood is predestined and which it were futile to attempt to prevent, and this in the face of the knowledge that these two diseases contribute very materially to the general mortality.

If this is true of diseases known to be infectious, how much more difficult is the problem of preventing that group of infections, so common and yet so misunderstood; so trifling in the minds of the majority and yet so dangerous—the common cold and its complications. The same principles are involved in the spread of colds as are in any other infectious disease.

The bacterial agents which are concerned are the pneumococus, staphylococus, streptococcus, influenza, Friedlanders and the micrococcus catarrhalis.

Acting locally on the mucous membranes of the nose and throat these germs set up the pathologic conditions which characterize a "cold"; swelling of the mucous membranes: outpouring of mucous, and pus formation. General symptoms of fever, malaise, headache, etc., are present; due to the absorption of poisons and to the pressure upon nerve terminals caused by the swelling. These symptoms alone are enough to incapacitate a pupil for study, but when we consider the possibilities of complications by extensions to the bronchi and

lungs; the ears and tonsils; the eyes and even to the brain, often resulting in death, every precaution should be taken to prevent the spread of this *publicly accepted mild disease*. The exclusion of pupils having this infection is imperative.

At the recent meeting of the West Virginia Educational Association a resolution was passed asking the State Legislature to amend the law, making medical inspection compulsory in all the schools of the state and also to give power of exclusion to the medical supervisor in cases where diseases and defects are found which are a menace to the child as well as to others. The wisdom of medical supervision has been abundantly demonstrated in our schools as shown by the following statistical report:

REPORT OF THE MEDICAL INSPECTOR OF MORGANTOWN SCHOOLS 1912 TO 1916.

	12-13	13-14	14-15	15-16
Total No. pupils examined	1728	2132	2320	2504
Total No. re-examined		1389	1398	1472
Total No. first exam		743	922	1032
Defective teeth	1107	1120	1088	1108
Per cent.			46	44
Enlarged tonsils-adenoids				378
Defective hearing		14	11	12
Defective vision	273	145	208	224
Defective lungs		4	4	7
	3	2	4	4
Ortheopedic diseases	8	8	8	5
Heart diseasesOrtheopedic diseasesStabismus (cross eye)			19	12
Epilepsy			2	4
Goiter				7
Anæmia		9	22	21
Creten	1	1	2	3
Blind in both eyes			1	1
Blind in one eye			3	3
Rackward punils	1	1	19	
Undernourished Cleft palate	12	9	22	11
Cleft palate				3
Improvemt. in 1472 re-ex.		554	563	811
No having no defects	·			947
No. excluded (all causes)	151	102	71	97
Visual defects corrected by			1	
glasses				168
Cases followed up				454
Acute Diseases	l i			
Diphtheria	33	6	3	4
Diphtheria suspects	5	5	5	3
Scarlet fever	10	4	4	14
Scarlet fever suspects	7	9	7	22
Impetigo (contagious)	61	22	49	33
Ring worm	10			4
Pediculosis capitis	56	23	27	13
Eczema, seborrhea, etc	3	6	22	23
Chorea	2		2	
Chicken pox (excluded)				12
Conjunctivitis (excluded)	4	2]	š	10
Mumps (reported)			*	30
Whooping cough (report.)				1

<sup>\*</sup>Epidemic.

When the history of the twentieth century is written, it is doubtful if any accomplishment along the line of pre-

ventive medicine will stand out more prominently than the medical inspection and examination of school children; inspection whose pre-eminent consideration is prevention of disease; inspection which at school guards against contagion in every form and discovers the existence of physical defects that interfere with the child's development, school progress, educable capacity, equipment and future usefulness; inspection which by a thorough "follow-up" process in the home by a school nurse unearths hidden and unsuspected contagion and stimulates in parents an endeavor to have physical defects remedied and thus prevent shattered and perverted lives and degenerate citizenship; inspection which is not only for today but which will make the future homes a more potent environment for the development of the physical, mental, moral and spiritual well-being of their offspring; inspection which has for its ultimate goal the betterment of home conditions and the welfare of the child-"the nation's best asset''—as he has been called.—Sobel.

I have condensed this paper into ten sub-divisions for the guidance of school children. When printed on small sheets they can be placed in all new books and thus be a constant reminder of health guides.

- 1. Sit and stand crect.
- 2. Use tooth brush daily.
- 3. Keep clean, wash before eating.
- 4. Never put pencils in your mouth.
- 5. Don't spit on the floor or side-walks.
- 6. Sleep with windows open, top and bottom.
- 7. Stop, look, listen and think before crossing the street.
- 8. Don't bite apples others have bitten, or suck others' oranges, or "suckers".
- 9. When coughing or sneezing use a handkerchief and don't wipe your nose on your hand. Disease germs are scattered in this way.
- 10. Don't play with matches or around bonfires; jump on moving cars, automobiles or wagons and thus avoid accidents.

### THE COUNTY SOCIETY

Address of Dr. G. F. Grisinger, President of Fayette County Medical Society, Gamoea, W. Va.

Gentlemen of the Society:

My first duty is to express to the gentlemen here assembled my grateful thanks for the honor they have done me in electing me president of the soeiety, the highest honor this society can confer upon one of its members. appreciation of the compliment is all the greater from the fact that I am only a young member of the society and from my knowledge that the society has such an admirable list of members from which to choose its officers. Entering upon the performance of my duties in this frame of mind, you may be assured that so far as I have the ability, it shall be my aim to justify your judgment.

But, do not forget this fact gentlemen, that it requires the hearty cooperation of every member of the society to make it a success. Your officers can do nothing without your assistance. I therefore, beg your ecoperation during the present year in the interest of the society, that our association may make us better physicians and that our obligations to the society may be fulfilled.

No single factor and no collection of factors can so strongly affect the condition of the local profession as can the county society, provided it completely lives up to its duties and privileges. The association with one another of the local physicians, which should occur in the eounty society, is one of the most valuable of its assets. From this association a more friendly spirit is created, we understand each other better and from the harmony thus ereated we do better professional work both in the society and out of it. It makes us more thoughtful in speaking of our professional brother. especially if any of us should be so base as to speak ill of him.

We know that there will always be differences of opinion so long as human nature remains as it is, but if these differences of opinion can be discussed collectively and in a common meeting place all concerned will be better off, for a less bitter feeling will remain afterward.

The society should be a constant stimulus to each member and by the reading of papers, discussions, clinical meetings, lectures and a number of other ways aid him to make of himself the best and most useful physician which he is capable of being.

To the laity the society can be of the greatest service. In the county in which it exists it should be the recognized authority on all matters of public sanita-

tion and hygiene.

The society, therefore, has a two-fold obligation: first, to its members; second, to those outside its ranks. Then gentlemen, with such a golden opportunity to make of ourselves better physicians and of fulfilling our obligations to society in general let us accept it.

We have the professional fabric which if properly woven together will make one of the best county societies in the state. We have at times been afflicted with mild attacks of lethargy so let us apply the specific treatment and prevent a recurrence by inoculating with an immune sera.

Let us resolve to make the world brighter and better and bring sunshine and gladness to hearts in gloom. Let us,

"Do noble things—not dream them all day long—

And so make life, death and that vast forever

One grand, sweet song."

### NOTES ON THE MAYO CLINIC

By J. E. Cannaday, M. D., Charleston, W. Va.

The Mayo system is a department store of medicine and surgery with the shining planets, the Doetors Mayo, at the head. Dr. J. W. Mayo is the head of the executive and administrative department and is an artist in that capacity. Had he gone into the oil business he would have duplicated Rockefeller and had he been a railroad man he would have been a Hill or a Harriman. From an insignificant town on a nameless western prairie, Rochester has grown as the clinie has grown and the two destinies

of the clinic and the town are one and the same.

A few years ago the little town of Rochester was full of nursing homes. The reason for this was plain, St. Mary's Hospital had not kept pace with the practice of the Mayo Brothers Corporation. Patients were kept in the hospital for the shortest possible time, then sent out to a nursing home or to a hotel. Recently a large private hospital, the Colonial Sanitarium, with room for 300 patients, has been built. This is run financially as a hotel and professionally as a hospital.

At the Colonial Sanitarium a vast number of the minor and the more commonplace surgical cases are treated hernias and appendectomies without number, much of the orthopedic work, tonsils and adenoids, mastoids, eye casts, etc.

The hernias are done after the method of Andrews, the superficial fascia brought down to the shelving edge of Poupart's ligament with 20-day chromic catgut, in fact all of the deeper sutures are of the same material and are contin-The first stitch is placed right down at the extreme lower edge next the The sac is Kocherized or drawn up under the rectus muscle. Most of the skin wounds are closed with a basting stitch of black linen thread after the iodized silkworm gut sutures have been passed figure of eight fashion. This figure of eight suture is ubiquitous as the Jew; it is seen in every operating room in which any of the Mayo connection The silkworm gut is kept in operate. 1% iodine. All of the anesthetists are trained nurses. Dr. W. J. Mayo frankly said that they used them because they were cheaper and quite as efficient. They have a record of 100,000 cases without a death primarily due to ether.

In speaking of the diseases of the pancreas he said that they were very poorly understood and in speaking of the various tests said he would not be so malicious as to say they were not worth a darn, but would be very generous and say they were worth about two darns. He does not at all approve of scopolamine anesthesia or of nitrous oxide an-

esthesia. He severely condemns the Kelly suspension of the uterus which is now seldom seen except in small communities, possibly excepting the occasions when double pus tubes are removed and the operator desires that the uterus become adherent in a more comfortable position than to be stood on its head in the culdesac of Douglass.

A great many blood transfusions are being done for the relief of cases of pernicious anemia, surgical bleeders, victims of jaundice that require operations. The donors and recipients are divided and classified into four groups according to their blood affinities in regard to the phenomenon of hemolysis. The serum of one is placed under the microscope along with the corpuscles of the other and are watched to see if agglutination takes place. The Mayos have a list of paid donors who can be called on at need.

The effect of transfusion in pernicious anemia is to stimulate the blood forming organs to renewed action. In doing this operation a fine needle is passed through the skin and upper one-third of the diameter of the basilic vein, the needle raised by the finger of the operator, the skin beneath is depressed by a forcep in the hands of an assistant and the short trocar pushed in.—30 C. C. of a 2% solution of sodium citrate has been previously poured into a 500 C. C. capacity glass graduate, the blood flows into this, being constantly stirred with a glass rod, when the 250 C. C. mark is reached another 30 C. C. of citrate solution is added. The mixture is given through a similar trocar slowly and cautiously so as to be on the watch out for the first symptoms of trouble, which are pain in the back, eyanosis, difficulty in breathing, a sudden drop of as much as 20 beats in the pulse. Blood transfusion slows the pulse normally. Formerly the Mayos gave the blood by means of a syringe. That method requires more assistants and occasionally results in failure. Percy of Chicago collects the blood in and gives it from a glass vessel which has been lined with a coating of paraffine. Bernheim passes it directly through a glass tube lined in the same manner. Personally, I have transfused blood by the Crile method, with the blood vessel

canula, but it is a technically difficult and time-consuming procedure.

Dr. Henderson resected a tubercular knee in an adult. He saws both ends square off and does not use the refinements of technique displayed by Albee, who concaves one end and convexes the other in order to sacrifice as little healthy bone as possible and who also uses two inlay grafts cut from the patella to reinforce the joint, thereby locking the joint both from before backwards and from side to side. Henderson also ignores the principle of fixation that requires the cast to include the hip in order to absolutely fix the knce. amount of protective material applied about the limb is rather meagre as compared with what is used in a number of other clinics.

A bone transplant was done on a radius for fracture of the lower third. This case has been bone grafted before and the X-ray negative showed some union. The result apparently would have been good had the patient waited long enough. Dr. Henderson chiseled out the old graft and replaced it with a new one which he took from the tibia. He recommended Murphy's bone dowel in fracture of the upper part of the forearm, especially when both bones were broken.

The Mayo bunion operation is still being done with a large bone forcep (veterinary size). A small amount of the head of the metatarsal is removed. Then with a rongeur some of the inner side is removed so as to make the inner side a little shorter than the outside. The bursa has been dissected free with a pedicle at the base of the great toe, this bursa is turned into the joint for the prevention of anklylosis.

Hyperthyroid cases in bad condition are subjected to a prolonged rest in bed, followed by the injection of one or two cubic centimeters of boiling water, or a few drops of a solution of quinine and urea, later by ligation and finally removal of the lobe.

Iodine is used rather lavishly in wound preparation. Drains are used whenever much drainage of serum is expected. These drains are usually removed in 48 hours. Sometimes the skin

edges about a wound are painted freshly just before suturing.

In doing the operation of puncture of the corpus callosum for the relief of cerebral pressure, a line is drawn just over the longitudinal sinus, then another from the pinna of one ear to the other and in the angle where the two lines coincide the trocar is passed just to the right of the sinus. This is carried down alongside the falx cerebri as a guide until the corpus is struck, usually at a depth of about three inches.

The kidney incisions are quite generous. Starting under the last rib and extend out over the ilium. This gives free access. The kidney is raised with ease. The appendix may be removed and a general exploration of the abdominal cavity can be made through this incision.

Judd does not altogether approve of the Wertheim operation for cancer of the cervix. He believes that when the cervix has been well invaded that the post peritoneal glands are probably infected by that time. He uses the Percy cantery, then does a complete hysterectomy in about three weeks. Is not at all sure but what these cases would do as well with the uterus left in.

Dr. Mayo says that he removes the spleen in cases of Hanot's cirrhosis and cures them. Dr. J. W. Mayo commented on the fact that the ten cent magazines had been of great service to the medical profession, that they had induced the reading public to learn so much of the new things about medicine and surgery that many of the general practitioners had been forced to read in self defense. The Mayo Brothers themselves owe something to the ten cent magazines also, as these same ten centers have given them considerable advertising in the shape of several write-ups.

The new clinical building furnishes offices for the members of the firm and the seventy or so doctors employed by them. It is fully equipped with laboratories, minor operating, treatment and examination rooms and even has its own drug store, power plant, etc. The financial side is entirely handled by the clerical department.

In the operation for carcinoma of the

rectum the method usually followed is about as follows: A preliminary cecostomy is done. Then a few days later the coccyx and last segment of the sacrum is removed and the rectum earefully freed from its surrounding structives, such as the posterior urethra and seminal vesieles. The anus is closed with a circular suture before the dissection is started. After getting well above the new growth the rectum is erushed with an angiotribe and divided between clamps with an electro cautery.

One of the interesting operations seen was a gastro enterostomy done under local anesthesia for the relief of obstruction due to possible malignancy. patient had a few whiffs of ether when the stomach and small bowel were being brought out of the wound. Only the parietal peritoneum is sensitive and the operation was done with great ease. Cat gut 20 day 0 and 1 tanned are used for the suturing. No silk or linen being used in the intestinal suturing. are three rows of continuous suture and a number of interrupted sutures used to reinforce the line. The stomach is fixed with interrupted sutures in the mesenteric opening before the anastomosis is begun; a rather large bite of stomach and bowel are taken in the clamp; the first row of stitches taken whip-stitch. The peritoneal coats incised, all large visible vessels ligated; the two cut peritoneal edges sutured with a second line of suture, then the mucosa is cut, contents wiped out, none of the redundant mucosa is trimmed away, the edges sutured, either buttonhole or ring fashion, the anastomosis completed by the familiar in then out stitch on first one side and then the other. The suture line is made close up to the duodenum, no loop being made and the most dependent part of the stomach is utilized.

The technique of skin preparation is simple, the evening before the patient is given a bath and the operative field shaved. When the patient is brought to the operating room, he or she is put into the proper position the anesthetic started and the field of operation scrubbed with a wash cloth saturated with benzine. The skin dried, then painted with pure strength tincture of iodine. Just

before the incision there is a repainting. This preparation is made by one of the surgical assistants.

One of the most interesting operations seen is the Mayo operation for prolapse of the uterus. After the cervix is grasped and drawn well down, the mueosa is incised circularly about one inch above the tip of the cervix; it with the bladder and vaginal wall is dissected upwards until the peritoncum is reached and in-The same procedure is carried out back of the cervix. The uterus is tipped forward and drawn down into the vagina, both broad as well as round ligaments are included in the bite of two heavy forceps, handles pointing upward placed alongside of each other. The ligamentous masses are sutured together through and through once and back again, then the mueosa is sutured over all raw surfaces and finally a perineorrhaphy completes the job. Dr. Mayo considers this one of the very best things that has gone out from the Mayo clinie and considers it better than the Watkins operation for the relief of procidentia uteri.

In the Mayo clinic the operation of gastro enterostomy is done for the relief and eure of pyloric and duodenal uleers. The ulcers itself is not usually disturbed as the danger of malignancy is not ordinarily great. If, however, the ulcer is located in the stomach it is excised and generally a gastro enterostomy is advised as well. The theory being that some of the alkaline secretions of the intestine are allowed to come into the stomach and this neutralizes the excessive acidity of the gastric juice.

One evening we went out to the State Insane Asylum, where supper was served to the Olmstead County Medical Society and a scientific program was given which covered the more important classifications of insanity; each class being illustrated by numerous patients of that type. Most of the paretics give a positive Wassermann. The laboratory of the asylum does the Wassermann test free for any doctor in the state who sends in a specimen, the state law providing for this. Wisconsin also has a eugenic marriage law which is said to work very well in practice. One doctor related an

instance in which he refused a certificate for marriage to a young man who had syphilis. This man went to another physician, but this second physician also refused to comply and referred the applicant back to physician number one for suitable medical treatment.

In the case of pyloric and duodenal ulcer seen in the clinic, Dr. Mayo did nothing to the ulcer but either did a gastroenterostomy or occasionally a Finney duodenostomy (pyloroplasty).

In removing large kidneys he has the patient well on the side and makes a large incision curved well around above the ileum. He uses many cigarette drains each with a small strip of iodoform gauze inside. In one case he suspended a kidney for the relief of a kink in the ureter. Free use is made of a suction apparatus and often the pelvic cavity is washed to remove pus, blood, etc.

He says secondary carcinoma of the ovary is common after primary involvement of the liver or stomach the cancer cells by gravity fall to the pelvis and at each menstrual cycle an ideal condition is present for the grafting of a cancer focus on the raw surface by the rupture of a Graafian follicle.

The Mayo brothers are not operating so strenuously as they did a few years ago. Dr. W. J. Mayo who is the real executive head of the concern, supervises most of the surgical work and goes from one operating room to another. Frequently the assistant makes the incision. Dr. Mayo does the important steps of the operation, and the sutures are placed while Dr. W. J. Mayo is taking the kinks out of some other case.

The removal of the spleen is done particularly well in this clinic. The organ is delivered through a long left rectus incision, supplemented in a few cases by a transverse incision. A large gauze pack is placed next the diaphragm after the spleen has been dislocated. The pedicle is ligated in sections very carefully, the knots are tied good and hard, quite the reverse of ties in wound closure when after the manner of Ochsner the edges are brought together and no more; sometimes a bit of small calibre white rubber tubing is passed over the silkworm

gut to prevent cutting into the skin. Long incisions and self retaining retractors are prominent features.

Dr. Mayo is quite frank and even enjoys a story at his own expense. Once he told a patient after an exploratory operation for tumor of the large bowel that he could do nothing for her. went home to a little Kansas town where a homeopath assisted by another tyro, removed the supposed growth and she promptly got well. Again, he made a diagnosis of neurasthenia in the case of a young woman who later went home where one of Cincinnati's 1800 "surgeons' removed an enormous gallstone. The wrathful patient sent a photo of the stone and a letter to Dr. Mayo. He said some years ago Cincinnati had one internist but he had died. He said if a neurasthenic was fat the case was hopeless but if lean and you could fatten them up twenty pounds or so they became so proud of themselves that they would often get well. He said there should be enacted a game law for the protection of neurasthenics from surgeons. I now recall a case of tuberculosis of the kidney of many years' standing who had her ailment diagnosed as neurasthenia by several eminent geons and internists in Columbus, Cinnati and Richmond.

Dr. Mayo spoke of the effect on the voice of the removal of the tonsil, stating that it would take a singer months of hard work to re-educate the voice after tonsillectomy. Dr. W. J. Mayo remarked that he would not let a throat man look in his throat for anything, that they never failed to find something there that must be removed. He thinks the tonsil may have a useful function as a sort of a vaccinator of the body against infections, that various small doses of bacteria may be introduced there for preventive purposes. He thinks the slaughter of the tonsil has been quite indiscriminate and that it is often removed needlessly.

He told the saying of Henry Watterson, that the negro grew and progressed until he reached the age of fourteen years and there he stopped for the rest of his life. Dr. Mayo said that when a doctor became too busy to attend the

medical societies and said he could learn nothing there, that man's clock had struck the hour of twelve; that the trouble was with the man and not the society. He said that those who matured early faded early and spoke of his admiration of the English people, men like Lord Bryce, who though past eighty years of age, still maintained their full mental grip. The clear open mind of W. W. Keene who never gave himself up to prejudice. He spoke of the work of Hilton Fagge of Guy's Hospital, London, as being one of the most superior works on the practice of medicine.

The history of the Talma operation was reviewed. This operation for the relief and cure of cirrhosis of the liver was first suggested by Talma, a truly great internist who has been on the staff of the Dutch Hospital at Utrecht for many years. The operation was performed and the patient died; seven or eight years later the work was again taken up in earnest by the surgical profession.

### DO YOU KNOW THAT-

Efficiency decreases as fatigue increases?

The full pay-envelope is the great enemy of tuberculosis?

A reliable disinfectant which may be made for fifty cents per gallon has been devised by the U.S. Public Health Service?

The maintenance of health is the first duty of the patriotic American/

Exercise in the open air cures and prevents many ills?

Typhoid fever is contracted by swallowing sewage?

Unpasteurized milk kills many babies?

Mayor Sehon of Huntington, has offered the Cabell County Medical Society a room in the City Hall to be used as a clinic for the treatment of disorders and deformities of poor children. This offer will be accepted.

### WILLIAM RANDOLPH DANIELS

William Randolph, aged four years, only son of Dr. and Mrs. H. W. Daniels, died about nine o'clock Wednesday morning, December 20, following a brief illness of congestion of the lungs. He became ill Tuesday and grew rapidly worse, despite every attention that medical science could give him, until the end came Wednesday morning. There was no finer little fellow in Elkins than William Randolph; manly, bright and of a most lovable disposition, he made friends with everyone he met and his death has cast a gloom over the large circle of friends who have known him since his birth on December 19, 1912, and who have known his sorrow-stricken parents for so many years. The heartfelt sympathy of hundreds of people goes out to the bereaved family. Surviving are the parents and two sisters, Delaine and Elizabeth. Funeral vices will be conducted by Revs. Craig and Barron Thursday afternoon from the family residence on Davis avenue, following which the little body will be conveyed to its last resting place at the family burying ground on the farm of his grandfather, R. M. Harper, at Midland.—Elkins Inter-Mountain.

### BOWLES

Dr. J. L. Bowles, M. D., died last night at the age of 43 years at his home, stop 9, South Charleston. Heart trouble was the cause. Dr. Bowles had an attack of pneumonia last November and during the course of his convalescence his heart became affected, but he was able to continue his medical practice until a short time ago.

Dr. Bowles was a former resident of North Carolina, being a member of the Masonic order and the Knights of Pythias in Charlotte. He moved to Charleston a few months ago from Givens, Putnam county. He is survived by his widow and two children, Paul and Maud Bowles, as well as his father, M. V. Bowles, of St. Albans.

The funeral will be held from his father's home tomorrow. Dr. Bowles was a graduate of a medical college of Louisville.—Ex.

### 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., Feb., 1917

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All original articles for this Journal must be made 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 memhers 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 hefore 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 thau e 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 he made hy check, draft, money or express order or registered letter to Dr. Jas. R. Bloss, Chair-man of Puhlication 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 hy authors or in communications submitted to this Jour-nal for publication. The author or communicant shall be held entirely responsible.

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### Editorial

Under the caption of Communications is published one from Dr. J. E. McDonald of Logan, W. Va. Our friend, Jim, always lets us know just where he stands. It seems to us that this communication of his is one which should cause us to halt. Dr. McDonald is a member of this Association and as such is an equal owner of this publication.

If his statements are correct, and knowing him as we do, we feel that he is in a position to substantiate them, or he would never have written them to your editor for publication, a condition exists into which our profession should inquire.

The columns of your Journal, Gentlemen, are open to a discussion of this matter. Let the Editor hear from all of

you; just remember those restrictions imposed by the postal regulations.

We are not in receipt of any reports from the office of the State Health Commissioner concerning the existence of infantile paralysis in Randolph and adjoining counties. From reports which come to us in lay papers it would seem that a condition which is quite serious

We feel very sure that our Health Commissioner and his assistants will do all things in their power to aid in suppressing the spread of this dread dis-

It is hoped that not only all local health officers, but every practicing physician will be on his guard and lend his best efforts to stamping out this menace.

A number of clippings from various

daily papers concerning the charging for telephonic advice and prescriptions by the physicians of Johnstown, Pa., have been received by the editor. It is not a matter for discussion by either the local societies or the State Association from our point of view. However, it is a question upon which physicians should think. During the last decade the cost of living has advanced; the charges made by physicians, except in the rarest instances, have remained the same.

During this decade we must all admit that the service rendered by our profession in the way of preventive medicine and so on, has multiplied many fold. We bow in deference to the profession of ten years ago; their services could not then, and cannot now, be measured by dollars and cents. Yet is it not true that today our greatest efforts are expended in preventing illnesses?

It would seem that the time has come for our profession to ask for remuneration worthy of the service rendered. Think about this matter.

As we grow older, we find the works of Charles Dickens grow more interesting. Occasionally something of his impresses us and we enjoy it so thoroughly that we feel that we just "must" let other folks know of it.

Apparently our linotype operator has not yet reached the mature years of such great appreciation. Our quotation was from "Bleak House" not "Black House".

### Health News

EARLY DISCOVERY OF CANCER

YEARLY MEDICAL EXAMINATION URGED FOR PREVENTION OF DISEASE

The American Society for the Control of Cancer strongly seconded the efforts of the National Association for the Study and Prevention of Tuberculosis to have December 6th set apart as "National Medical Examination Day."

The time is undoubtedly coming when Americans will appreciate the great wisdom of the Chinese policy of paying the doctor to keep the patient well. The rapidly growing movement in favor of an annual medical examination for every person, sick or well, promises much benefit in the reduction of the death rate from cancer as well as that from tuberculosis. In both these very prevalent diseases the hope of cure is very much greater if the ailment be recognized and treated in the earliest stages. Cancer is by no means a hopelessly fatal disease and an ever increasing number of those afflicted are being saved through their intelligent recognition of the danger signals and their prompt recourse to competent treatment. Undoubtedly many more cases of this disease would be recognized in time for treatment in the early stages, when cure is a comparatively simple matter, if people were in the habit of consuling their physicians once a year or even at shorter intervals, and having a general physical examination.

Cancer patients are often persons who have generally enjoyed good health, have never been seriously ill and who at the time of the onset of the disease were apparently in robust health. disease is so insidious in its approach and so often without pain in the first stages that the patient often fails to pay serious attention to the signs of danger. Statistics independently gathered by many surgeons prove that the average cancer patient waits a year or more after observing some suspicious condition before seeking the treatment which is then often too late. This disastrous delay is the main if not the sole obstacle to the successful treatment of cancer at the present time.

"Early cancer," says Dr. Charles P. Childe, a prominent English surgeon, who has written one of the best popular books on the control of this disease, "produces no feeling of ill health whatever. In other words, early cancer has no symptoms. The reasons which usually induce people to consult a doctor are the suffering of pain or the feeling of ill health. Early cancer produces neither. People are far more likely to go to a dentist with an aching tooth than to a doctor with commencing cancer; they are far more likely to consult a doctor with some trifling derangement of the liver than on account of cancer in its

early stages. Owing to the insidiousness of its onset, the victims of cancer are often totally unconscious of the scriousness of the discase which has attacked Disaster following on delay through sheer ignorance on the part of the unfortunate sufferers that there was anything seriously the matter with them —these are the everyday experiences of surgeons who see much cancer." good physicians, however, are familiar with the warning signs of the approach of this dangerous disease and if given a chance to examine their patients once a year, especially after the age of thirty, they could undoubtedly save many of them from death before their time.

That there may be an increase in pellegra during the coming year on account of the rise in the cost of food-stuffs is the fear expressed in a statement issued by the U. S. Public Health Service today. As a result of government researches it was found that pellagra is produced by an insufficient, poorly-balanced diet and that it can both be prevented and cured by the use of food containing elements in the proportion required by the body. The application of this knowledge greatly reduced pellagra in 1916 as compared with previous years. This reduction is believed by experts of the Public Health Service to have been due to improved economic conditions which enabled wage earners to provide themselves with a better and more varied diet and to a wider dissemination of the knowledge of how the disease may be prevented. It is feared, however, that pellagra may increase in 1917 by reason of an increase in food cost out of proportion to the prosperity now enjoyed by this country. The great rise in the cost of forage, particularly cotton seed meal and hulls, is causing the people in many localities to sell their cows and thus there is danger that they will deprive themselves of milk, one of the most valuable pellagra preventing foods. The high cost of living has further served to bring about a reduction in many families in the amount of meat, eggs, beans and peas consumed, all of which are pellagra prophylactics. In effecting economies of this nature the general public should bear in mind the importance of a properly balanced diet and refrain from excluding, if possible, such valuable disease preventing foods. It is believed that unless this is done there will be a greater incidence of pellagra next spring.

### MOVIES WILL FIGHT TUBERCU-LOSIS

NATIONAL ASSOCIATION PRODUCES POWER-FUL DRAMA CALLED "THE GREAT TRUTH."

Drama has been pleasingly mixed with tuberculosis in a new motion picture entitled "The Great Truth," just issued by The National Association for the Study and Prevention of Tuberculosis as an aid in the Red Cross Seal sale and the fight against consumption. This is not a dry educational production, but a thrilling dramatic story which drives home the much-needed lessons that tuberculosis is curable and that it is not inherited.

The story centers about an old man by the name of David Brown and his nephew, Paul, who lives with him. David is a hunchback and obstinately clings to the belief that he inherited his tuberculosis of the spine from his mother, who told him so on her deathbed. His deformity, together with this belief, has embittered his life, and although he is very wealthy he finds nothing of use to do with his money except to spend it on his nephew. So obsessed is he with his belief in the hereditary nature of tuberculosis that David has forbidden Paul ever to marry, under penalty of disinheritance.

Reckless of his uncle's prohibition, however, Paul falls in love and finally marries June, the cousin and ward of Dr. Wright, a prominent tuberculosis specialist. His uncle promptly orders him out of his house. A year later, Paul, from overwork and lack of good food, breaks down with tuberculosis, just as his wife is about to give birth to a child. In despair, he believes that his baby will inherit hunchback, and that his uncle's prophecy of his own inherited disease

has come true. He is going to shoot himself when the doctor announces the arrival of a healthy baby son. Before he knows anything about the arrival of the baby, David goes away to forget it all, brooding bitterly over what he believes is his nephew's folly in propagating the curse of tuberculosis. During the year that follows, Paul is cured of tuberculosis by proper sanatorium and home care.

It is Christmas Eve and Red Cross Seals are much in evidence. While they hope against hope for David's return, his sudden arrival is announced. Breaking off her holiday preparations, June with her family and friends go to David's home and quietly enter the library where the old man is brooding before the fireplace. June steals up behind him and puts the baby in his lap. He looks from the child to the mother and then to the father, now completely restored to health, and then in astonishment exclaims, "Why, its back is straight."

Then the doctor tells him The Great Truth, that tuberculosis is not inherited and that it is curable. With two living demonstrations before him, David is convinced and says, "I'm an old man, but, please God, I can help to spread The Great Truth."

The picture will be circulated through The National Association for the Study and Prevention of Tuberculosis and a number of state and local associations affiliated with it, in theaters, churches, schools, and elsewhere. The picture was produced for The National Association for the Study and Prevention of Tuberculosis by the Plimpton Epic Pictures, Inc., of New York.

A clergyman living near Leyden was the father of thirteen children. The eldest, born December 31, 1668, was Herman Boerhaave, accounted by many the most famous physician not only of the eighteenth, but probably of any century. He died of gout in 1738.

He was an indefatigable teacher, sometimes lecturing five hours a day to his students at Leyden. He was the first to give separate lectures on ophthalmolomy (the science of diseases of the eye) and to use a magnifying glass in the ex-

amination of the eye. He combined with a desire to study disease at the bedside a freedom from theoretical and philosophical influence which led him to use the most modern diagnostic apparatus which he could secure. He was so famous that a Chinese official once sent him a letter addressed simply "To the most famous physician in Europe." His maxim was "Simplicity is the scal of truth."

The modern diagnosis of disease aims to employ every method which will reveal the exact mental and physical condition of the patient. Psycho-analysis will reveal the depths of the patient's mind almost as clearly as the X-ray shows the broken bone hidden beneath the body tissues. The pressure of the blood against the vessel walls may be accurately measured and appropriate means taken to ward off an apoplectic attack. The bodily excretions may be analyzed and the efficiency of the excretory organs determined. Special apparatus permits the examination of the eye, the ear, the nose, throat, bronchi, and the interior of various other parts of the body. Nothing is taken for granted; the blood is examined; the activity of the stomach is estimated; the validity of the nervous system is looked into. The modern physician finds the disease before he treats it.

Accurate diagnosis is of importance to the public health because an early and correct knowledge of the presence of a disease affords opportunity to prevent its spread. The case of tuberculosis which is found early has an infinitely greater chance of recovery than the one which is found late. Boerhaave recognized these facts in a general way and applied them, in fact, according to Rohlfs, he was the first who made a chemical examination of some of the bodily excretions.

# Miscellaneous Announcements and Communications

Editor Journal:

The Journal has had much to say in commending the fraternal advantages of the county and state societies and is insistent on having monthly reports and it is impossible with me since the Logan Society has had only two meetings since last July.

The Editor forgets that the majority of several county societies are men who are interested in contract practice, doing it themselves or holding the contract and having it done by men recently licensed or unsuccessful has-beens, at a nominal price and take down the velvet as salvage for prestige and pull. Editor should devote some time to a system of ethics that would permit this kind of work and see if it can't be improved to some extent. The death rate in these camps is astounding especially with infants and children, and I have been informed that more than one hundred children died on one creek in this county last year. It does seem to me we have reached an age of progress when some dignity for the profession should and could be asserted by the better circulated Journals and call a halt to these methods of blood-money-extraction by men who should respect their professional sphere and the state-license under which they operate. In my judgment it should forfeit both the license of the principal and serf and the State Board of Examiners should rule that no man should enter into contract work for commercial purposes without forfeiting his The securing of contract work for several camps through a pull, usually political, and farming it out to some cheap man for one-third or one-half of its collections is a crime on the people who have to stand for the service. puts the lives of their families in jeopardy for the satisfaction of a dollarmad-money-crazed doctor who has prestige and "pull" and is all accomplished under and through a license granted by the State Board and that in spite of any protest from the people who have to stand for the service. The Journal stand for the service. should make some effort to put the profession above the dollar and help eliminate commercialism which is so rapidly destroying the higher plane it once had. Expose such cases as you would nostrums and let's have a general cleanup. I would like to see the names of some of

these higher-up-blood-money extractors in print and hear their defense.

Yours, etc., J. E. McDonald, Logan, W. Va.

Chicago, Jan. 16, 1917.

Dr. James R. Bloss,
Huntington, W. Va.
Dear Dr. Bloss:—

I am enclosing a copy of the program of the Midwinter Conference which will be held in Chicago, February 5 and 6. Please give this program as wide publicity as possible through the columns of your Journal in order that your readers may be informed thereof. A cordial invitation is extended to all members of state societies to attend and to take part in the conference.

Thanking you for your cooperation in

this matter, I am,

Very truly yours, Frederick R. Green, Sec. Council on Health and Public Instruction.

### INVITATION

All those interested are cordially invited to be present at the annual Congress of Medical Education, Public Health and Medical Licensure. This Congress is held under the auspices of the Council on Medical Education and the Council on Health and Public Instruction of the American Medical Association, the Federation of State Medical Boards of the United States and the Association of American Medical Colleges and is to be held in the Florentine Room of the Congress Hotel, Chicago, Monday and Tuesday, February 5 and 6, 1917.

# Society Proceedings

CABELL COUNTY SOCIETY

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

Dear Dr. Bloss:—

I am sending you herewith a report of the last meeting of the Cabell County Medical Society. It is as follows:

The Cabell County Medical Society

met in room 227, Frederick Hotel, on January 11, 1917. President Rowsey presiding. The minutes of the last meeting were read and approved. The members present were: Drs. Haynes, Williams, Yost, Watts, Marple, Schultz, Prichard, Hume, E. B. Gerlach, Bloss, Hunter, A. K. Kessler, Cronin, Steenbergen, Fitch, Rowsey and Pepper.

It was moved by Dr. Kessler, seconded by Dr. Hunter that a legislative committee be appointed for one year to look after legislative business of the society. Carried. The following committee was appointed: Drs. Kessler, Yost and Bloss.

Dr. J. Ross Hunter, chairman of the committee for the organization of a Medical Club, reported progress and asked for further time which was granted, and the committee continued.

The committee appointed at the last meeting to investigate if there were any candidates other than Dr. C. C. Hogg for the position of superintendent of the Huntington State Hospital, reported that there were other candidates and it was moved by Dr. Watts, seconded by Dr. Bloss, that the committee be discontinued and that the resolutions recommending Dr. C. C. Hogg be laid upon the table. Carried.

The following bills were allowed and paid: To Dr. Bloss, the retiring secretary, for postage, \$12.89. The bill due the Frederick Hotel for dinner given in entertainment of the West Virginia Hospital Association.

It was moved by Dr. Schultz, seconded by Dr. Cronin, that the program committee at each meeting of the society appoint four men to bring or report clinical cases for the next regular meeting. Carried. The committee for the next meeting were appointed as follows: Drs. Cronin, Yost, Williams and Guthrie.

It was moved by Dr. E. B. Gerlach, seconded by Dr. Bloss, that a committee of three be appointed to confer with the city commissioners, asking them to furnish a room in the city hall in which to hold clinics for the worthy poor on regular meeting nights of the society.

The chairman appointed the following

committee: Drs. Gerlach, Cronin and Fitch.

On motion the society adjourned. Yours very truly, R. H. PEPPER, Sec.

### BARBOUR-RANDOLPH-TUCKER

Dartmoor, W. Va., Jan. 18, 1917. Dr. Jas. R. Bloss, Editor.

Dear Dr. Bloss:—

In compliance with your frequent requests I am sending you a brief report of the January meeting of the Barbour-Randolph-Tucker County Medical Society, which was held in the reading room of the Y. M. C. A. building in Elkins on the afternoon of January 15. The following members and visitors being present: Drs. Daniels, Gruber, Wilson, Moore, S. G. Rodgers, Talbott, Golden, Updike, Hamilton, Hall and Irons; and also Dr. Alvin McClung of Weaver who was afterward elected a member of the society. Dr. Weirich, representing the State Health Commission, and Drs. Seak, Smith and Bolden from the National Health Department, Washington, D. C.

The business of the society was transacted in the usual manner and as but few things of general interest came up, I will only mention those of importance. There having been much complaint of the Western Maryland Railroad refusing to carry sick and injured on a cot unless by special car, which with the poor amounts to prohibition, Dr. Golden, who was a member of the committee to take up the matter with the chief surgeon and the railroad company, reported that there had been no progress made and that the Elkins Board of Trade had tried to have the present rule changed with no better success.

The committee was continued and the society directed the secretary to write our state legislators asking them to assist in formulating and passing a law compelling railroads to furnish suitable conveyance for the sick and injured at a reasonable cost.

The secretary was directed also to write our legislators to request them in behalf of public good to support bills already prepared by the Medical Health Committee looking to the improvement of our vital statistics reports and the higher educational requirements of those entering the medical profession of our state.

West Virginia is now behind our neighboring states along these lines and we hope we may at least be placed on an equal standing and stand to the world as a progressive state, especially on our Health and Medical attainments.

Complaint was made that a member of our society is one of the incorporators of a proprietary medicine company, which advertises cures for rheumatism, croup, diphtheria, etc., contrary to the rules of the society and the requirements of medical ethics. The matter was referred to the Board of Censors for investigation and report.

The prepared program was dispensed with and on motion of Dr. Moore the visiting experts were asked to discuss poliomyelitis, which is now agitating, especially, the communities of Elkins,

Grafton and Fairmont.

Dr. Seak gave a very instructive talk on the various manifestations of this dread disease, its mode of invasion, parts effected, classification according thereto, etc. He frankly stated that its exact nature, mode of conveyance, manner of treatment are as yet not satisfactorily defined, and that the different treatments recommended from time to time have not proven reliable.

Drs. Weirich, Smith and Bolden each gave valuable talks on the different phases of this malady. It has been learned that in the three previous epidemics in the United States; viz., New York, Minnesota, and New Orleans, the disease extended along the routes of most frequent travel and was lessened in virulence as it progressed. The New York epidemic extended westward and extended westward and extended to Ohio with an average death rate percentage about 23. Minnesota extended eastward with only 4 to 5% mortality, while New Orleans extended northward with about a medium between the two. The greater death rate may have been due to local conditions. In New York it was in the cities, while in Minnesota it was rural. The most marked peculiarity of the present invasion is that it appears in the winter season and that there is more frequent involvement of the nerves and muscles controlling respiration. This may be due to the season and not to any change of the character of the disease.

The meeting was of vast interest to all and especially to the physicians.

The experts arc doing all they can to help in the management of the situation and to gain further knowledge of the disease.

The time and place of the April meeting was left to the President and Secretary.

J. C. Irons, Sec.

### BROOKE COUNTY

The regular December meeting of the Brooke County Medical Association was held on Friday afternoon, December 8, at the home of Dr. W. T. Booher, of Bethany. Present were: Drs. T. H. and C. R. Weirich, Joseph B. Palmer, F. T. Dart, J. R. Arnold, C. L. Ruggles, of Wellsburg; C. R. Megahan, C. P. Burke and Leo Huth, of Follansbee, and Dr. C. R. Maxon, of Steubenville, Ohio, and Prof. W. B. Taylor as the guests.

Dr. Booher read a very interesting paper on "We Doctors," which was ordered published in the State Medical Journal. A report of the clinical cases was made which proved instructive to all present.

At the close of the meeting the physicians were invited into the dining room where an elegant four-course dinner was served, to which full justice was done.

The next meeting of the association will be held in Follansbee, on January 7, 1917.

### KANAWHA COUNTY

That goitre is more prevalent in West Virginia than in most parts of the country was the opinion expressed by some of the physicians in attendance at last night's meeting of the Kanawha County Medical Society, in connection with a lecture on that ailment by Dr. Harvey G. Beck, member of the faculty of the College of Physicians and Surgeons of

Baltimore. Dr. S. L. Jepson, state health commissioner, said his attention had been called to that existing belief, and he expressed the view that some peculiar conditions, such as mountain water or local affections, might be responsible. He stated that the ailment is most common in Switzerland and in the upper lakes region of the United States.

Others of the doctors present made the observation that it seems to be more common among women than men, or else the habit of West Virginia women of wearing "low-neek" waists may cause any affection of the glands of the throat to be especially noticeable. Dr. Beck said he had observed more of it at St. Paul, Minn., than any place he had ever visited. His lecture was illustrated by lantern slides showing individual cases, and he gave the audience the benefit of his extensive experience in diagnosing and treatment during a long career as a specialist on the subject.

Dr. Beck was followed by Dr. William S. Gardner, a fellow member of the same faculty, with an illustrated lecture on cancer, its diagnosis and treatment. The meeting was held in Hotel Kanawha assembly room, presided over by Dr. Wm. A. McMillan, president of the association.

In honor of the visit of these two representatives of the college of which he is a graduate, Dr. O. L. Aultz, city and county health officer, will give a luncheon today noon at his residence on Quarrier Street entertaining them and the local alumni of the College of Physicians and Surgeons of Baltimore, of whom there about thirty practicing in Charleston and surrounding towns. After their entertainment at the Aultz home, Drs. Beck and Gardner will leave for Baltimore on an afternoon train.—Ex.

### NOTES OF THE JANUARY MEET-ING.

Little Kanawha and Ohio Valley Medical Society held their January meeting in the Chancellor parlors. President Stille in the chair.

### ELECTION OF OFFICERS

President, Dr. F. L. Keever of Park-

ersburg.

First Vice-President, Dr. Roy Ben

Miller of Parkersburg.

Second Vice-President, Dr. E. S. Goff, Spencer.

Third Vice-President, Dr. P. W. Mc-

Clung of Elizabeth.

Secretary, Dr. T. L. Harris of Parkersburg.

Treasurer, Dr. O. D. Barker of Park-

ersburg.

Councillors, Dr. H. D. Wise of Parkersburg; Dr. Milton McNeilan of Parkersburg; Dr. M. R. Stone of Parkersburg; Dr. Wiley R. Corbitt of Waverly; Dr. E. S. Goff of Spencer.

H. E. GAYNOR.

### MERCER COUNTY

Officers and committees for 1917. President, Dr. H. G. Steele, Bluefield,

First Vice-President, Dr. J. R. Vermillion, Princeton.

Second Vice-President, Dr. W. W.

Morton, Bluefield.

Third Vice-President, Dr. J. A. Mc-Guire, Princeton.

Secretary, Dr. E. H. Thompson, Blue-

field.
Treasurer, Dr. T. E. Perry, Bluefield.
Censor for one year, Dr. E. W. Hor-

ton, Bluefield. Censor for two years, Dr. O. S. Hare,

Bluefield.

Censor for three years, Dr. H. C. Hays, Princeton.

Delegates, Dr. W. C. Slusher and Dr.

J. B. Kirk, Bluefield.

Chancellor, Dr. W. H. St. Clair, Bluefield.

Committee on Program and Scientific Work, Dr. H. G. Steele, Bluefield; Dr. J. R. Vermillion, Princeton; Dr. E. H.

Thompson, Bluefield.

Committee on Public Health and Legislation, Dr. F. T. Ridley, Bluefield; Dr. C. C. Peters, Princeton; Dr. H. R. Fair-

fax, McComas.

Committee on Red Cross Medical Work, Dr. H. G. Steele, Bluefield; Dr. E. H. Thompson, Bluefield; Dr. B. W. Bird, Princeton; Dr. F. F. Holroyd, Athens; Dr. W. W. Harlow, Matoaka.

Committee on Refreshments, Dr. W.

O. Slusher, Bluefield; Dr. Uriah Vermillion, Oakvale; Dr. T. H. Becker, Bluefield; Dr. L. G. Todd, Princeton.

H. G. Steele, Pres.

Bluefield, W. Va., Dec. 21, 1916.

The Mercer County Medical Society met in the room of the Chamber of Commerce, and was called to order by President E. E. Vermillion, at 8 p. m.

The regular program was preceded by

a short business session.

The following bills were allowed:

Daily Telegraph Printing Company, Dec. 20, 1916, to 100 folders \$4.00; 200 bond envelopes, \$1.25.

Dr. C. T. St. Clair to auto hire for taking Dr. Davis to the Mercer Healing

Springs, July meeting, \$8.00.

H. G. Steele for stamps, stationery and messages from September 15 to December 21, 1916, \$10.75.

The Preisdent appointed on the Auditing Committee, Drs. A. H. Hoge and B. F. Cornett.

A reciprocity demit was granted Dr. S. L. Johnson of Princeton, W. Va.

The reading of the minutes of the last

meeting was approved.

Under the head of clinical cases Dr. H. G. Steele showed a child twenty months old that he had operated on at the time of birth for Spina Bifida, which now weighs twenty-four pounds and in apparent perfect health, with no bulging at the sight of operation, no paralysis of the lower limbs, and no cephalic complications.

Dr. S. R. Holroyd made some kind remarks in regard to the case, and congratulated the mother in having such a

healthy child.

The mother, Mrs. Zella Wilson, who is an Evangelistic speaker, before leaving the room asked permission to say a few words, and when this was freely granted her, said "she and her husband were thankful to the Almighty that their child was spared." She eulogized the operator and then thanked the members of the Mercer County Medical Society for the interest taken in this case.

Dr. J. B. Kirk introduced Dr. C. C. Coleman of Richmond, Va., who read us a most interesting and instructive paper, and showed many clear cut lan-

tern slides on Reparative Surgery of the Mouth and Face. I want to say here, that the physician who is a member of this society and did not hear Dr. Coleman, missed a great treat. It is hoped that Dr. Coleman will permit his paper to be printed in the State Journal, then you all can enjoy it as we did.

Dr. C. M. Scott showed a few lantern slides along this same line of surgery, and briefly discussed Dr. Coleman's paper, which certainly was a compliment

to this or any other society.

We have one of the best County Medical Societies in the state, but my dear colleagues, this society would be much better if you who do not would respond when you are placed on the program, some do but there are some who do not.

The doctors present were as follows: Morton, C. T. St. Clair, Hoge, Kirk, W. H. St. Clair, Becker, Fox, Horton, Slusher, Scott, Vass, Perry, S. R. Holroyd, Hare, Thompson, Fairfax, Uriah Vermillion, E. E. Vermillion and H. G. Steele.

Visitors: C. C. Coleman of Richmond; I. Pearce and J. D. Johnson of Tazewell, Va.; II. Frazier, Graham, Va.; Dr. Del Castillo, Graham, Va.

A unanimous vote of thanks was extended Dr. Coleman for coming here and reading before our society this valuable and instructive paper.

Adjourned at 9:45 p. m. to luncheon. H. G. Steele, Sec.

On account of the death of George Ben Johnson of Richmond, Va., December 20, Dr. Murat Willis, who was to read a paper before this society at the regular meeting, December 21, was called back to Richmond from Tazewell, Va. On his return through our city the evening of the 20th, and his train leaving here being two and one-half hours late, Dr. Willis, after some persuasion decided to read his paper on the Surgery of the Billiary Tract.

The Secretary got busy at the phone, and in an half hour the following doctors were in the room of the Altamont Hotel listening to Dr. Willis reading his paper: Perry, C. T. St. Clair, W. H. St. Clair, Mørton, Wood, Slusher, Ridley, Scott, Thompson, Hoge, Kirk, Vass, Horton

and Steele of Bluefield; and the visitors were: Dr. C. C. Coleman and W. H. Hutchinson of Richmond, Va.; Dr. King of Radford, Va., and Stewart Lawson of New London, Conn.

The thirty lantern slides shown here were very clear and the talk from Dr.

Willis was instructive to us all.

Dr. Coleman showed a few lantern slides of patients on which he had operated for Exstrophy of the bladder, showing where he had transplanted the ureters into the rectum.

Dr. Hutchinson then talked for some length on the treatment of bronchial asthma by autoginous vaccines.

H. G. STEELE, Sec.

### State News

Dr. Oscar Biern, a well known young Huntington physician who has been at the Cincinnati General Hospital for the past year, will go abroad for duty in the King's Hospital in London, England, and may see service in the battlefields of Europe.

Dr. W. W. Point of Charleston, formerly of Huntington, has been promoted to the rank of Captain in the Medical Corps of the West Virginia National Guard, now on duty at the Mexican border. Capt. Point is commanding officer detached service of an ambulance company designated as Provisional Ambulance Company A of the Twelfth Provisional Division.

Dr. Raymond H. Dunn of Charleston, spent several days recently in Huntington visiting his brother.

Dr. E. B. Gerlach of Huntington, is acting as coroner while his father Dr. H. P. Gerlach, is in Florida for the winter.

Dr. J. E. Rader of Huntington, was re-elected Medical Inspector of the schools of that city.

Dr. H. L. Robertson of Charleston, has returned from a visit to Richmond, Va. Dr. Tom A. Williams of Washington, D. C., has been elected for the United States of America, Foreign Corresponding Member of the National Academy of Medicine, Rio de Janeiro, Brazil.

Dr. R. D. Roller, formerly of Charleston, now located in Bridgeport, Conn., spent Christmas with his parents, Rev. and Mrs. R. D. Roller.

Drs. James Putney, Geo. MacQueen and W. W. Tompkins of Charleston, have returned from a visit to New York.

Dr. J. A. Guthrie of Huntington, delivered an address before the Ohio County Medical Society of Wheeling recently.

Dr. O. L. Aultz of Charleston, gave a very delightful luncheon on January 17 to a number of his professional and political friends. The luncheon was given in honor of Drs. Harvey, Beck and W. S. Gardner of Baltimore. Dr. Gardner was called to Huntington and was unable to be present.

Dr. B. B. Wheeler of McKendree, has accepted a position as surgeon in charge and chief of staff of the Clifton Forge Hospital.

Republican members of the West Virginia senate have announced they intend to introduce and support a bill providing an appropriation for the establishment of a sanitarium for the treatment of tubercular victims of the colored race.

Dr. H. H. Farley and Dr. S. B. Lawson of Logan, were recent visitors in Huntington.

Dr. Harry W. Keatley, former president of the Cabell County Medical Society and connected with the Huntington State Hospital, arrived in Huntington January 21 to spend a few days with his family. Dr. Keatley is employed in the Cabin Creek coal fields.

Rev. Alexander C. Godbey of Charleston, died in that city on January 19. He was the father of Dr. M. V. Godbey of Charleston.

We are in receipt of information concerning the enlargement of the Beckley Hospital at Beckley. The capacity of the hospital has been increased extensively; new Roentgen ray equipment has been installed, and many other improvements made. The staff of this hospital consists of Dr. J. E. Coleman, surgeon in charge; Dr. Robert Wriston, assistant; Dr. Elbert S. Dupuy, general medicine; Miss Dollie Zopp, R. N., superintendent of

The associates to the staff are: Drs. K. M. Jarrell, U. G. Cook and W. W. Hume, who has charge of the Eye, Ear, Nose and Throat department.

Dr. G. B. Capito of White Sulphur spent Chritsmas in Charleston.

Dr. J. L. Bowles of South Charleston died suddenly January 14 of an acute dilation of the heart.

The State Senate and Legislature is now in session. The medical profession has one member in the House and two or three in the Senate.

Dr. A. B. Elliott, formerly of Sewell, has located in Charleston and has gone into the drug business.

The new addition to the St. Francis Hospital of Charleston, will be formally opened January 24. This addition has been built at a cost of about \$60,000 and represents the latest improvements in hospital construction.

### Propaganda for Reform

DRUGLESS CULTS IN OHIO

The State Medical Board of Ohio is now investigating the more difficult cases of drugless healers who are applying for "limited practice" certificates, under the Platt-Ellis law, on the ground that they were engaged in continuous practice for five years prior to the amendment of the law. According to the Ohio State Journal for September, the board is having some amusing experiences.

One of these applicants, a Mansfield

healer, had applied originally for a license to practice thosophy, but as that was not recognized by the law as a system of healing, he later amended his application to include suggestive and psychotherapy. On the advice of one of the board's investigators, the applicant was summoned to Columbus to explain his practice to the board. He came, very fussy and very important.

"I understand," said President Siemon, after consulting the investigator's report, "that you have been treating infectious and contagious diseases."

"Nothing lately but tuberculosis," the healer replied. He then added, professionally: "I have been getting some very nice results."

Dr. Siemon coughed, and inquired timidly by what system the results were obtained. Here is the exact answer:

"By the power of thought and the grace of God."

Dr. Sherman suggested that he exemplify his explanation a bit, and tell the board just how the same was applied in healing the lungs. Again the answer was very specific and definite:

"God put man on earth to live and do

good. Don't do no evil."

He refused to explain further. The board members seemed at a loss as to further questioning, but Dr. Upham asked:

"You say that you treat tuberculosis and other diseases. How do you recog-

nize these conditions?"

The healer turned to him, with a rather fatherly and half pitying look and answered promptly:

"Why, by seeing them."

Dr. Siemon then ventured an inquiry as to the applicant's use of local applications in the treatment of cancer. The good brother answer promptly:

"Well, I don't use applications no more, much. I used to, occasionally. I had successby putting a little rotten ap-

ple on the sore. I—"

He was promptly excused.

At the same meeting of the board a woman applicant for a license to practice "suggestive therapy and mental healing" appeared to argue her case. In answer to a suggestion that she explain

her system, she turned impressively to Dr. Siemon and said:

"Yes, doctors, I have taught others to heal the afflicted and I will now teach

you."

With a smile she then explained that it was only necessary to take three red silk threads, knotted carefully, and pass them slowly before the patient, commencing at the top of the head. While doing this you repeat in German a couplet which strongly resembles, "EEnie meenie, miney mo." Mix in a strong portion of faith, and the trick is turned. Very simple, and it works in almost any condition. She said that after learning it from her mother she had personally treated tuberculosis, erysipelas and "lots of other bad diseases." She was excused.

# HEALERS, EXCEPT CHRISTIAN SCIENTISTS, NEED LICENSES

Washington, Jan. 8.—Without deciding constitutional questions, the supreme court today affirmed refusal of California federal courts to enjoin enforcement of California's medical practice law, requiring licensing of "drugless" practitioners. The law exempts Christian Scientists. The ruling leaves it in full force and operation.

The law designed to suppress "quack" and "fake" healers, requires osteopaths, neuropaths, chiropractors and other so-called drugless healers to have certain

physiological knowledge.

The court also dismissed an appeal attacking the validity of California's law regulating practice of optometry and requiring licensing of "drugless" ophthalmologists, but exempting regularly licensed physicians and surgeons.—Ex.

### LAWFUL PRESCRIBING OF MORPHIN

(Fyke vs. State (Tex.), 184 S.W.R.197)
The Court of Criminal Appeals of
Texas reverses a judgment of conviction
of defendant Fyke, a physician, who was
charged with having unlawfully prescribed morphin for the use of an alleged habitual user of morphin. The lat-

ter testified that she had become bedridden, and when she first called the defendant in, he had to treat her for peritonitis and a swollen condition of the groins and inflammation of the bowels. It appeared that he administered the morphin for two purposes: first, to relieve her of her present suffering, and, second, to cure her of her habit, succeeding in both. The court holds that if the defendant gave the medicine to relieve the woman of pain at the time he was called in, this should not have been made the basis of a conviction; that if he, as a lawful practicing physician administered morphin to his patient, who was suffering with peritonitis and abscesses in the groin, and it was known to him, and he did it for that purpose, he would not be violating the Texas stat-Moreover, the jury should have been instructed that, if they had any reasonable doubt as to whether or not he prescribed the drug in good faith, believing it to be necessary in the treatment of such diseases, it would be their duty to acquit. If they had such reasonable doubt, he was entitled to the benefit of the doubt, although the jury should find and believe that the patient was a habitual user of the drug. Nor would the defendant be guilty of a violation of the statute if, in treating or curing her of the habit itself, he administered the drug in such way as it assisted in curing the habit. Excluded testimony wherein it was offered to be shown by the defendant that the size of the dose of morphin gradually grew less, until it altogether ceased, under his treatment, should have gone before the jury. It bore directly on the case, and was pertinent to show his good faith in using the morphin to cure the habit of using that drug. It will be observed, from a casual reading of Article 748 of the penal code, that its denunciations are leveled at practitioners, or prohibits practitioners from administering morphin to habitual users of that drug or any of the drugs mentioned. It is also discernable on the face of the statute that it was not intended to prevent practitioners from administering this drug in case of sickness, or to alleviate pain, or to cure the habit of using morphin.

In other words, its provisions seem to be directed against the named physicians or practitioners with a view of prohibiting them from prescribing or administering these mentioned drugs to habitual users in order to continue their use. It does not interdict the administration of these drugs when it is necessary to alleviate pain or to cure the habit. Therefore, if the practitioner administers it to alleviate such pain, or uses it in good faith where the party is sick, or as a means of finally curing the habit, it is not within the statutory denunciation.—

J. A. M. A., 10-7-16.

# MALPRACTICE UNDER INDUSTRIAL INSURANCE LAW

(Ross et ux. vs. Erickson Construction Co. et al. (Wash.), 155 Pac. R. 153.)

The Supreme Court of Washington holds that, in this action by Ross and wife against the construction company and a physician to recover damages alleged to have been suffered by reason of the malpractice of the physician in the treatment at his hospital of plaintiff Ross for an injury sustained in the company's service, the plaintiffs had cause of action. The court says that the physician was employed to do the surgical and hospital work for the construction company, and was paid for his services out of a fund made up by deducting \$1 from the monthly wages of the employees. After leaving the hospital the plaintiff made a claim under the industrial insurance law and accepted a final award. Subsequently this action was brought for the recovery of damages laid in the sum of \$15,000, and resulted in a verdict for the plaintiffs in the sum of \$1. The court directs that the case be dismissed. The defendants contended that no recovery could be had against either of them, for the reason that plaintiff Ross had been compensated for all injuries resulting from his primary inpury, or proximately attributable there-The industrial insurance law is grounded in a humanitarian impulse. It takes account only of the place of injury and the extent of the disability, and compensates for the conditions resulting from the primary injury, or, in other

words, it will reject no element of disability if it has accrued in consequence of the first hurt, or as an aggravation arising from any collateral contributing cause. The legislature knew that workmen had been compelled to meet the defense of nonliability on the part of the employer, who might plead the malpractice of the attending surgeon as a bar to recovery, and if they pursued their remedy against the malpractitioner they might be subject to the hazard of expert opinion evidence, from which a jury may generally find a sufficient warrant to follow its own inclination. There was no assurance of a recovery against either party, or against either offender. On the other hand, the employer and faithful and competent physicians and surgeons had been put to the hazard of illfounded suits. The deserving had gone from the courts, their wrongs unredress-The undeserving had taken which in good conscience was not their own, and to cure all the legislature passed the industrial insurance law covering "all phases of the premises." These things seem clear to the court, but it must be admitted that it is exploring a new field, and there is but little to offer to those who find no assurance for their opinions unless something is found to throw on the shrine of "authority" and "precedent." To all such the court can say no more than that a diligent search has convinced it that there are no cases "in point." But to confirm its conclusion that the consequences of malpractice are an element which will be considered and compensated for by the state, the court can offer a few cases bearing slightly. But it is said that a holding that the master and the surgeon are not liable to answer for an aggravated condition resulting from the ill treatment of a wound, or the malpractice of a surgeon, may result in grievous wrong, in that only a partial recovery may be What is or what is not a full recovery in a given case is a relative question, with which the court has nothing to do. It is enough that the legislature has fixed a schedule of recoveries within which the discretion of the commissioners may move, subject to a "court review" as provided in the act, and in lieu of a system that often brought a full recovery in unmeritorious cases, and as often no recovery at all in meritorious cases., it has substituted a system that will insure an award in all cases. Surgical treatment is an incident to every case of injury or accident, and is covered as a part of the subject treated. When a workman is hurt and removed to a hospital, or is put under the care of a surgeon, he is still, within every intendment of the law, in the course of his employment and a charge on the industry, and so continues as long as his disability continues. The law is grounded on the theory of insurance against the consequence of accidents.

# Medicine and Surgery DRS. ENSLOW AND RADER

### MEDICINE

### RAT AND INFANTILE PARALYSIS

The following facts supporting the theory that the disease is transferred by rodents, insects, or both are offered by Richardson. (1) Summer incidence of the disease; (2) the resemblance of the disease in its epidemiology to malaria and yellow fever has been noted more than once; (3) the positive results of Rosenau and also of Anderson and Frost together with the successful experiment of Flexner with the bedbug. That the bedbug might be the intermediate link in the chain seemed to Richardson highly improbable in view of the fact that infantile paralysis attacks with almost equal frequency all strata of society. The possible relation of the rat to infantile paralysis was first brought to Richardson's attention in 1910 through an observation made by Dr. Charles E. Simpson, state inspector of health. In investigating an epidemic of the disease, Dr. Simpson observed the fact that many rats, whose homes had been in a town dump, were compelled, because of a fire in that dump, to seek refuge in the neighboring houses. In these houses infantile paralysis seemed to be unduly prevalent. Another experience pointing in the same direction occurred in a small coun-

ty neighborhood occupied as a summer colony by a number of city residents. The only immediate unusual factor to be assigned for this epidemic was the removal from one situation to another, of an old barn. The barn cellar was dug up and improved, and, during this operation, the affected children played in the excavation. The inference is, of course, that many old rat holes were destroyed and that the accumulation of years in the way of rat disease and fleas may have been distributed broadcast to the outside world. A third observation, but a rare one, was made in a Massachusetts city where, in an infected district. many rats were said to have been found dead. In another city a muddy river and its tributaries honeycombed to greater or less extent the municipality. The location of the cases of infantile paralysis seemed to have a remarkable relation to this stream and its branches. Indeed, the whole Massachusetts experience seems to indicate that the disease has been endemic along its rivers, most of which are polluted by sewage to a greater or less extent. The possible association of the water rat was thus indicated.

The great increase in poliomyelitis during the last twenty-five years has been explained as due to the great increase in facility of transportation all over the world, so that infinitely increased human contact has become possible. The same argument would apply, however, to the transfer of infected rats from one locality to another. Indeed such transfer in freight cars and ships carrying grain, cattle, pigs, etc., must be common. The relation to the railroads of cases of infantile paralysis has been noticed by a number of observers.

Nothing could be more probable than that children living near railroads should play in rat-infected freight cars. Infected rats, furthermore, if dropped from freight cars, would necessarily seek their food in the immediate neighborhood. In the transfer of the infection from the rat to man, the agency of the flea is assumed, although the possible contamination of food by rodent excretions might well be considered. The insect transfer might be simply mechani-

cal or it might require a preliminary cycle of development of the virus in the flea. Furthermore, the possible role of cats, dogs and other animals, or even human beings, as carriers of infected fleas, would be apparent. Moreover, in grossly unsanitary surroundings, the fleas might carry infection from one child to another directly. These theories, Richardson says, explain better than any other hypothesis submitted the epidemiologic facts as observed in infantile paralysis.—J. A. M. A. 10-7-16.

# OUR PRESENT KNOWLEDGE OF POLIOMYELITIS

The following authoritative statement, from the American Public Health Association, appears in the Weekly Bulletin of the Health Department for Novem-

ber 4, 1916:

At the recent annual convention of the American Public Health Association, held in Cincinnati during the week of October 23-28, a committee was appointed with instructions to prepare a report of "the present actual knowledge of the cause of poliomyelitis, the manner and agents by which it is spread, the best methods of treatment, and the best preventive methods." The report of this committee was presented at the closing session of the association and was unanimously adopted, with the recommendation that it be published as the authoritative statement of the association.

The specific cause of poliomyelitis is a micro-organism, a so-called virus, which may be positively identified at present only by its production of poliomyelitis in monkeys experimentally inoculated. Such experiments have shown this virus to be present not only in the nervous tissues and certain other organs of persons who have died of poliomyelitis, but also in the nose, mouth, and bowel discharges of patients suffering from the disease. It has been proved by similar experiments that healthy associates may harbor the virus in their noses and throats. These experiments, together with the fact that monkeys have been infected by direct application of the virus to the mucous membrane of the nose and by feeding of

the virus, are strong evidence that in Nature infection may be directly spread

from person to person.

Observation on the occurrence of the disease might seem at first thought to be inconsistent with this conception, since contact between recognized cases can seldom be traced. However, this may be adequately explained by the lack of means for detecting mild non-paralytic cases, and by the belief that healthy carriers of the virus and undetected cases are considerably more numerous

than the frankly paralyzed.

Many facts, such as the seasonal incidence and rural prevalence of the disease, have seemed to indicate that some insect or animal host, as yet unrecognized, may be a necessary factor in the spread of poliomyelitis, but specific evidence to this effect is lacking, and the weight of present opinion inclines to the view that poliomyelitis is exclusively a human disease, and is spread by personal contact, whatever other causes may be found to contribute to its spread. By personal contact we mean to include all the usual opportunities, direct or indirect, immediate or intermediate, for the transference of body discharges from person to person, having in mind as a possibility that the infection may occur through contaminated food.

The incubation period has not been definitely established in human beings. The information at hand indicates that it is less than two weeks, and probably, in the majority of cases, between three and

eight days.

If the foregoing conception of the disease is correct, it is obvious that effective preventive measures, approaching complete control, are impracticable, because isolation of recognized cases of the disease and restraint upon their immediate associates must fail to prevent the spread of infection by unrecognized cases and carriers.

These difficulties would appear to be inherent in the nature of the disease. Nevertheless, we may hope for the development of more thorough knowledge which will permit of more effective control of the disease than is now practicable. Of first importance is the more general recognition by practitioners of non-

paralytic cases through clinical observation and laboratory procedures.

Lumbar puncture has been shown to offer valuable aid in diagnosis, and a more general use of this test is to be encouraged, since it not only facilitates accurate and early diagnosis, but many cases affords sympathetic relief as a therapeutic procedure. Without undertaking to predict the future progress of research, we may hope for certain possible developments which may afford far more effective control of the disease, with substantial relief from many inconveniences at present inevitable. Among these possibilities we would include: A practical test for the detection of all clinical types and carriers; a simple and reliable test for distinguishing between susceptible and insusceptible and means of conferring artificial immunity against poliomyelitis.— N. Med. Jour.

### THE EPIDEMIC OF POLIOMYE-LITIS

The epidemic of poliomyelitis from which New York City and its environs have been suffering since early in June seems to be on the wane, if a daily average of one hundred reported cases and over twenty deaths can be so considered. On their face, the figures, showing a drop from the two hundred cases per day reported a week or so ago, might well be looked on as a decline indicating the gradual control of the situation. As a matter of fact, this is not the case, and the epidemic shows a decrease in the number of its victims because of the decreased number of susceptibles being exposed to infection. At the beginning of the epidemic there was a certain proportion of the public succeptible to the disease and more or less liable to contract it if exposed to its virus. Quite a few close students of poliomyelitis that it is not highly infectious, and insist that there must be a very definite susceptibility to the disease to insure its contraction. This is well borne out by several facts, especially the frequency with which only one or two children of families of five or six, become infected. All this points to a certain limit in the

total number of those in any community who are susceptible. The same condition obtains in New York City, the only difference being the increase in the total due to the increased size of the city.

With the fact established, therefore, that there was a fairly definite number of susceptibles to the disease, it must be plain that this number will be constantly being decreased by those who contract it, those who go away from the city, and those who take greater precautions to avoid exposure to infection. After a certain length of time, therefore, even with wider spread of the infecting agent, there is bound to be a numerical decline in the number of cases that become infected, a sign of the control of the epidemic is more apparent than real.

This then is the situation in New York The epidemic has subsided be-City. cause there are fewer susceptibles feed upon. The danger of infection has been reduced with the decrease in the number of acute cases and corresponding decrease in the sources of infectious material. Following this line of thought it will be apparent that the danger of contracting the disease will still further diminish. But since this has resulted from natural conditions—the practical burning out of the disease—and not to any special act on the part of those who have been fighting it, or the employment of any definite and clearly effective preventive measure, it must be evident that the unknown factors in the transmission of the disease still remain and constitute a constant menace to every susceptible coming back into the city.

### THE VIRUS OF POLIOMYELITIS

"The virus of poliomyelitis enters the body, as a rule if not exclusively by way of the mucous membrane of the nose and throat," says Flexner (Jour. A. M. A., July 22, 1916). "Having gained entrance to those easily accessible parts of the body, multiplication of the virus occurs there, after which it penetrates to the brain and spinal cord by way of the lymphatic channels which connect the upper nasal mucous membranes with the interior of the skull. Whether the virus

ever enters the body in any other way is unknown.

The physical properties of the virus of infantile paralysis adapt it well for conveyance to the nose and throat. Being contained in their secretions, it is readily distributed by coughing, sneezing, kissing, and by means of fingers and articles contaminated with these secretions, as well as with the intestinal discharges. Moreover, as the virus is thrown off from the body mingled with the secretions, it withstands for a long time even the highest summer temperatures, complete drying, and even the action of weak chemicals, such as glycerine and phenol (carbolic acid), which destroys ordinary bacteria. Hence mere drying of the secretions is no protection; on the contrary, as the dried secretions may be converted into dust which is breathed into the nose and throat, they become a potential source of infection. The survival of the virus in the secretions is favored weak daylight and darkness, and hindered by bright daylight and sunshine. It is readily destroyed by exposure to sunlight."

### THE PARALYSIS OF POLIOMYE-LITIS

ITS TREATMENT IN THE EARLY STAGES

Every one appreciates the great importance attached to the earnest research being done to enrich the epidemiology of infantile paralysis, and sincerely hopes that, before another year, means of prevention and control will be at our disposal. But while the management of paralysis continues to confront us, much permanent damage can be prevented by proper treatment. It is not amiss, therefore, to review at this time the management of the paralysis.

Especial attention should be called to the advantages of less vigorous and more closely supervised treatment in the case of weak muscles. As Lovett and others have pointed out, the greatest danger to the convalescing infantile case is fatigue of the weak or paralyzed muscles. Fatigue should be prevented. This is not easily accomplished, because we are dealing with the child in all his vigor, except for the muscular defects. The

chance to experiment with his arms and legs, which have been unable to serve him for awhile, but whose strength is now returning, encourages him to make them pull him about, thus using them until they are exhausted.

If I were allowed only two words of caution or advice to physicians, and through them to the parents of the many beautiful children stricken during the present epidemic of infantile paralysis, they would be: Prevent fatigue. By this I mean fatigue not only from the active movements of the child, but from passive motions and also from massage or electricity.

I believe that 25 per cent. permanent gain in muscular strength will be the reward when the weak or partially paralyzed muscle groups are properly protected and guided so there is a minimum of fatigue.

During the treatment of deformities in long-standing infantile cases, I have frequently been surprised at the return of muscular power following total or partial rest of the paralyzed or weak member.

During the present epidemic in Chicago, I have had an opportunity to study the paralysis in its acute stage while the patients were yet in the contagious ward for the five weeks' isolation. Some of these patients have been followed up after their dismissal from the hospital, and their early progress with and without treatment noted. The results suggested the following outline:

As these suggestions are intended for the physicians into whose hands the patient may fall after leaving the hospital, it is not necessary here to detail the management during hospitalization.

## THE MILD TYPE OF PARALYSIS OR WEAKNESS

When the patient leaves the hospital, all tenderness and spasticity have usually disappeared in those cases which showed such symptoms, and the paralysis in the mild, near abortive type may, by this time, be apparently gone. When such is the case, the parent may accuse us of a mistake in diagnosis and isolation. We are particularly anxious that

in this type of case there should be a card of written directions and that a physician should be called in. Otherwise, the fatigue following the childish exertion may permanently weaken groups of muscles which otherwise would become normal. Observation of this mild type will give the suggestion for management.

We should look for:

1. Weakness of back muscles when the child is sitting. Tendency toward curvature may be observed, and the proper care of these weak muscles may prevent a fixed scoliosis in later life.

2. Drop foot, eversion, inversion, etc.,

when lying or sitting.

3. Bending of the knee backward

when standing.

4. Outward rotation of the thigh, abduction, adduction, etc., when lying down.

5. Weakness or dragging of the leg

after play or after a long walk.

Frequently an apparently normal child, one which shows no signs of muscle weakness during the physician's examination, will be found to tire in groups of muscles by the end of the day. Permanent lameness may be prevented if fatigue is never allowed. In this near abortive type of paralysis, there is usually no tendency toward deformity on weight bearing, and no supporting apparatus is needed. Limited active and passive motions are permissible; also massage; but too much should be avoided, and an effort should be made to prevent fatigue. If the family is allowed to treat the child, the greatest gain will follow instructions to rest, and to give massage and passive motions guardedly.

### THE SEVERE TYPE OF PARALYSIS

Among the children who leave the hospital are those who cannot stand or sit or use an arm. Their muscles appear normal, otherwise, but it is well to watch them for weak muscles, etc., as in the near abortive cases. Attention is too often fixed on the paralyzed muscles, and the weak groups are unnoticed and neglected.

This severe type with deformity needs such support as the position suggests.

Drop foot should have permanent support by removable apparatus, preventing position contractions and deformity, allowing no stretching and fatigue of the weak muscles by the pull of the opposing normal ones. Later, massage and passive and active motions should used when indicated, and the effect on the muscles watched as a guide for continued treatment. It is much safer to underdo than overdo. When on testing the muscles on the day following treatment, the power is found diminished, this is a plain indication for more rest and support and for less vigorous acti-The operative and muscle-educational treatment of the deformities which often follow infantile paralysis need not be considered here. It is generally admitted, I think, that electrical treatments should be used only in exceptional cases. There is normal sensation in this paralysis. Enough current to reach the affected muscles is too much for the surface, and the effects on the paralysis do not justify its use.

### CONCLUSIONS

1. Recently much that is new has been learned regarding the care of the weakness and paralysis of poliomyelitis.

2. These weak and paralyzed muscles are sick muscles, with deranged nerve and blood supply, and should be treated as such.

- 3. Sick muscles tire easily, not only by active use, but also by passive use and by massage, and when they tire they are less able to functionate the following day. Their ultimate usefulness is also harmed.
- 4. Study the result following the treatment. Undertreat rather than overtreat. Avoid fatigue.—J. A. M. A., 9-26-'16.

# THE TREATMENT OF INFANTILE PARALYSIS

The reported successful use of adrenaline in the treatment of acute poliomyelitis will meet an urgent need of a number of recoverics sufficient to afford a fair test can be recorded. Indeed, in a recent editorial article (New York Med-

ical Journal, July 8, 1916), we referred to the unfortunate paucity of curative measures at our disposal. In the recently published edition of Osler and Mc-Crea's Modern Medicine, Farquhar Buzzard speaks in the same vein when he states: "We are unacquainted with any method of combatting the acute attack and must be content to treat the initial stage similarly to that of any such infective disease. When the disease is epidemic," continues this distinguished neurologist, "and constitutional disturbances suggest the possibility of an attack, the administration of hexa-methy-lenamine is worth a trial." The same reserve was fittingly observed by Simon Flexner in his recent public address, when speaking of the shortcomings of hexamethylenamine, and of his own serum, he said: "The experiments have not yet reached the point where the new drugs are applicable to the treatment of human cases of infantile paralysis."

We urge that a fair and impartial trial be given to adrenaline, not only because its use was suggested by so competent an authority as Meltzer, and because of the favorable results obtained in forty-one cases by Dr. Bermingham at New York Throat, Nose and Lung Hospital, but on account of its intrinsic merits as a pharmacological entity. To realize its possible worth, however, its users must place the problem on a higher scientific plane than the reported statement that the direct injection of adrenaline into the spinal canal acts "as a wonderful tonic" when "reaching the nervous tissues" and "removes pressure from them," and thus "places nature in a position to do the rest." Much evidence is available to show that we have in all probability, in adrenaline, thus used, a direct activator of the antitoxic function of the blood in the central nervous system, the main seat of morbid activity of the veins.

Brown-Sequard, Abelous, Langlois, Albanese, Zucco, Charrin, and others have long emphasized the importance of the ductless glands as factors in the active protection of the body against disease. While Charrin, nearly twenty years ago, wrote, "As to antitoxic functions, one may depend upon a series of

viscera, first of all the liver, the pituitary, the adrenals, the pancreas, the kidneys, the spleen, etc." Albahary, as recently as 1913, in a paper read before the Paris Biological Society, stated that "as regards the neutralizing secretions" that the organism can oppose to the action of a toxin in general, we know today that this role belongs mainly to the ductless glands." Sajous, however, identified the role of the adrenal secretion in the process as that of a catalyzer, the purpose of which is to activate oxidation and thus enhance the antitoxic power of the digestive ferment which, both in phagocytes and the plasma, endows the blood with defensive proper-The influence of the adrenal principle on oxidation was confirmed, 1912, by Bernstein and Falta; while the labors of Abderhalden have confirmed the view that a digestive ferment is the active protective agent in our defensive functions. Briefly, the evidence goes to show that adrenaline should not be looked upon as an antibody, but as an activator of antibodies.

How does the adrenaline penetrate the central nervous scystem to enhance the antitoxic power of the blood therein? On the basis of Ehrlich's methylene blue injections, Sajous, in 1903 and 1907, pointed out that bloodplasma laden with the adrenal principle circulated in the nervous elements, traveling upward as does tetanotoxin. Lichwitz, in 1908, confirmed this view, having also observed that "adrenalin traveled from the lower extremeties to the upper when these were only connected by nerves." Recently the presence of adrenaline in nerves was likewise discerned by Macallum, of Toronto, with the aid of silver nitrate solution injections.

This evidence, to which much could be added, will suffice to indicate that we may have in adrenaline the keynote for a successful treatment of acute poliomyelitis. It will undoubtedly increase the defensive reactions of what active antibodies are formed. This suggests that it might sufficiently increase the activity of Flexner's serum to give it the potency it needs to render it effective, not only very soon after infection, but as long as the latter is active. That the hexame-

thylenamine wisely given simultaneously by Dr. Bermingham is aided indirectly by the adrenaline, is also probable.—N. Y. Med. Jour., 7-29-'16.

## Book Reviews

Volume four, twenty-sixth series, 1916, of International Clinics, a quarterly of illustrated clinical lectures and especially prepared original articles on Treatment, Medicine, Surgery, Neurology, Pædiatrics, Obstetrics, Gynæcology, Orthopedics, Pathology, Dermatology, 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. M. Landis, M. D., Philadelphia, U. S. A., with the collaboration of Chas. H. Mayo, M. D., Rochester; Sir William Osler, Bart, M. D., F. R. S., Oxford; Rupert Blue, M. D., D. P. H., Washington, D. C.; Frank Billings, M. D., Chicago; Jno. G. Clark, M. D., Philadelphia, Pa.; A. McPhedran, M. D., Toronto; Jas. J. Walsh, M. D., New York; J. W. Ballantyne, M. D., Edinburgh; Jno. Harrold, M. D., London; Richard Kretz, M. D., Vienna, with correspondents in Montreal, London, Paris, Berlin. Vienna, Leipsic, Brussels and Geneva. Published by the J. B. Lippincott Company, Philadelphia and London.

As may be seen from the above list of high class editors and correspondents from almost every important medical center in the world, there must be some very valuable knowledge to be gained by the possession and perusal of these vol-The illustrations are good, especially the colored frontispiece in Vol. IV, from which a very useful lesson can be learned, from simple contemplation, by layman as-well-as professional. The paper is "bum" the binding of medium quality, but the contents are "up in G." Without referring to any one feature we advise you to buy it and feel assured that you will get your money's worth.

C. R. E.

We have received Vols. IV and V, PRACTICAL MEDICINE SERIES. Vol. IV, GYNECOLOGY, edited by Emelius C. Dudley, A. M., M. D., Professor of Gyne-

cology, Northwestern University Medical School; Gynecologist to St. Luke's and Wesley Hospitals, Chicago, and Herbert M. Stowe, M. D., Assistant Professor of Obstetrics, Northwestern University Medical School; Attending Gynecologist to Cook County Hospital, Chicago.

Vol. V, Pediatrics. Edited by Isaac A. Abt, M. D., Professor of Pediatrics. Northwestern University Medical School, Attending Physician Michael Reese Hospital with collaboration of A. Lovison, M. O., and Orthopedic Surgery, edited by Jno. Ridlon, A. M., M. D., Professor of Orthopedic Surgery, Northwestern University Medical School, with collaboration of Chas. A. Parker, M. D. Price of these volumes \$1.35 each. the series of ten volumes \$10.00. lished by the Year Book Publishers, 327 LaSalle St., Chicago, Ill. The text represents the latest trend of professional opinion on the subject considered.

Volumes 7 and 8 of the Practical Medicine Series has been received from the publishers. These volumes are two of a series of ten issued at about monthly intervals, covering the entire field of medicine and surgery. Each is plete on the subject of which it treats, for the year prior to its publication. The series is arranged so that those interested in special subjects may buy only the parts they desire. Price of Vol. VII on Obstetrics, edited by DeLee is \$1.35. Price of Vol. VIII on Materia Medica and Therapeutics, edited by Butler, and Preventive Medicine, edited by Evans, is \$1.50. By the Year Book Publishers, 327 LaSalle Street, Chicago.

### A MANUAL OF NERVOUS DISEASES

A Manual of Nervous Diseases, by Irving J. Spear, M. D., Professor of Neurology at the University of Maryland, Baltimore. 12mo of 660 pages with 169 illustrations. Philadelphia and London. W. B. Saunders Company. 1916 Cloth \$2.75 net.

We have reviewed the above very carefully and can heartily recommend it to the profession, as a very "usable" book for the library of the general practitioner.

# The West Virginia Medical Journal

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AGGRAVATED CORYZA—SO-CALLED GRIPPE

By G. A. ASCHMAN, M. D., B. Sc., Wheeling, W. Va.

Read at Annual Meeting, Wheeling, W. Va., May, 1916.

For the past twenty-six years La Grippe has been more or less prevalent during the winter scason. Although known as Influenza before that time, the first severe epidemic occurred in the United States in 1889, resulting in a large number of deaths, principally from pneumonia. During the frequent repetitions from year to year, there has been a gradual decline in the severity of the symptoms and complications, as if the virulence of the disease had decreased. or a degree of tolerance had developed. Last winter there seemed to be a considcrable recrudescence, for from all corners of the country, especially from some of the larger cities, came reports of a regular epidemic of grippe, afflicting a large percentage of the population, so that even schools had to be closed for a stated time. There is no doubt that every practitioner was called upon during the past six months to administer to an increased number of cases with symptoms which led to the diagnosis of La

Grippe, both on his and the patient's part. But it is very questionable as to how many of these were suffering from real influenza, which is now known positively to be caused by Pfeiffer's bacillus. I believe one is safe in saying that four out of five such cases are not the result of this bacillus, but are manifestations of a more or less acute inflammation of the upper respiratory tract, leading to an indefinite variety of symptoms and complications, which to the satisfaction of the physician, and as easily understandable to the lay-mind, are grouped under the diagnosis, La Grippe.

The typical and true influenza is an infectious disease, with an abrupt outset after a period of incubation of from one to four days. The attack is characterized by high temperature, oftentimes a chill, an intense feeling of depression, which is liable to last far into convalescence. It is now generally recognized that the disease may present itself in three different forms—although two or all three of them are sometimes combined—the respiratory, nervous or gastro-intestinal. The duration is variable, lasting from a week well on to two months, with various complications ensuing. It is for that reason that almost any set of symptoms, which cannot be called anything else, is called la grippe. Headache, fever, general malaise, bad cough or diarrhea,

racking pains, stiffness of the joints, etc., are often present; and such serious complications as pneumonia, otitis media, meningitis, etc., occur all too frequently. Every winter you have seen such eases. As a rule the diagnosis is made by exelusion. In other words, after a thorough physical examination, typhoid fever, pneumonia, meningitis, rheumatism, appendicitis and tonsilitis are ruled out, and naturally one disease remains to aecount for all symptoms present—la grippe.

But while this designation is very convenient, it becomes imperative for us to differentiate between this really serious disease and other ailments, which are liable to be brought under the same diagnosis by both patient and physician.

During the inclement weather of the winter months, which was especially marked in the past season, very few people in this part of the country cseape the ravages of a mild infection, causing catarrhal inflammation of the upper sespiratory tract. The rapidity of changes in atmospheric conditions—the thermometer jumping from below zero to 70° twenty-four hours—the frequent rains and snows, the slush upon streets, the inability of the patient to accommodate his body-temperature to the vagaries of the elements, the going from heated offices and houses into a chilled, heavy-laden atmosphere, tend to cause a constant combat between hyperemia and anemia of the mueous membranes which results in stasis in smaller blood-vessels with general engagement and lack of resistance. While these pathological changes begin as a common "cold," they frequently spread to the whole respiratory tract and its aduexa, but on the other hand, present symptoms far different and less serious than those in true influenza. Dr. Harold Hays of New York, has suggested the name "Polynasal Catarrh," but as only the starting-point is usually in the nose, the writer prefers the term "aggravated coryza."

While the onset is insidious, there may be premonitory signs, such as sniffling, frequent sneezing attacks, ringing and fullness in the ears and a heavy, dull

feeling in the head. At first the discharge from the nose is watery, but soon is changed to muco-pus; and as the disease progresses there is a trickling of inueous into the naso-pharynx, burning and watering of the eyes and eough, first pharyngeal and later on laryngeal or bronchial. General malaise is always present, but only rarely a mild degree of fever. Constipation is the rule. A general physical examination is usually negative. Even when cough is present the lungs are entirely free from rales or signs of any kind. Examination of the nese and throat reveals the typical pieture of passive hyperemia. The turbinates are all greatly engorged, and the mucosa may be so swollen that it is impossible to see beyond the lower turbinates. The throat, especially the posterior pharyngeal wall is intensely congested with superficial veins dilated and lymph-follicles hypertrophied. As the disease advances, the posterior wall of the epiglottis, the arytenoids, false cords and even the true vocal cords may be hyperemie. If this condition is not alleviated the outlet from the sinuses, especially the frontal, becomes obstructed, and increased pressure and secretion produces headache. Sometimes there is pain in the groins and neuralgia of the face, which is a sign that the congestion has extended to the antrum of Highmore.

A simple coryza reaches its height in the course of a few days, remains stationary for an indefinite time, and gradually subsides, unless complications occur. It is these complications which lead to an aggravated coryza, and they brought about by a diminished resistance of the tissues and an invasion by various micro-organisms, superinduced above all by a lack of proper ventilaiton and drainage of the nasal cavities. The invading organism is as a rule the streptococcus or pneumoeoecus, and only at times the Pfeiffer bacillus which then will lead to a true influenza. The more frequent complications are disease of the various sinuses, otitis media with its dangerous sequelac, then bronchitis, pharyngo-laryngitis, tonsilitis, peritonsillar abscess, inflammation of the glands of the neck, etc., the gravity depending on

the virulency of the invading organisms.

When a patient comes to the physician with a bad "cold" complaining that he feels "grippy," it is of the utmost importance to keep in mind these possible complications, so that the proper steps can be taken to prevent them.

At the beginning stage abortive measures may be efficacious. As the condition is mainly one of congestion of the nasal mucous and its accessory and adjacent parts, treatment should be di-rected toward the establishment of congestion in other parts and toward the elimination of waste products through the bowels, kidneys and skin. The old remedies, like Dover's powder, calomel at night, followed by a saline in the morning, a glass of hot lemonade, a hot bath and going to bed covered with extra blankets, are still much in use. Analgesics, especially those containing asperin or acetanilid in small amounts, are frequently prescribed to dissipate the indefinite pains throughout the There are several kinds of coryza or rhinitis tablets on the market; but the writer has had the best results from the use of tablets containing a combination of atropia, morphia and caffeine in the proportion of 1-800 grain of atropina sulphate with 1-16 grain of morphine sulphate and 1-6 of caffeine citrate. The morphia relieves the pain and nervous irritation, suppresses the excessive secretions and stimulates the circulation; the atropia elevates the tone of the bloodvessels, quickens the pulse, decreases all the secretions except the urine, stimulates the respiratory center, and counteracts the constipating effects of the morphia; the caffeine stimulates the nervous centers and the kidneys and diminishes the tendency of the morphia to produce nausea. By giving one of these tablets at the outset of the attack the symptoms subside with as much certainty as can be affirmed by any medicinal specific. The effect of this remedy lasts several hours, even though the dose is small, and it should be repeated in one, two, four or six hours, if the symptoms begin to reappear. These tablets should never be given through prescriptions to patients. Long before the advent of the Harrison

Law the writer never allowed them to know the composition, so that no drug habit could be contracted.

The general treatment by hypodermic injection of anti-toxic sera or vaccines has of late come into vogue, but its merits will not be considered now, as it is the object of this paper to draw attention to the local acute congestive conditions only.

Local treatment is at once applied according to indications. The familiar alkaline nasal spray or douche should not be used in the beginning of an acute catarrhal condition, and later only to remove accumulated secretions. While the nose is cleared by the process the congestion is not relieved, and the constant blowing of the nose predisposes to increase turgescence. Moreover, the hard blowing of the nose is very liable to spread the catarrh to the Eustachian tubes and middle ears. The prime object should be the re-establishment of proper drainage and ventilation in the upper respiratory tract and its adnexa. After this has been accomplished by the judicious application of cocaine and adrenaline, the patient is given for use at home a spray of albolene or benzinol with camphor and menthol added in the proportion of one-half to three grains of each to the ounce. According to conditions, a few drops of eucalpytol some other ethereal oil may be added. It should be remembered, however, that in too great amount the camphor-menthol has irristating qualities and may set up a series of paroxysms of sneezing, which again increases the nasal congestion. Later on the application of some of the silver preparations will lend tone to the mucous membrane. The patient should be impressed with the importance of continuing the treatment until normal conditions have been re-established, for only too often abeyance of acute symptoms nothing more is done, and relapses set It is these which often lead to the more serious complications. Then these repeated attacks leave behind them some chronic disturbance which in turn render the parts more susceptible to another coryza during the following winter season. If there are deformities or any other chronic derangements remaining, the patient should be advised to have these removed, as it is a well-known fact that such conditions pre-dispose to renewed acute attacks.

All this may be trite and familiar to many, but the very frequency of its occurrence has led the writer to re-emphasize the following:

#### CONCLUSIONS

1. The diagnosis "la grippe" or influenza is quite often incorrectly made and treatment accordingly directed towards general symptoms, without due attention being given to congestive changes in the upper respiratory tract.

2. A common coryza will frequently lead to an aggravated coryza with more or less severe implication of the sinuses, the middle ears and other adnexa.

3. Such complications can usually be prevented if from the start proper care be taken to establish and maintain proper ventilation and drainage in the whole respiratory tract.

THE PATHOGENESIS OF SOME NON-PSYCHOGENETIC TYPES OF FUNCTIONAL NERVOUS DISORDERS.

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Read to the Medical Society of Virginia, October, 1916, at Norfolk, Va.

No consideration will be given here to functional disturbances of psychogenetic character, not because they are unimportant, for they are exceedingly important, and very numerous, but because their mechanism has been so often presented during the last few years before this society particularly by the present writer. city, particularly by the present writer. Nor will the incipient stage of Paresis, Dementia Precox or other major psychoses be considered, nor shall we deal

with the mild cyclothymies or deteriorate conditions of hereditary type.

That functional does not mean unknown is an idea slow to penetrate the mind of practitioners. A neurologist of wide vision, if imbued with the scientific spirit, not content with a mere name, seeks a cause of functional disturbance, he wants to understand its mechanism so that he need not by fumbling rule of thumb stab at the stopcocks hoping for favorable happenings and rarely sure of the outcome.

It will be profitable to discuss together some of these functional mechanisms. As the concrete situation is easier to grasp than the abstract generalization, it will be by cases that the presentation will be made.

#### SO-CALLED NEURASTHENIA

The head of a prosperous engineering firm was sent to me by Dr. Pressley, from California, because of exceedingly unpleasant and incommoding chiefly within the head which his neurologist there, obstinately attributes to neurasthenia. The patient is tired of two years persistent and conscientious blunderbus-therapy, which included even cessation of work in a mountain camp for four months without the least benefit, and after high words with his friend, the neurologist, came east to seek another opinion, as he was convinced, after studying many text-books that he was not in the least a neurasthenic within the usual meaning of the term.

His illness began suddenly by a sensation of being drugged, surging through him. This lasted ten days. He was not sleepy, more tired; he felt all dreamy and made mistakes at work, at addition for instance. Special stress upset him; but he did not feel run down. He is not torpid, but is rather restless; working mentally or physically makes him worse, but he has no inclination for exertion, mental or physical, both of which he formerly enjoyed. Even to bathe or to go to the theatre is felt to be too much of a task. Sometimes the cloud leaves him for a few days, he is then perfectly alert. At his worst there is a congested feeling at the back of the head, and it can be always brought on by coffee or digitalis, each of which makes him very restless and somewhat confused. Alcohol has no effect upon him. He feels worst after lunch, before which he has a drawing feeling like but not hunger. He has cephalic sensations about three a month of three kinds.

First neuralgic type from a draught, easily removed by two grains of acetanilid; second, from strong sun glare; third-

ly, the kind he cannot explain.

He kept a chart of his sensations during eight months while taking bacillus bulgaricus. This showed his condition never to have been better than fair.

There have been no paraesthesias nor blurring of vision, no loss of weight, no chilliness, no headaches. Reflexes are not brisk, pupils equally react, the optic disk is normal, visual fields unconstricted but the eyelids are discolored brownish red and have large veins. Blood pressure 119 and 75 diastolic, rising on standing. Pulse 80. He has lost sexual inclination and power but had always been under par in this respect.

Experiments were made with injections of pituitrin, adrenalin, pilocarpin, emetinc. Pituitrin caused only a slight rise of blood pressure and slowing of pulse, and the effects passed off in twenty minutes. Adrenalin hardly affected him, and caused no midriasis, a slight fall of blood pressure and slowing of pulse after twenty minutes. Pilcarpine nitrate (grain 1-8) caused flushing and moisture of face and hands, disappearance of slight headache, slight rise of blood pressure, and pulse rate, slight nausea followed by a fall of blood pressure fifteen points, severe salivation. blurred vision and slight midriases. Emetin caused only slight midraisis and a fall of blood pressure. These experiments thus showed a slight vagotonic tendency only. This denotes over action of the pneumogastric, third in part and sacral autonomic nerves, which form an antagonist to the sympathetic nerves in vegetative functions, keeping them in balance as regards secretion of the ductless glands, as well as of those of digestion, besides balancing the tones of viscera and blood-vessels.—Loudon.

That we were not dealing with a psychogenetic case was clear from the history and the psychological reaction of the patient. That so called neurasthenia was not the correct interpretation is indicated by the lack of morbid fatigability

The peculiar cephalic sensations, the disinclination for exertion and the clouded feeling in the intelligence not in the nature of torpor point to aberration of the pituitary gland. Such sensations have been well described as follows by Dr. Mark, himself a victim of hyperpituitarism in The Autobiography of an

Acromegalic.

"A general feeling of discomfort, sometimes with intense fatigue. A sensation akin to that of being partially under the influence of an anesthetic or some drug. Sometimes a feeling of restlessness or impatience, with perhaps a craving for food. Most frequently the desire to keep absolutely still. Intolerance of any noise or din. Intolerance of any strong light, of the glare of the sun reflected off the pavement when out of doors.

"When I am at my worst I still seem to be master of all my mental faculties, but lose the inclination to make the best of them.

"It seems as if all one's natural zest were gone. All interest in what is going on around one, or in what is going to happen, is lost for the time being."

In so mild a case, however, I felt that a biological test would be desirable in confirmation. Accordingly Aberhalden tests were made at the Corson White laboratory in Philadelphia. The reactions were negative to thymus, thyroid, adrenal, pancreas and testes, but markedly positive to pituitary. Radiograph examination then showed marked enlargement of the sella turcica, especially in length and breadth, but without deepening.

#### TREATMENT

As testis is regarded as antagonistic to pituitary, didymin was prescribed. In six weeks no benefit was obtained. Thereupon, a small amount of thyroid was added, still without benefit. Dr. Foster

Kennedy of New York who had also seen him had first prescribed hormotene and later thyroid and adrenal. The latter produced a wakefulness similar to coffee but no improvement and as it caused a strained feeling in the heart, he gave it up. Later pituitary gland was taken along with certain drugs, no benefit accruing.

I am now contemplating the rontenization of the sella turcica, a precedure which has been successful in diminishing pituitary over-growth in two cases of mine previously reported.

Lannoe's Adipose Pituitary Syndrome ameliorated by deep rontgenisation, J. A. M. A., 1912. Pituitary overgrowth reduced by radiotherapy, Wash. Med. Annals, 1915-1916.

#### CASE II

Here again is a case most instructive in illustrating the need of careful appraisal of the significance of symptoms and reactions in functional nervous disorders, for it is only by the further knowledge gained through minute analysis of cases of this kind that we can learn their natural history and advise measures for their relicf, in the attainment of which rule-of-thumb routine is entirely inefficacious.

### PARAESTHESIAL AND OCULAP ASTHENIA

A woman aged 42, was referred by Dr. Wilmer, in February, 1916, on account of a swimming feeling in the head and an aching of the limbs, especially in the heels, pricking sensation especially in the knees, and great nervousness, trembling and starting on the least provocation. Sleep was irregular. Until eight years before there had been periodic headache, nausea and vomiting lasting about twenty-four hours (migraine). There was pain in left shoulder and arm, and at times loss of power in using the hand. For two years this had extended to the right arm also. For eight years she had scarcely used her eyes, as doing so makes the head swim. Crowds and conversation enervate, may even cause weeping.

She had always been retiring and a blusher. Her nervousness had been

greatly aggravated by the death of her father, whom she had nursed for fourteen years, during which he had been blind for twelve. The only objective abnormalities were tremor and perspiration of the hands, enophthalmos, slight dermagraphia, tachycardia, pulse a hundred, standing 114, after five stoops 141. Blood pressure 130, diastatic 90; standing 125 and 184; and an increase of weight from 129 pounds to 169 pounds, 20 pounds of which had come in the preceding year. Lymphocytes 33%, total white cells 12200.

The condition, regarded as endocrine; and the patient was given mixed hormones and an organic phosphorus.

In a week the blood pressure rose to 145:90, 148:94 on standing. The pulse rate fell to 96:99 and 108 sitting, standing and after five stoops respectively, and she was greatly improved subjectively and had more energy.

The diminution of pulse continued on her return home, falling sometimes to 72 in the morning and 76 in the evening, and averaging under 80 the former, a little over 80. There was less pain and she felt better, although still having neuralgic effects, but some cardiac pain occurred, which I attributed to the pressor hormones being taken.

Two months later the blood pressure had fallen to 124 standing, she had further improved and would sometimes feel rested on waking which she had not done for some years, while tremor had ceased. The pulse rate, however, had risen towards 90. In September she was not so well again, the harmones having had to be interrupted because of the cardiac distress and anxious feeling they produced. But she still sleeps better, has more strength, has less orbital pain and nervousness, and had lost 12 pounds. was given pituitary gland, and the following month had a return of pains behind the eyes and swimming in the head and aching in the limbs. She was then given anterior lobe of pituitary because worse. She is now better again upon the treatment at first given being resumed.

The general nervousness which was recognized by Dr. Wilmer as so important a feature, was in this case not due to a psychological situation. The wo-

man's attitude towards herself and others was perfectly normal. She had no obsessions, morbid anxieties, phobias or hysterical ideas. The inability to use the eyes without disturbance was due to a neural inadequacy, which must therefore have a physical source. That this was of a metabolic nature is to be inferred from the neuralgias, hyperaesthesias, tachycardia, raised blood pressure and increase of weight, tremor, dermagraphia, hyperhydrosis. That hyperthyroidia is concerned is shown by the tachycardia and tremor, but that it is not a sole cause is shown by the lymphocytosis of the blood with the marked asthenia. Some clinicians believe these signs indicate thymus hyperplasia. But in this case no choking sensations are present.

Hyper-æsthesia of subcutaneous tissue occurs in the adeposis of anterior pituitary insufficiency. But there is no

somnolence to corroborate this.

The case is instructive as showing the complexity of the data required for the interpretation of a functional case of this type and that physicians are no longer justified in a diagnosis of prostration of neurasthenia, least of all, to attributing to psychoneurosis such phenomena as these. Psychoneurosis has very definite characteristics susceptible of clinical demonstration. The fact that this case is not yet completely adjudicated makes it all the more impressive as an illustration of the objects of this paper.

#### SUPPOSED NOSOPHOBIC HYSTERIA

A Washington physician was referred by his medical attendants because after an appendectomy he manifested persistent anxiety as to his recovery; and could not be disabused of the conviction that his renal functions were impaired, that cardio-vascular disease was impending and finally that he was losing his mind and that he would be permanently incapacitated for carrying on his work. His physicians regarded his state as hysterical, and had tried to change his mental attitude by chaffing him, and endeavoring to cheer him up, but their efforts were unavailing; so after two weeks I was asked to see him.

I found him anxious and agitated and yet rather ashamed of his emotional weakness, which he tried to laugh away, without, however, attempting to minimize how dreadful he felt. He had scarcely slept for several nights. His pulse rate which had once descended to 82, remounted to over 100, and the respirations were 22, sometimes being as high as 26 per minute. Blood pressure 190.

There was no infection to account for his condition; as the wound had healed promptly, except for one small stitch abscess, and the rise of temperature was inconsiderable as it had steadily fallen since the operation from 102 to 98.8. There was restlessness, throbbing round the heart, lightness of the head, marked

insomnia, nausca.

I considered that nothing indicated the case to be psychogenetic and that a physical cause must be sought. As nothing objective except tachycardia and high blood pressure and neural irritability were apparent, and as there was no indication of hyperthyroidism, and the pressure had not previously been elevated, I sought for the causes in the postoperative and pre-operative conditions. These were as follows: The infection of acute appendicular abscess, the wakefulness, pain, and nerve strain in driving his motor car from Pittsburgh while suffering from acute appendicitis. The preceding anxiety of his father's illness in Pittsburgh, the anesthetic given for the operation, the narcotic given before it, the hypnotics and narcotics given after the operation, the starvation before and after the operation, very little food being given, and that consisting entirely of albumin substances. At first orange egg albumen, later jelly, custard, milk, eggs, chicken, coffce, later a very little toast and still later a little ice cream. When it is remembered that a proper metabolism of an adult at rest needs 2000 cal. of which less than half should come from proteins, the unscientific balance of this dietary stares one in the face.

All of these conditions perturb metabolism, cause toxicosis and predispose to an acid state. See Fischer's Masterly Work, Oedema and Nephritis, second edition (Wiley & Sons, N. Y., 1915).

The acid state interferes with cellular metabolism and may even cause cloudy swelling. The functions of the noble elements are impaired; thus the muscles, glands and central nervous system are all in disorder.

I suspected that we were dealing with an acidosis, in spite of the absence of acid bodies in the urine. To confirm this inference the alvular air carbon dioxide tension was measured. It was found distinctly subnormal, being only 28.4 mil. mercury. No other tests were made in this mild case but treatment was instituted forthwith.

Therapeutics consisted of carbohydrate diet, corn starch drink, during the night, sugar water, puffed rice and later oatmeal for breakfast with abundance of vegetables and fruit at midday as well as the general diet of the hospital. Thirty grains of sodium bicarbonate was also given every four honrs.

As a result the patient was improved within two days, and within a week was no longer obset by fears and went to Atlantic City, whence he returned completely well in ten days. The carbon dioxide tension in five days had risen to 32.9.

I am not convinced that acid itself is the cause of the phenomena in most of these cases; for it is possible that a toxic protein may act, not because of acidity itself but because of special chemical effect upon the cells of the body. In that case then, acidosis would be merely an indicator of a more subtle change. That many of the tonic effects are, however, due to acid qua acid, is clear from their disappearance after alkali is given. The fact that they disappear still more effectively through the combustion of carbohydrates need not be an argument against the toxicity of the acid factor, for destruction of the toxin might be effective through disappearance of acid rather than through catalyais of protein.

### ROENTGEN RAYS IN DIAGNOSIS

By Dr. W. C. Moser, Morgantown, W. Va.

Read before Monongalia County Medical Society, December 12, 1916.

Professor Roentgen discovered the "X-ray," as he called it, January 11, 1896, and the first picture taken was one of the hand, February 15, 1896.

(By the examination of normal living anatomy and the grosser forms of the abnormal conditions one is prepared to understand the finer pathologic lesions,

in the living subject.)

It may safely be said that skiagraphy has passed the experiment stage, and as an art has attained the dignity of being a positive means of diagnosis in fractures, dislocations and foreign bodies. Heretofore, of all the symptoms that arose incident to the fracture of bone, crepitus held the foremost rank. This symptom, however, can be elicited only under exceptional circumstances. many cases no crepitus can be obtained, and yet solution of the continuity of bone of a very serious nature may exist. Nor is it of small significance that the elicitation of the symptom causes distress and suffering; and when crepitus cannot be obtained, only a doubtful diagnosis of fracture is admissible. Hence arises the fact that without a skiagraph, a positive diagnosis in every case cannot be made. Furthermore, even if the diagnosis of fracture is positive in a given case, the skiagraph will give much additional information, obtainable in no other way. A skiagraph shows with startling vividness the extent of the bone injury, the position of the fragments, the rotation, the over-riding, and the shortening and displacement—information of the utmost importance in the diagnosis and treatment of the injury. Therefore, no diagnosis of a fracture is complete and certainly not scientifically so, without a skiagraph of the injury. That fractures and dislocations can be diagnosed and treated intelligently and successfully without the aid of an X-ray picture is freely admitted, but that the diagnosis and treatment of these fractures so handled, becomes less problematic with a skiagraph at hand, must also be freely conceded.

The practical application of the Roentgen rays requires the intelligent use of certain apparatus. With efficient apparatus at hand the technique of successful skiagraphy becomes very simple.

Our knowledge of bone injuries has been immensely enlarged since the discovery of the X-rays, and this can be readily understood when we consider the fact that to the sense of touch the sense of sight has been added. We can actually see the amount of damage done to the parts. Not alone the diagnosis, but the method of treatment, has been greatly benefited by the X-rays. A properly executed skiagraph, taken at a proper angle, will lend a wealth of information about the bone injury. A simple fracture of bone is amenable to treatment, which requires the observance of but one essential point, viz: immobilization. Not so, however, with a fracture where bone has been crushed, where the fragments have been misplaced, and possibly pieces of bone have been chipped off. Here immobilization alone will not suffice. Proper reduction followed by immobilization is necessary. It is in these serious and complicated conditions that the Roentgen rays illuminate so brilliantly the pathologic field. Here, most complicated manipulation will be called for to remedy the conditions. Intelligent and carefully executed reposition of fragments and correction of displacement and deformities are only possible under the leadership of the X-ray. In the complicated injuries, the fluoroscope should be pressed into service, and the examination made in various planes so as to become acquainted with the entire field of injury. Only in this manner can a mental picture of the amount of damage be estimated.

In taking an X-ray picture, the skiagraph will show a shadow in one plane of the object. While some fractures will show up well in one picture alone if the proper angle is caught, it is not the best to rely upon one skiagraph in all cases. Each fracture should be skiagraphed in at least two planes; if possible, one at right angles to the other. It may be necessary in some bone injuries to skiagraph

in three or four different planes before the extent of the injury is learned. In some regions like the shoulder, for example, it is not possible to skiagraph so that one shoulder be at right angles to the other because the body will not permit such position. Under these conditions an anterior and posterior plane can be taken or else one picture can be taken at an acute angle. In a fracture of the surgical neck of the humerus, a picture taken at an acute angle, with the plate resting on the scapuler region, the tube in front of the patient at an acute angle to the plate, will show markedly the usual displacement of the upper fragment. will show the displacement somewhat exaggerated, but the picture will give one an excellent idea of how best to reduce the displacement. Here again, in these complicated fractures, the fluoroscope should be used to aid in replacing the parts. Particularly is this method of reposition to be advocated when fractures involve structures that enter into the formation of a joint. Displacement of fragments that would be of little significance in other parts of the body, and would not cause impairment of function, when they occur in the joints may turn out to be potent agents in causing serious functional derangement.

The ingenuity of the operator will be taxed quite frequently to determine what plane of the fracture to depict on the plate to show up the fracture to the best advantage. This can best be discovered by making a fluoroscopic examination before deciding on the plane of the skiagraph. In certain injuries this cannot be done. For example, in injuries of the hips a fluoroscopic examination can scarcely be carried out; in injuries of this nature, a picture taken with the patient lying on the back, and a second onc with the patient lying on the abdomen, will give us all the data necessary for a diagnosis; and the study of the two pictures will suggest other modifications in the position, should such change be necessary.

In severe and complicated fractures, it is wise procedure to obtain a picture of the normal or sound side. By doing this we have a picture of the normal X-ray appearance and it will be of ex-

cellent service for comparison with the injured side.

One should look upon all fracture cases as potential medico-legal cases and be prepared with the two sets of plates, because in this way even the uninitiated can be made to understand the difference between the negatives.

The foetus in utero can be demonstrated as early as the fourth month by the Roentgen rays. The shape and size of the pelvis can be brought out clearly by means of stereoscopic rocntgenography, also bringing out deformities and narrowings; therefore, aiding in the subsequent delivery. Twins could be determined and in case of illegitimacy when vaginal examination is refused, the X-ray would discover the foetus. After the sixth month, such gross foetal abnormalias hydrocephalus, anencephalus, monsters; could many times be diagnosed as could also, hyper-ossification, due to prolonged pregnancy. Before a Cæsarean operation is performed, an X-ray should be taken to determine a normal pregnancy, lithopædium mole, hydatid or calcified fibroid, etc.

The fluoroscope has proven of great service in medicine, from a diagnostic point of view. In locating foreign bodies it is at times superior in value to a photographic plate in locating, for example, a foreign body in the esophagus. Here the fluoroscope cannot be equaled by the In fact, in chest examinations this instrument finds its greatest field of usefulness. In this region of the body the examination of the various organs in motion will yield considerable information. One must of course, be thoroughly familiar with the normal physiologic fluoroscopic appearance of this region of the body before the pathologic appearance can be appreciated. In examining the chest with the fluoroscope, the clavicle, the scapula, the ribs, the heart, the sternum, the vertebræ, and the large blood vessels, all throw their distinctive shadows on the screen. These shadows necessarily vary in their outline form, as they are viewed from different angles. A side view will differ from that in front or back. These shadows will also differ in different individuals. The lung tissue admits a ready penetration

of the X-rays, and any deviation from this transparency points to congestion, infiltration, or some other pathologic Radiating from the coarser markings which are caused by the larger or stem bronchi, are finer lines which project into the lung field for varying distances, but in the stereoscopic roentgentogram they do not extend to the surface normally. These markings are produced by the walls of the bronchi. blood vessels, lymphatics and their contents. In early tuberculosis these fine lines often reach the periphery of the lung at the site of the lesion. Sometimes small spots are seen along these lines—the early tubercles. In other cases, where these lines do not extend into the lung field for any considerable distance, they are much more numerous and heavier than normal about the hilum region. Sometimes near the root, soft shadows with irregular borders, with fine lines connecting these shadows with lung root are seen, indicating an early involvement of the lung parenchyma in that region. Involvement of the parenchyma in this region is usually roughly wedge shaped—the triangle of Dunham of Cincinnati; with the apex at the hilum. When the disease is of long standing and not active, the shadow is soft and borders ill defined. Because of the interposition of the cardiac shadow the infra-trachæl glands are usually not seen.

The position of the heart admits of being outlined with the fluoroscope, and the size of the shadow will assist in determining the degree of its hypertrophy or dilatation. The extent of the shadow of the aorta and large blood vessels in this region will determine the presence of an aneursym. The fluoroscope has been pressed into service to locate gangrenous areas in lung tissue with great success. It is difficult to appreciate what it means, both to the patient and to the surgeon, to be able to locate the areas with precision, for it becomes a comparatively small matter to drain an area in the lung tissue if the abscess or gangrenous spot can be located. On physical examination alone one cannot rely positively for the localization of these pathologic areas. Neither palpation, percussion, or auscultation can be compared in value

to the information that sight can give. True, with the fluoroscope, we only see a shadow, but location of these shadows is all we need to know. Pleuritic effusions and pus collections can be seen with surprising clearness. Foreign bodies in any part of the chest can be located, and their extraction need not become so hazardous an operation under the guidance

of the fluoroscope.

In searching for foreign bodies the plate should also be pressed into service. By taking skiagraphs at various angles the location of the foreign body can be determined more accurately. The same is true of foreign bodies in the abdominal cavity. Foreign bodies in the stomach and intestines such as buttons and pins swallowed, can be located with the fluoroscope and their progress through the intestincs watched; or, if arrested, their location noted, making the extraction by a surgeon a comparatively simple matter. It is no small comfort for the surgeon to watch his Murphy button coursing through the intestinal tube.

The use of the X-ray has thrown much light on the diagnosis of abdominal conditions, but in the hands of the unskilled it can be made to prove almost any condition and is in consequence a dangerous tool in diagnosis. It is not available in acute cases and is often too far removed

from the clinician or surgeon.

One who has never practised fluoroscopic roentgenoscopy of the abdomen, cannot appreciate how much learned under this kind of an examination, the intestines having been visualized by the introduction of the barium meal. The identity and relation of the various coils of the bowels, the motility and therefore the matter of adhesions of the excum, the ascending colon, the various flexures and particularly the pelvic colon, the relation of various intestinal segments to palpable masses to the points of localized tenderness or pressure, the motility of the terminal ileum and its relation to the appendix shadow and to the cæcum; the fixity and permanence of points of apparent spasm or kinking; the constancy of an apparent filling defect and its coincidence with a mass or a point of localized tenderness. These are only a few of the many questions relating to the bowels, which can be determined by visualized palpation.

Quite characteristic is the fluoroscopic picture of the upper abdomen. The liver, spleen, kidneys and the pancreas, in part give shadows, the form and outline of which should be studied in the physiologic state. The up-and-down motion of these organs with each act of respiration is not without interest. During pathologic states these rhythmical excursions of the organs in this region are disturbed, and we may be assisted by the fluoroscope in establishing a diagnosis. Disease of this region of the body, a space scarcely larger than the palm of a hand, offers considerable difficulty in diagnosis, and if the fluoroscope and plate promise ever so little in clearing up the diagnosis it surely deserves recognition and skilled application.

The large abdominal blood vessels and lumbar vertebra have also their distinctive shadows on the fluoroscopic screen, and aneurismal enlargements may also be studied with the fluoroscope. It is of great service in affections of the joints, and here in some respects will give more valuable information than the plate itself, because a joint can be examined in various motions, particularly in dealing with foreign bodies in this cavity. fractures and dislocations in this region, as well as in others, the plate will give more accurate information. A fluoroscopic examination of a fracture while it may give valuable information, will never compete with the information that a plate gives, and furthermore, a plate remains a permanent record—a consideration of no slight importance when treatment is to be instituted. If displacement of fragments exists, with a radiograph at hand their proper reposition is greatly facilitated. In fracture cases when the splints are in position, or plaster cast applied, the fluoroscopic examination will show the success of the efforts at re-position.

As for the diagnoses of internal medicine, the great majority of X-ray examinations are grossly inadequate. Equipment, technical knowledge and time for the examination are prerequisites. Reliable deductions cannot be drawn from a study of the plates alone.

The thorough-going fluoroscopic technic which is required demands a clinical familiarity with the conditions likely to be encountered. Occasionally, plate records are desirable. Gall stones, renal concretions, and particularly, ureteral calculi, are often thus discovered, when they would be missed if the examination was only fluoroscopic. Therefore a combined technic, largely fluoroscopic, with a few plates, for the elucidation of doubtful points, is essential.

SOUTHERN SURGICAL ASSOCIATION—NOTES ON THE WHITE SULPHUR MEETING.

December, 1916.

By J. E. Cannaday, M. D., of Charleston, W. Va.

Dr. Bryan spoke of his experiences in the war hospitals on the western front. He visited Carrell at Compeigne and saw the marvelous results obtained by the use of Dakin's solution. This mixture of the hypochlorite must not be under .45 or over .51 per cent. in strength. Weaker than this it is ineffective and stronger it becomes irritant to the tissues. The formula for the solution is described in detail in the Journal of the A. M. A. December 9, 1916, under correspondence. Dr. Bryan said that the wounds heal smoothly and are ready for closure in a short time. Frequent smears are made from the raw surfaces and when the number of pathogenic bacteria becomes quite small the suturing is done. In no case is it deemed advisable to wait for an absolutely sterile field. A large number of small branched perforated drainage tubes are used, sometimes as many as twenty in one wound. Bits of Turkish towelling are used as wicks to cause by capillarity a gentle seepage of the autiseptic solution toward the wound. Dr. Royster spoke of the solution made from vinegar, chloride of lime, magnesium sulphate and water as being somewhat similar to Dakin's solution.

Dr. Ochsner discussed the bactericidal action of certain common antiseptics with reference to some of the ordinary surgical infections. He had found by

experimental work that some of them seemed to possess selective affinities for certain bacteria. Saturated boric acid solution having a marked effect on the staphylococcus infection. He had also observed that the stitch abscesses sometimes seen are due to aerobic skin infections and they may be prevented by sealing the needle puncture around the sutures with compound tincture of benzoin which has been evaporated in a water bath to the consistency of molasses.

Dr. Vaughan discussed the treatment of fractures of the femur but brought out nothing new. He advocated the use of the Hodgen splint which is a most excellent treatment for many cases. Dr. Grant exhibited a device for the fixation of fractures by means of screws secured to a common handle or rather two handles united. Mr. E. W. Hey Groves in his recent work on fractures features a similar and apparently better device. One excellent point was brought out and that was that the periosteum should be undisturbed in bone operations. Dr. Baer described some of his experiences in the treatment of ankylosis of the jaws. He uses chromicized pigs bladder to interpose between the bony surfaces to prevent the re-establishment of the ankylesis after the performance of osteotomy. His results as a whole seem to have been very encouraging. He makes a very short incision and takes great care to avoid injury to the facial nerve and its branches. In some cases a paralysis lasting for several months has followed the severe traction made at the time. Fascia lata is probably more effective and certainly serves to fulfill the anatomic and physiologic requirements with more certainty. I have used a free transplant of fascia lata in the clbow joint with permanent mobility as a result. He spoke of the difficulty of finding out which side was ankylosed when one side was free, by inserting a small wedge between the teeth and working it back and forth the side may be located. X-ray negatives give no aid whatever. Dr. Carr reported three cases of ankylosis of the lower jaw. He makes a large incision, apparently cuts away a considerable amount of bone with his bone drill and does not interpose anything between the

cut edges of bone. However, he says his results were good. He props the jaw open for a few days and then begins

passive motion.

Dr. Hunner reported many cases of reported many cases of ureteral strictures successfully treated by dilation with boughies. He finds that these strictures cause many painful symptoms and are the cause of most of the cases of hydronephrosis. He finds that even strictures of large calibre may cause much trouble. In cases of hydronephrosis he dilates the stricture and irrigates the pelvis of the kidney. At the present time the amount of diagnostic data that may be secured by the use of the eystoscope, ureteral catheter, pyelography, ete., is enormous, in fact it is not possible to practice modern scientific medicine and surgery without their aid. In the performance of pyelography the kidney pelvis is not injected until the plate is under the patient and all is in readiness for the X-ray, then the pelvis is filled by low gravity pressure and as soon as the exposure is made the solution is allowed to run out. If the ureter is totally obstructed for even a few days the kidney is usually destroyed so far as its function is concerned. Most cases of pyelitis are associated with ureteral stricture and these in turn are usually due to some septic focus—a tooth abscess, a bad tonsil or some other atrium of infection.

Dr. Peterson advocated the closure of the vagina and the turning of the urine into the rectum in certain cases of urinary incontinence due to causes that could not be remedied otherwise surgically. These cases usually do not have ascending infection because they are protected by the normal ureteral valves at the junction of the ureter with the bladder. The rectum will hold the urine for several hours without irritation and does not eause diarrhea. It is a good last resort procedure and brings some peace and comfort to those women who are afflicted in this distressing manner.

Dr. Judd discussed the implantation of the ureter into the rectum. He thinks that the simplest and easiest methods are best. Dr. Deaver said that when he had occasion to implant the ureter he made

a small opening into the bowel or bladder, inserted the ureter, fixed it with a suture and nothing more. Dr. Coffey said that he had separated the mucosa from the bowel wall forming a tunnel half an inch long or more for the implantation of the ureter with the hope that ascending infection from the bowel

might be prevented.

Dr. Goldsmith said that the care of the patient who has undergone a prostatie operation is quite as important as the operation itself. He uses a small drainage tube and usually does not irrigate the patient's bladder until five or six hours after the operation. Dr. Hagner spoke of the extremely effective action of the Hagner bag for the coutrol of hemorrhage. Dr. Deaver packs a strip of gauze in the cavity, sutures the bladder mncosa snugly around it and lets it remain until it almost comes away spontaneously. Water is freely given by rectum and by mouth. Do not operate on these cases if the specific gravity of the urine is very low, as the risk would be too great. In the old days the bladder was always approached from the perineal side and when the suprapubic method was introduced some surgeon said, why break through the roof when you ean go in at the cellar door.

Dr. Thompson read a paper concerning the operative treatment of hypospadias. This dealt mainly with the various methods of forming a new urethra from the skin of the penis. The operative treatment of this condition has been gratifying. Dr. Mayo called attention to the proper location of the artificially constructed meatus. He said that it should be placed so as to open near the

center of the glans penis.

Dr. Malone entered into a long discussion of the various methods of treatment devised for exstrophy of the urinary bladder. The implantation of the ureters or base of the bladder into the rectum have usually given a satisfactory result for a time but have ended fatally with an ascending infection of the kidneys. Dr. Mayo pointed ont the salient reason for failure and that is the base of the bladder with its ureters can be transplanted but its innervation is cut off and there is no adequate protection against

an ascending infection. The operative scheme of Maydl was at one time heralded as a great advance but it has proved no better than a mere transplantation of the ureteral ends into the rectum. One operative scheme which has been carried out at least once and which possesses certain advantages is the following: cecum is separated from the ileum and ascending colon and its ends closed. The appendix is used as a urethra. The ureters are transplanted into the cecal pouch and the patient can plug the lumen of the appendix with a suitable obturator or wear a urinal as he desires. In a few cases the ureters may be anastomosed to the urethra behind the pubes securing easy drainage into a rubber urinal.

Dr. Cullen in his presidential address gave a comprehensive and entertaining review of the surgical advances of American surgeons. Dr. Crile paid a beautiful tribute to the memory of John B. Murphy. Senator Lane from the Pacific coast held his audience spellbound with his inimitable wit and humor. Franlin H. Martin told us how that if the Allies declined the peace terms of the Germans, the war would be prosecuted more relentlessly and with more barbaric ferocity than before and that it would grow increasingly difficult for the United States to keep out of war; that the problem of preparedness for possible war was now so pressing that we should each and every one of us do our bit to the greatest extent possible. terwards a most interesting motion picture play was shown on the general subject of military preparedness and the political opposition such measures would meet with until the danger was absolutely at hand.

Dr. Jones described a new operative procedure for the cure of a femoral aneurysm. He took an autoplastic fascial flap and passed it around the femoral artery above the sac, drew it sufficiently tight to cause visible pulsation in the sac to cease, then fixed the flap with that amount of tension. The limb was not very well supplied with blood for a time but the anastomotic circulation early asserted itself and a complete cure was the result. The strip of fascia probably not entirely cut off the circulation

of the blood at first but gradually accomplished this by virtue of cicatricial contraction.

Dr. Nicholson devoted himself mainly to the subject of ligation of the external carotid artery. He found numerous indications for this procedure. It might be said however, that he viewed the subject from the standpoint of a most enthusiastic advocate of the procedure. Many years ago Dawbarn advocated it in his starvation treatment of malignant growths of the head.

Dr. Horsley reported two cases of that surgical rarify, traumatic aneurysm of the superficial temporal artery. The vessel is caught between some foreign body and the bone and is damaged by the forcible compression. The treatment in these cases is naturally excision. The trouble has been diagnosed as a wen. He also spoke of some of his experiences in finding that carcinoma occasionally developed in bits of mammary tissue that had been misplaced in the axilla.

Cholecystitis with and without gall stones was discussed by Dr. Hendon who called attention to the fact that many cases suffered severe infections of the gall bladder without the development of gall stones.

Dr. Deaver spoke of the recurrence of gall stones following operation. Some of these stones are hidden in nests in the liver substance high up in branches of the hepatic ducts and later come down and manifest themselves.

Dr. Elbrecht called attention to the fact that if in doing post mortem examinations of the liver, we dissect out the hepatic ducts instead of cross sectioning them, many pockets containing groups of stones will be found.

Dr. Coffey presented a large collection of drawings and color sketches illustrating his work in the treatment of gastric ulcer. He also gave out general collections of statistics which proved that the operative mortality largely depends on the amount of time spent and the amount of trauma. Naturally when there is a resection added to a gastro-enterostomy the mortality rate is much higher. There is also a considerable mortality rate for perforations of these ulcers. The danger of peritonitis being great. Personal-

ly I have operated on four cases of perforated gastric ulcer with four operative discoveries. All of these perforations had been of several hours standing. The shortest time being five hours and the longest nineteen hours. In the last case the perforation was in a malignant area at the cardiac end of the lesser curva-All of these cases had a very definite history of previous gastric ulcer extending over many years. Dr. Mayo in discussing Dr. Coffey's paper said that the theory of the cure was that the gastro-enterostomy opening allowed the alkaline intestinal secretions to come in and to a considerable extent neutralize the hyperacid and irritating secretions from the stomach.

Dr. Coffey pointed out that the opening might be made too large; in such case an edge of the stomach might fold over the opening and act as a valve.

Dr. Downes reported eight cases of syphilis of the stomach discovered surgically and treated medically with good results. He emphasized the point that we ought to be on the lookout for such conditions.

Dr. Mayo again contributed one of his excellent talks on the choice of operative procedures for carcinoma of the rectum and pelvic colon. The work must be done with calmness and deliveration—do not do a terrier dog operation. The mortality of this operation is largely based on shock and hemorrhage. By reference do a two-stage operation. First open the abdomen, resect the sigmoid above the neoplasm and do an operation for the formation of an artificial anus. If the growth is well above the peritoneal rcflection of the rectum, do a resection of bowel and an end to end anastomosis or "slip" in anastomosis, modeled after the spontaneous anastomosis that has been known to take place after the sloughing of an intussuscipiens. If the preliminary operation for formation of an artificial anus has been done and the end of the bowel just above the new growth has been invaginated and closed off then wait for a week (no longer) and do the second stage of the operation. Place a circular suture about the anus, remove the coccyx and the last sacral vertebra, dissect around the rectum carefully secur-

ing all bleeding as you go upward and remove the lower segment of the bowel en masse, secure all bleeding points carefully, cover all the raw exposed surfaces with vaseline so as to prevent absorption; the lower pelvis has previously been entirely shut off from the geenral peritoneal cavity so as to avoid infection. If we wait longer than a week the devitalized lower bowel may become too rotten and friable and a severe infection result. If the rectum is resected below the peritoneal reflection an intractable stricture results. If the rectum is dissected out entire and the sigmoid brought down through the anal opening a stricture plus fecal incontinence will result. He formerly thought well of the combined operation complete at one sitting. One operator working above and one below, both at the same time, but the results by this method were not altogether satisfactory and the operation has been abandoned. The operation must be done early before extensive matastases have had an opportunity to take place. The bowel must be resected well away from the margins of the new growth. When an astomosis is done a large rectal must be passed well above the suture line and left in situ for several days so that the line of union will not be jeopardized by gas pressure. A preliminary cecostomy is also a good prophylactic measure for the prevention of gas pressure.

Dr. Clark showed that there are certain cases of floating and wandering kidneys that need fixation and said that many cures had been brought about in this way. A number of years ago this operation was overlooked as was the repair of the torn cervix but like other things a re-adjustment has come about and the operation of nephrorrhaphy has "found its place in the sun." Renal ptosis may occasionally even cause albuminuria.

Dr. Ransohoff reported a case of congenital lipoma of the cheek, a rare condition, while single lipomas of various parts of the body are rather common. A general lipomatosis, as I have seen in one case, is quite rare.

Dr. Blair gave a well illustrated talk on the subject of cleft palate. He condemns the Brophy operation and thinks

his own is much better. He believes that if the operation is done early and the child is given the proper voice training that the speaking voice will be quite normal. Much can be done to educate the voice at any age and some of the people who specialize along these lines are highly successful. He thinks the oval or mirror operation one of the best for hare Some of the hare lip operations seem apparently successful until the victim smiles and the fraud is most apparent. Babies having cleft palates have abnormally wide faces and a comparatively slight amount of continuous pressure speedily brings the bones together. The voice results of the poorest successful cleft palate operation arc far superior to those of any of the obturators These operations while considered by some as simple are in the performance quite difficult and call much attention to detail, long practice and mature surgical judgment.

Dr. Winslow reported some cases of cystic hygroma, in one of which an attempted removal proved fatal. The patient was a small child and hence unable to support the loss of much blood or to tolerate much shock. In such a case the tumor might have been successfully removed by an operation of several stages.

Dr. Sherrill and one or two others reported cases of traumatic asphyxia. In this rare condition the face is livid and extremely cyanosed and remains so for some time. Other portions of the body may not be cyanosed at all. This condition usually results from great compression being made to the chest and upper portion of the body forcing a great deal of blood into the face and neck. In some of these cases artificial respiration has been necessary.

Dr. Davis reported his results in the use of whole thickness skin grafts for the prevention of cicatricial contractions. As is well known the thin Thiersch grafts do not prevent the formation of scar tissue. In some cases these grafts are held on by a rubberized mesh fabric. A perfectly dry technique is maintained during the transference of the grafts and they are kept dry as an important part of the after treatment. Personally, I have been making use of an electric light

bulb for warmth, dryness and illumination in cases of skin grafting. One case was reported in a young lady lacking an cyebrow—had one made by transference of a suitable strip of whole thickness skin from the vulva, care being taken of course to align the hairs in the right direction. By trimming, a passable eyebrow resulted. These whole thickness grafts are particularly effective about the fingers for the prevention or relief of contractions.

Dr. Bartlett described the technique of his operation for the removal of the thyroid gland. The anesthetic is given through a wash bottle and two nasal tubes so as to keep the anesthetizer well away from the operative field; the head and face of the patient are covered with the usual sterile sheet. The line of incision has been previously determined by noting the position of a string of beads or ornamental chain about the neck and drawing a line at that point, several short cross lines are made so that in closure the skin will not be drawn too much to one side or the other. When the ribbon muscles are severed and the ends clamped in forceps, the handles of these forceps are crossed so that they may be drawn out of the way with retractor that is used to draw up the skin flap. A light spring clamp is applied to the base of the gland so that the amount of bleeding will be slight. The patient has been elevated almost into a sitting position so that the amount of bleeding will be reduced to a minimum. He does not make use of the stab drain in the centre as most operators do as that leaves a rather ugly scar. He makes use of a split rubber tube which is placed transversely across the ribbon muscles of the neck and is brought out at the two angles of the wound. This he says when removed leaves practically no scar. The patient is put to bed lying on the abdomen with a pillow under the chest. Dr. Bartlett thinks that there is less danger of aspirating fluids into the lungs when in this position and that the patient will do better. He thinks we are inclined to err on the side of removing too little rather than too much thyroid tissue. He not infrequently removes not only the major portion of one lobe,

but a portion of the other lobe also.

Dr. Finney spoke of this method of removing the diseased thyroid. He aims to leave some thyroid tissue at each lobe; the largest amount being left at the upper lobe. This roughly is not to exceed in size the second joint of the thumb. Dr. Finney does not altogether favor ligation as a preliminary to lobectomy but thinks the chain of the vicious circle may be more effectively broken by the removal of some of the gland tissue. Digitalis is not given but large amounts of normal salt solution are used and he thinks most effectively.

Dr. Hogan advocated the ligation of the internal iliac arteries and the use of the Percy cautery in the treatment of carcinoma of the cervix. I have made use of this treatment along with the Percy cautery in several cases, and while the curative results are probably few and far between, life can be prolonged considerably and the patient made much more comfortable. A pale, exsanguinated woman, after this procedure will take on flesh and regain her former color and sense of well being to such an extent that she will convince herself that she is getting well. I usually carry the technique of this operation a step further and ligate the ovarian arteries as well as the internal iliacs then use the cautery. The hand of the assistant on the uterus determining the degree of heat to be applied to any one point. A merc shell of uterine tissue should be left. After this the bleeding ceases entirely and the amount of discharge becomes almost entirely nil.

Dr. Boldt has been using the chloride of zinc for the prevention of uterine bleeding. It causes the mucosa to slough and its place is taken by cicatricial tissue which by its contraction tends to prevent further bleeding. In certain selected cases this method will probably have some advantages but must be handlel with care and by skillful manipulator or serious results might ensue.

Dr. Robins thinks that hysterectomy may be resorted to rather freely when we are dealing with the pathologic uterus at menopause. From that time on this organ is a functionless one and if it is seriously diseased should be removed. Dr. Smythe called attention to the great importance of the early surgical treatment of gastric ulcer as prophylactic for gastric cancer as nearly all neoplasms in this location are engrafted on an ulcer base. When gastric cancer is detected early, there is an excellent prospect of cure by resection and removal, but the vast majority of cases are overlooked or treated palliatively until the day of hope is past.

Dr. Moore presented drawings and a description of a method of securing utcrine suspension by the formation of new ligaments from the fascia of the recti muscles. This plan of treatment might be of use in some unusual case but I can not believe that it will be of much real service in the average case.

Through the courtesy of Dr. Capito, the resident physician, the use of the various baths, etc., was extended to the visiting surgeons. The management of the new hotel has established here perhaps the most complete hydrotherapeutic institution in the United They have recently added a zander room for the scientific and up-to-date treatment of stiffened joints and muscles. The value of this treatment is now being generally recognized and is of great value in the treatment of the stiffness and soreness following fractures and other in-Taking it altogether this last meeting of the Southern Surgical Association was a most enjoyable one.

A STUDY OF ARSENIC COM-POUNDS IN THE CHEMO-THE-RAPY OF TUBERCULOSIS.

By Aaron Arkin, M. D., Morgantown, W. Va.

Read at the Annual Meeting, Wheeling, May, 1917.

The fact that we have at present no specific serum or vaccine therapy in tuberculosis has led to many investigations in the past ten years in an effort to discover a specific chemical substance. In this field of endeavor the principles of chemotherapy outlined by Paul Ehrlich have been of the greatest value.

They have demonstrated the possibility of preparing synthetically compounds which have a selective action on the parasite in vivo as well as in vitro. Such a compound to have a specific action in tuberculosis must (1) reach the tubercle bacilli in the avascular tubercle in sufficient concentration to inhibit their growth or destroy them, (2) be non-toxic for the host.

A tuberculocidal substance of therapeutic value must be able, therefore, to penetrate the avascular tubercle. work of Wells, Corper, and the results here reported, indicate that crystalloids can penetrate the avascular tubercle, and in concentrations present in other dead tissues or living tissues of the body. Such a crystalloid which would accumulate in the tuberculous tissue and there exert its specific effect might furnish the ideal chemo-therapeutic agent. This agent must not lose its action when combined with living or dead tissue, but preferably must be activated by such combinations.

That colloids will not diffuse into tuberculous lesions, which themselves behave like colloidal masses, has been demonstrated by Wells and others. Hence, chemical substances which in the body assume a colloidal state would not be very likely to penetrate the tubercle. This has already been demonstrated for copper compounds by Corper. He found that copper salts do not enter the tuberculous tissues, and are distributed in the animal body just as is colloidal copper after injection.

In the course of the study of the above problems relating to the chemotherapy of tuberculosis, the writer and Dr. II. J. Corper undertook a study of the value of arsenic compounds asserted by many clinical observers to be of definite value in the treatment of tuberculosis. This work was done at the Otho S. A. Sprague Memorial Institute, Chicago, under the direction of Dr. H. Gideon Wells,

A historical review of the use of arsenic in tuberculosis reveals the fact that it has been used since ancient times. It was employed by Dioscorides, Antylus, Marcellus Empyricus, and Galen. Recently Burow claimed a specific action for guaiacol-arsenic, as did

Mendel for atoxyl, and Rohden for Atoxyl and ichthyol salicylate. These claims were none based on careful animal experimentation. The observations of many clinicians with arrhenal, arsenous acid, arsenic cinnimate, sodium cacodylate, salvarsan, etc., have shown no specific effect.

In order to determine the effect of arsenic compounds on the tubercle bacillus and their value in the treatment of tuberculosis, we investigated the tuberculocidal action of sodium arsenite, sodium cocodylate, mercury cacodylate, atoxyl, arsacetin, and neosalvarsan. We also determined the permeability of these compounds for the tuberculous animal.

Our experiments revealed the fact that sodium arsenite has no germicidal action on tubercle bacilli in vitro in dilutions of from 0.0001% to 0.1% in 24 hours at 37° C. The results were all controlled by guinea pig inoculations. Sodium cacodylate in dilutions of from 0.002% to 2% has no effect. Mercury cacodylate has a germicidal action on human tubercle bacilli in dilutions up to 0.001%. This action is undoubtedly due to the presence of the mercury in the molecule, for sodium cacodylate is without effect.

Arsacetin in dilution of from 0.001% to 1% has no effect on human tubercle bacilli in 24 hours at 37° C. Neosalvarsan in the same dilutions has no effect.

From the above results it is seen that none of these commonly used arsenic compounds has any tuberculocidal action in the dilutions studied, except mercury cacodylate which owes its action to the mercury.

The second part of our work was undertaken to determine the distribution of arsenic compounds in the animal organism (rabbit and guinea pig). The method employed is a modification of the Marsh-Berzelius method, described in detail in the Journal of Infectious Dispasses.

Our results indicate that arsenic is simple crystalline salt form, as sodium arsenite, sodium cacodylate, atoxyl, arsacetin, and neosalvarsan, administered to tuberculous animals parenterally, is found in the liver, lungs, kidneys, blood,

spleen and tuberculous tissues. The concentrations in the various tissues do not differ greatly. No evidence of accumulation in tuberculous tissues was obtained.

We may therefore conclude that the commonly used arsenic compounds cannot be said to have any specific action in human tubercle bacilli. They penetrate the avascular tubercle, just as do other crystalloids. These compounds, if of value in tuberculosis, are so only because of their favorable influence on metabolism.

## Book Reviews

PHARMACOLOGY AND THERAPEUTICS, H. C. Wood, Jr. Published by the J. B. Lippincott Company, Philadelphia, Pa. Price \$4.

This, the second edition of this work by the well known teacher and author, H. C. Wood, Jr., professor of Pharmacology and Therapcutics in the University of Pennsylvania, Second Vice-Chairman of the Committee of Revision of the U. S. pharmacopæia, was delayed as explained in the preface, on account of the coming edition of the United Pharmacopæia so that in justice to the many probable purchasers of the book it might include the changes made in the legal standard. There has been added some twenty substances not considered in the previous edition and a number of articles have been rewritten with important changes so that they may conform more nearly to the latest information concerning their properties, actions, etc. It may be noted herein for the benefit of those not familiar with the former edition of the work a very valuable feature in the arrangement of the book, namely, that of treating each drug or substance under the head corresponding to its physiological action on the various organs or systems and process as in chapter five, drugs used to affect the alimentary tract, chapter six drugs affecting metabolic processes, cardiac stimulants and so on. A book for ready reference.

We have received from the publishers volumes IX and X of the PRACTICAL

MEDICINE SERIES for the year 1916. Vol. IX, Skin and Venereal Diseases is edited by Oliver S. Ormsby, M. D., professor and head of the Department of Skin and Venereal Discases, Rush Medical College and Jas. Herbert Mitchell, M. D., Hyde Memorial Fund Fellow, assistant in Cutaneous Pathology, Rush Medical College. Published by The Year Book Publishers, 327 LaSalle St., Chicago. Vol. X, Nervous and Mental Diseases, is edited by Hugh T. Patrick, M. D., professor of Neurology in the Chicago Policlinic, Clinical Professor of Nervous Diseases in the Northwestern University Medical School, Ex-President, Chicago Policlinic, Clinical Professor of Nervous Diseases in the Northwestern University Medical School, Ex-President Chicago Neuroological Society. Price of either volume \$1.35. These volumes are in keeping with the usual well known standard and are very convenient for reference.

AMERICAN PUBLIC HEALTH PROTECTION, by Henry Bixby Hemenway, A. M., M. D., author of The Legal Principles of Public Health Administration, etc. Published by The Bobbs-Merrill Co., Indianapolis, Ind.

To those particularly interested in Public Health Measures this book will be of great interest and assistance.

AN INQUIRY INTO THE PRINCIPLES OF THE TREATMENT OF BROKEN LIMBS. A Philosophice-Surgical Essay with surgical notes by William F. Fluhrer, M. D., Consulting Surgeon to Belleview and Mount Sinai Hospitals. New York, Rebman Company, 141 West 36th Street.

This is a well gotten up book, splendid type, wide margins and good paper. The text is an expose of the author's ideas and Belleview Hospital methods of applying and forming plaster splints to fractured limbs. The directions along these lines are plain and in detail, showing how the best results may be obtained. The book is well written and profusely illustrated. The treatment advised is consistent and rational. Physicians having fractures to contend with will find many useful hints which will greatly aid in securing satisfactory results.

## 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, 1917

THE JOURNAL	issued o	n the	first	of	each	month.		

Subscription	-	-		\$1.50 per year
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All original articles for this Journal must be made 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 be-fore 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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## Editorial

Your editor has been making so many remarks upon the subject of support to our advertisers, that he feels a very great hesitancy in saying anything more along this particular line. I wish to tell you that it is very necessary, however, that the members of this State Association support our advertisers.

The assessment laid, namely, one dollar per year, will not begin to pay the actual cost to each member. Were it not for the advertisers in our Journal we could not keep it up. Your editor does patronize those firms which help us and he tells them of this, with every order. DO YOU?

Unless we do this we must expect that our advertisers will feel that they do not "get their money's worth." Frankly I will say that I am afraid that we do not give them the support we should. Let us think this matter over.

We have talked the matter over, of the cost of our Jaurnal. The printers tell us that to get "Our Journal" out, it is going to cost us more money. Your editor thinks that the printers do not "figure right;" still we must admit that the cost of getting out such a Journal as is ours costs money.

I will be perfectly honest; you must help. Either we must raise the price of our publication again or cut down the size by several pages. You do not wish this Journal of ours to become a mere pamphlet I am sure.

Please write me your ideas. Remem-

ber what it means to us and lend your assistance by helping plan ways and means to meet the situation confronting us.

It is with much gratification that we can report the defeat of the so-called Chiropractic bill in the House of Dele-

gates of the State Legislature.

This H. B. No. 147 would have nullified the Medical Practice Act of our state and the entire profession owes a vote of thanks to all the members of the State Association who worked for the defeat of this measure.

Two years from now it will come up again. Let us not be caught off our guard, but do individual work with our representatives. The physicians in both branches of the Legislature are to be commended highly for the service they rendered in opposing this bill.

It was our intention to publish a page of the County Societies in Affiliation with our State Medical Association, together with the names and addresses of the various presidents and secretaries.

Will the various county officers please send this information to the editor at once. Very frequently such information is wished and in this way a great deal of unnecessary correspondence will be avoided.

The Library of the West Virginia University at Morgantown needs a copy of the West Virginia Medical Journal for April, 1913, to complete the file. The editor has the other issues to send to the Librarian; if any of the members can find a copy of the above date to send them, please forward it to either the Librarian or the editor at once.

## Health News

NURSES ASKED TO FIGHT CANCER

Nurses, especially those engaged in public health work, can do much to prevent unnecessary deaths from cancer, according to a special bulletin published today by the American Society for the Control of Cancer. Many patients, especially women, it is pointed out, will speak to a nurse about the danger signals of this disease, such as lumps, persistent sores, ulcerations and other irregularities, when they would hesitate to call a doctor. Attention to these apparently trivial conditions, says the bulletin, often means the actual prevention of cancer or at least its discovery in the early stages when the hope of cure is greatest.

In promoting the special education of nurses so that they may be prepared to act as advance scouts in discovering this insidious enemy, the Society for the Control of Cancer has obtained the cooperation of national, state and local nurses' associations. All the leading schools of nursing have been urged to provide special lectures on the early signs of this disease so that nurses, when they take up their professional work may be equipped with the necessary knowledge, not make a diagnosis themselves but to see that people with suspicious symptoms receive prompt and competent professional advice. Through the cooperation of the National Organization for Public Health Nursing, the special bulletin above referred to, is being sent to several thousand visiting nurses' associations and prominent individual nurses throughout the country. Copies may also be obtained from the American Society for the Control of Cancer, 25 West 45th Street, New York City.

# IS CANCER EITHER CONTAGIOUS OR HEREDITARY?

Abstract of an address delivered by Mr. Arthur Hunter, President of the Actuarial Society of America and Actuary of the New York Life Insurance Company, at the Tenth Annual Meeting of the Association of Life Insurance Presidents, New York, December 15, 1916.

Cancer appears to be neither hereditary nor contagious, according to an investigation of life insurance statistics recently completed by Arthur Hunter, President of the Actuarial Society of America. Utilizing the large mass of vital statistics recorded with special accuracy and detail by six of the largest American life insurance companies which

cooperated with many others in the recent medico-actuarial mortality investigation, Mr. Hunter reports that the cancer rate among those in close attendance upon sufferers from this disease is only normal and that the same normal rate prevails among those whose parents or grandparents died of cancer. Summarizing this investigation in the words with which he concludes his address, "the statistics show that a man or woman, one or both of whose parents died from cancer, is no more likely to die from that disease than those whose family history was free from that blemish; strong proof should be presented in the future to justify asking the public to take any other point of view. Men and women who are in anxiety of mind on account of the appearance of cancer in their ancestry or immediate family may dismiss such anxieties, as there is no statistical evidence at the present time that the disease of cancer is transmitted by inheritance in mankind."

Pointing out that cancer caused 80,000 deaths in 1915 and nearly three-quarters of a million deaths among the inhabitants of the United States during the last decade, Mr. Hunter referred to the cooperation of life insurance companies with the American Society for the Control of Cancer in special statistical investigations and to the importance of an organized crusade against this disease, which, during the last ten years, has taken a toll of life equal to the entire population in 1910 of Maine or Florida. "It should not be assumed," said Mr. Hunter, "that cancer is a disease of old age and that accordingly its ravages do not constitute a serious economic loss to the country. About one-half (or 40,000 of the deaths in 1915) were among persons under 60 years of age, and if we assume that each of these individuals was worth potentially \$2,500, the community was poorer by \$100,000,000 through their deaths, aside from the cost of attending to them in their sickness. The economic loss, however, is a small matter compared with the pain of those who succumb and the sorrow of those who must watch their relatives die from cancer."

Referring to the interest which a dis-

ease so widely prevalent naturally arouses as to whether it is contagious or hereditary, either by direct transmission or predisposition, Mr. Hunter continued:

"Such questions must be in the minds of hundreds of thousands of relatives of persons who have died within the last few years from this disease and of the others who are suffering from it. I have found through direct information from relatives of cancer victims and through association with practicing physicians that there is a great deal of apprehension and foreboding—a fear that it may have been inherited or that it may develop through contagion. Unhappiness among some of the relatives is due to the mystery connected with the disease. Their fears are the result of impressions derived from individual cases where death from cancer has been attributed to a previous death of another member of the family. Desultory investigations in the past had led me to feel that there is little to fear from inheritance or contagion even before I undertook the present study with the desire to substitute facts based on a study of groups for impressions based on individual cases."

#### CONTAGION

According to Mr. Hunter "there seems little to support the views that cancer is the result of contagion. If it were, then in a goodly proportion of cases, the wife would be infected by her husband, or vice versa. In addition to the evidence heretofore published which seems to prove that there is no such result, I wish now to offer some original figures."

"Twenty thousand applications for insurance were reviewed, and it was found that in 488 cases one only of the parents of the applicant was stated to have died from cancer, and in four cases both parents were stated to have died of that disease. Summing up the results, it appears that out of the 492 cases where one or both parents had died of cancer, 43 per cent. of the other parents had died of some other disease, 56 per cent. were living at an average age of 61 and less than 1 per cent. (4 out of 492) had died from cancer. There were accordingly 122 times as many cases in which

one parent had died of caneer as of those in which both parents had died of that disease. This clearly indicates that there is very little to fear from contagion as there could hardly be a stronger test than the case of husband and wife. The significant fact in this investigation is that there were only four cases out of the 20,000 applications for insurance in which both parties died of cancer."

#### HEREDITY

"The possibility of heredity," said the speaker, "has generally been studied by experiments on animals. In the case of human beings there has been no previous attempt, so far as I am aware, to investigate the problem in families there has evidently been a eancer strain, if such a thing exists. In the present investigation, one of the groups consisted of cases in which both of the parents had died of cancer; and in another of the groups, a parent and a brother or a sister of the policyholder had died from that disease. It might be expected, therefore, that if eaneer were hereditary, it would be shown very clearly in the family records of these persons but this has not appeared. Approaching the problem from other aspects, several investigators, notably, Dr. F. L. Hoffman, have come to the conclusion that the factor of human heredity is of little, if any, importance. The fact that some strains of miee can be inoculated with eaneer while others appear to be uninoculable, suggests, however, that there may be similar differences in mankind, and that in one race, eancer is more or less inheritable and not at all so transmitable in other races."

After stating his belief that it does not follow that all the same conditions prevail in mankind as in animals, Mr. Hunter described his first investigation of the human material as referring to eases of persons insured in six eompanies, both parents having died of cancer prior to date of application for insurance. He first ascertained, wherever known, the causes of death of the parents of those who had died of cancer, with the following result:

"Of 472 grandparents of the insured,

the cause of death was given in 234 cases of which two were from eancer; the cause of the death was stated in 184 of these as 'old age,' the average age at death of which was 82. In 72 of the grandparents the cause of death was not known but the age was given, the average being 62; in 155 cases neither the age nor the cause of death was known. It is reasonable to conclude that if only two died of cancer out of 234 parents of persons who died of cancer, that disease is not hereditary.''

A further study referred to family records of cases where one parent and one son or daughter had died of caneer. The entire statistics were combined with the result that of 368 grandparents the eauses of death of 147 were stated and of these only one died from cancer.

Still another line of inqury was directed toward the 488 cases (already referred to as the basis of findings regarding contagion), in which one parent of the applicant had died of cancer. found that among the sons and daughters of these 488 parents "there were only two deaths from cancer among 810 persons, one of whose parents had died of that disease, all of these 810 persons having lived beyond the age of 40. Aceording to the mortality statistics of the Census Bureau, based on the population of the United States, the number of deaths to be expected above the age of 40 from cancer would be about three."

In order to obtain additional statistics from an entirely different source, Mr. Hunter concluded his series of investigations by examining the records of one of the largest and best hospitals in New York City. Although he found that "The material was not nearly as definite as the data from the life insurance companies" he suceeeded in tabulating the family history of 100 patients admitted for eancer. He found that the number of deaths from eancer recorded among the 200 parents of the patients was five, and among the 400 grandparents only one, which would represent a low death rate from cancer. "The study of these 100 eases," he concluded, "gives no indication that cancer was transmitted from the parents to the patients who had undergone an operation for cancer.''

"Are garment workers, particularly pressers and ironers, subject to chronic poisoning by carbon monoxide gas, a poisonous constituent of illuminating gas, which may be discharged into the air of workshops by gas-heated appliances?"

The U.S. Public Health Service in a bulletin which has just been issued, answers this question in the affirmative. In 11.8% of the shops examined in a study of the hygienic conditions surrounding the cloak and suit and dress and waist industries in New York City the amount of carbon monoxide was excessive. In 38% of the establishments studied the odor of gas was perceptible. Fifty per cent. of the shops used ordinary gas irons only; 41.8% used irons heated by means of a mixture of gas and air under pressure. Only 2.4% used electric irons exclusively, and in 8.6% defective gas irons were found. study of the gas tubes used shows that none were gas-tight and that most of them were in such a condition as to invite leakage. The constant breathing of carbon monoxide lowers the vital resistance of the body, thus paving the way for the infections of disease.

### COMMON COLDS

The most prevalent illness in the United States is the common cold, a disease group included under one name and considered of such minor importance that vital statistics do not record the enormous number of persons who annually are subjected to suffering, inconvenience and economic loss thereby. Remarkable as it may seem, the widespread familiarity with this condition has bred a contempt which hides its seriousness, yet when the sum total of the ravages committed by common colds is made, it becomes evident that instead of being a group of trivial affections, common colds must be classed as serious diseases.

The phrase "common colds" like "charity," covers a multitude of sanitary sins, and curiously enough, the name has been applied to a group of affections which far from depending absolutely on cold are frequently the direct result of living in close, overheated surroundings having a lower relative humidity than

the dryest desert known to man.

The word "colds" means an acute infection of the lining membranes of the nose, tonsils, throat and larger bronchial tubes. The process may be even more extensive and amount to a general infection of the entire body. All of the breathing apparatus excepting smaller terminal portions in the lungs may be involved, and as a matter of fact the disease may, and often does, spread to these, thus producing pneumonia. In this connection it may be pointed out that pneumonia kills more people in the United States than any other disease excepting tuberculosis and heart disease. Many pneumonias begin as a common cold. Colds do not produce tuberculosis, yet unfortunately what is considered as a cold may be in reality the first symptoms of the white plague.

The causes of colds are multiform and not entirely understood. In every case, however, they are dependent upon the growth and activity of living germs, which are always received from other people. It is true, that almost everybody harbors disease organisms in the mouth and nose, and that these under favorable conditions will produce a cold in their host. But these germs in every case were received from some other person. In other words, colds are infectious. It used to be thought that sitting in a draft or a prolonged stay in the swimming pool would produce a cold. This is erroneous, but the chilling of the body which the draft produces and the weakening of the vital forces caused by too long a swim, lower the powers of resistance and permit germs which have hitherto been harmless to their host, to produce their disastrous effects.

It is not necessary to describe a cold. Everybody is familiar with it in all its varieties, from the simple ordinary coryza, which is a polite running at the nose, to the sore throat, the aching chest, fever, and generally "knocked out" feeling. The cough, the snecze, the headache are, alas, only too well known. Common colds occur in epidemics and are distinctly contagious. They sweep through an entire household, an entire city, an entire state, attacking the young, the adolescent, the middle aged, and frequently

carrying off the aged, the weak and the debilitated. Schools, factories, stores are suddenly crippled by epidemics of this sort and the complications and serious disorders following the disease add to the great economic loss produced in this way. Infection of the cavities beneath the cheeks and brows, ear derangements, chronic lung infections, rheumatism, heart disorders, kidney impairment and depressed vitality may all follow in the train of this widespread infection.

To prevent a cold it is necessary first of all to keep the body resistance at a high point of efficiency. This means that the body machinery should be kept in good order at all times. Good wholesome food in proper amount, plenty of sleep, the careful attendance to the voiding of the body wastes, the taking of regular exercise in the open air, keeping the body clean, keeping the mouth and nose clean, the avoidance of hot, stuffy, dusty rooms, the avoidance of exposure to sudden changes of temperature, the prevention of the chilling of the body either by cold or wet, are all protective measures. It should be borne in mind, however, that even robust persons may contract colds from people who have them.

The germs of colds leave the body in the secretions of the mouth and nose. They enter the body through the same route. Thus a careless sneezer and the person who does not cover his mouth and nose when he coughs are breeders of these infections. The little living bodies which cause colds are so small that a million could rest on the head of a pin. When a person coughs or sneezes a fine spray carrying untold numbers of these germs is spread into the surrounding atmosphere to a distance of several fect and may be easily taken into the mouth and nose with the respired air. More direct contact such as by kissing, the common drinking cup, the common roller towel, by pipes, toys, pencils, fingers, food, and other things which have been contaminated by the mouth and nose secretions of a person having a cold may also carry the diseasc.

It is an obligation on the part of persons having colds to see to it that they do not spread these colds to somebody

else. The person who neglects to cover his nose and mouth when he sneezes and coughs, the careless spitter, the person who permits his germ-laden discharges to contaminate things which are going to be handled by other people is a menace to the community. If such a person uses public swimming pools, if he is not amenable to reason and persists in distributing his infection, he should be avoided as a spreader of pestilence.

A good deal has been said about hardening people so that they will not contract colds. There is an element of danger in this since to expose a weak person to the rigors of cold baths and cold drafts is apt to lower resistance, thus favoring the very condition which it is desired to avoid. At the same time, it should not be forgotten, that the Arctic explorer does not ordinarily have colds so long as he stays out in the open and that it is not the engineer and fireman in the cold, drafty cab who have colds, but those who ride in the close, dusty, overheated coaches behind. When all is said, it must be admitted that dustry, unventilated rooms perhaps play the greatest role in producing colds.

Since colds are a serious condition they should be treated as such. A great many people think that they have an infallible remedy for breaking up a cold. may be harmless in itself but usually it is not and consists of a combination of harmful drugs and alcohol, the latter usually preponderating. The sufferer takes these preparations in large quantities and if he is strong enough he may survive them and eventually get the best of his cold. Self-medication or medication by untrained persons is always dangerous. It is especially dangerous to those having colds and should always be scrupulously avoided. As a rule, much time, inconvenience and suffering will be obviated by consulting an intelligent physician promptly. If this is not practicable a brisk saline may be taken and the patient put to bed. This gives his body an opportunity to regain its vitality and at the same time isolates him from other people. The sick room should be well ventilated and the windows so opened as to keep the air moving freely. It is also wise to moisten the air a little bit by putting a pan of water on the radiator or over the register or on the stove. The handkerchiefs and bedding used by the patient should be sterilized by boiling. Kissing, and the use of drinking cups and towels, etc., in common with other members of the household should be forbidden, it being borne in mind constantly that colds are infectious and readily spread from one person to another.

"Pray, Mr. Abernathy, what is a cure for gout?" was the question of an indolent and luxurious citizen.

"Live upon sixpence a day, and earn

it," was the cogent reply.

John Abernethy, second son of Scotch-Irish family, born April 3, 1764, a physician of rare discernment, a surgeon of great skill, a lecturer, and teacher of dramatic magnetism, never said a better thing in his life. It is particularly apt in this country where the sin of overeating is far more common than the sin of overdrinking. Gluttony, always a fault, is all the more glaring in a land where a plentiful food supply permits it to be more general. The sallow, fat cheeks, the aching joints and irascible temper of the prosperous over-fed are far too common. Abernethy said to one such, the Duke of York, by the way, "Cut off the supplies as the Duke of Wellington did in his campaigns, and the enemy will leave the citadel."

Diet, however, is a really serious matter and many people suffer as much from dietary eccentricities and food fads as from actual disease. The average individual can eat good, plain, wholesome food in moderation all his life without ever being aware that he has a digestive apparatus. Starvation to cure a fancied ailment or to reduce an expansive waist line has shortened many lives, just as indiscretion in the opposite direction. Certain diseases do require a particular diet but this should be chosen by a physician of skill and not self-prescribed. The self-prescriber often has a fool for a patient.

Abernethy was married on January 9, 1800, to a lady whom he met at the house of a patient. A brief courtship was followed by a proposal by letter

giving the lady a fortnight in which to make up her mind and deprecating any "dangling." He was not as temperate with regard to work as he was to food. He did not even interrupt his lectures for his wedding, and died at the age of 67, completely worn out, a victim of his gluttony for work.

## Miscellaneous Announcements and Communications

Dr. Jas. R. Bloss, Editor, Huntington, W. Va.

Dear Dr. Bloss:-

I have just finished reading the February issue of the State Medical Journal, and feel so enthused that I deem it my duty to congratulate you on the splendid selection of productions in this number. I have noted, too, that your advertising section is free from both proprietary and patent medicine articles for which you and your staff are to be commended. The members of the State Medical Association should be proud of its Journal as compared with those put out by most other State Associations.

With kindest regards, believe me to be Very truly,

S. D. HATFIELD.

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

Dear Doctor:-

I am seeing some excellent work both in obstetrics and gynecology.

A few pointers observed in obstetric cases:

When patients are near term most all vaginal examinations are made per rectum.

At time of delivery the doctor cleans off the baby's abdomen and back with sterile vaseline, dresses the cord with gauze and puts on a steril binder and that is not touched again (i. e., removed) until the cord is ready to come off, which is about the seventh day. One per cent. of silver nitrate solution is always droppe into baby's eyes before it leaves the table.

All lacerations of the perineum are sutured immediately inside with 20 day cat gut and outside skin sutures are No. 1 or No. 2 silk-worm gut.

Any severe laceration of the cervix is repaired on the ninth day after delivery, unless necessary to control hemorrhage, when it may be repaired at once.

These patients are kept flat on their back for nine days unless some elevation of temperature is manifested, then the head of the bed is elevated.

Hope to be able to write you a few pointers every week. If you think them worthy of the Journal, well and good.

Sorry I will not be able to attend my own county Medical Society this month.

I am, yours fraternally,

H. G. STEELE.

Morgantown, W. Va., Feb. 5, '17.

Editor Journal.

Dear Sir: First, Please accept my humble thanks for the greatly improved Journal we are now enjoying. Nextly, I want to say a word or two in response to your progressively kind invitation, in your comments on Dr. J. E. McDonald's article, in the last issue of the Journal.

Dr. McDonald deserves credit for having backbone enough to come out into the open with his convictions. His attitude is the right one, and having done contract work myself, am in a position to know that he is right.

I have recently communicated with the American College of Surgeons in regard to contract practice, and have their promise that the matter shall have due con-

sideration.

There is absolutely no phase or form of contract practice that is right, and like the liquor problem it is all one-sided. I am in favor of cancelling the membership, in all our societies of every physician and surgeon, who can so stultify his conscience as to do contract practice. This may seem a little radical, but many pathological conditions require radical treatment. Dr. McDonald invites "the blood money extractors" to come forward with their defense. Not the least danger, Doctor; they have no defense, however they may try to whitewash the situation.

I personally know of examples where the doctor failed in competitive practice, later by "hook or crook" got a big contract, and did many surgical operations that were unnecessary, simply to get the experience. Contract practice is worse than fee splitting, because it injures more people, and there is more of it done. It is high time that we had legislation preventing completely all kinds of contract practice, and make it so binding that there will be no loop hole through which to escape, for any man mean enough to do contract practice, would not hesitate to use evasion if at all possible so to do.

It is not at all necessary to go into the detail, as to the bad points of contract practice, as they are so evident that a wayfaring fool can see them, but just one instance of the injustice to fellow physicians, not to mention the common herd.

A physician obtains a contract to do all the work, for the different industrial plants, in a small town at so much per This man assumes an head of course. Alexander Selkirk attitude, rakes thousands of dollars he did not earn, and by and with the aid and consent of the various corporations, succeeds in reducing the laborers' surplus cash to the point where he has not enough money left to employ a respectable physician and in other ways compelling the laborer to employ Alexander or lose his job. They do not tell him the reason his services are no longer necessary to the welfare of the corporation, but a Sherlock Holmes would guess it in less than a week. The respectable physicians in this little town are able to make a bare living and even this is grudged them by Alexander; while the said Alexander lives in affluence, visits the Mayo Clinic, etc. The system is un-American, unfair to the profession and the people, and ought to be prohibited on general principles and also as it is in direct conflict with the spirit of the public service commission.

Much has been done to elevate the profession of medicine in the state of West Virginia, especially in the last few years, and for which not a small modicum of credit is due the present Medical Council. There remains much to be done yet, as our present standards are not up to that

I think it would be a good plan to

in several of our sister states.

elassify the contract man with the saloon keeper, and other undesirables, and in this way prepare the soil of public sentiment for the harvest of a not-far-distant legislature.

Just now we want agitation and education, then we shall get the desired legislation.

IRVIN HARDY.

Chieago, Feb. 6, 1917.

Dr. Jas. R. Bloss, Editor, W. Va. Medical Journal, Huntington, W. Va.

Dear Sir:—You have doubtless received word from the Cooperative Medical Advertising Burcau that we have contracted for one-half page space in your Journal.

We hope that this is only the beginning of many years of pleasant relations between us. The length of time we will earry our ad in your Journal naturally is going to be governed by the mutual help and assistance we can be to each other.

It is the policy of the Victor Electric Corporation to stand for the TRUTH at all times, in all of its advertising, correspondence and sales work. If at any time your publisher's committee, in going over our copy, notice any statement which is at all questionable, we will appreciate your calling our attention to it, when we will either furnish your committee sufficient proof for its authenticity or withdraw it.

We have an honest, ethical service to render to your readers and we ask your earnest cooperation in helping us to present it.

Our products are divided into two classes, namely, X-ray apparatus and Electro-therapeutical equipment. If you were to ask us just how your journal would be of the most help mutually, we would suggest that you encourage your contributors to investigate the various uses of electro-therapeutics (galvanic current, sinusoidal current, high frequency current, light therapy, vibratory massage, passive ergotherapy, etc.) and report their experience through your journal.

There is no question in our minds but that the medical profession is only just beginning to realize how useful electricity in medicine really is, so in eneouraging the members of your society to investigate the subject, you are not only helping us as advertisers to "spread the gospel of progressiveness," but also rendering your readers most valuable service—even by making the suggestion to investigate.

Thanking you in advance for your

carnest cooperation, we are,

Yours very truly, VICTOR ELECTRIC CORPORATION.

SCHOOL OF MEDICINE AT WEST VIRGINIA UNIVERSITY RESTOR-ED TO FIRST CLASS RATING.

Morgantown, Feb. 14, 1917.

The most important announcement made for a long period in connection with West Virginia University or any of its departments was that made public here today by Dean J. N. Simpson, head of the sehool of medicine to the effect that he had received a letter from the president of the American Medical Association stating that after a thorough inspection of the entire school made last November the most recent meeting of this great organization held in Chicago last week had voted to restore the university School of Medicine to a class "A" rating, which places it again on an equality with the very best medical colleges in America. At the same time Dean Simpson announced the receipt of a letter from the Secretary of the Association of American Medical Colleges which stated that at the last meeting of this body the application of West Virginia University to be restored to membership had been favorably aeted upon and that for the first time since its membership in the association was taken away from it in 1912 the University was able to hold out to prospective students the promise that all their work here would be recognized at its full face value at any college of medieine in the United States. The School of Medicine first came into disrepute about 1910 when the American Medical Association reduced it to a class "B" rating where it has rested ever sinec. However through the ercetion of a new and well equipped building devoted entirely to the School of Medicine and

otherwise improving the facilities for instruction in medicine the school was able to undergo the most severe inspection and again be restored to membership in the Medical Association as well as in the Association of American Medical Colleges. Membership in the last named organization entitles the West Virginia School of Medicine to reciprocity in courses with every other member of this immense organization, which includes practically every medical school in the United States.

The American Medical Association includes in its membership practically every practicing physician in the United States and Canada and numbers about one hundred and twenty-five thousand, so that the placing of the University School of Medicine on the highest rating with this organization is a big step forward.

Due to the new buildings and equipment the enrollment in the Medical College this year is fifty per cent. greater than last year and the further boom to be expected from the recognition of these two big governing bodies is great.

### McINTIRE PRIZE

Last year Dr. Charles McIntire resigned the secretaryship of the American Academy of Medicine after twenty-five years of faithful service. In appreciative commemoration the American Academy of Medicine decided to raise a fund the income of which should be expended in accordance with Dr. McIntire,'s suggestions. As a consequence the Academy now announces two prize offers, the prizes to be awarded at the annual meetings for 1918 and 1921, respectively.

The subject for 1918 is "The Principles Governing the Physician's Compensation in the Various Forms of Social Insurance." The members of the committee to decide the relative value of the essays awarding this prize are: Dr. John L. Heffron, Dean of the College of Medicine, Syracuse University; Dr. Reuben Peterson, Professor of Obstetrics and Diseases of Women, University of Michigan, and Dr. John Staige Davis, Professor of Pediatrics and Practice of Medicine, University of Virginia.

The subject for 1921 is "What Effect

Has Child Labor on the Growth of the Body?" The members of the committee to award this prize are: Dr. Thomas S. Arbuthnot, Dean of the Medical School of the University of Pittsburgh; Dr. Winfield Scott Hall, Professor of Physiology, Northwestern University, and Dr. James C. Wilson, Emeritus Professor, Practice of Medicine and of Clinical Medicine, Jefferson Medical College.

The conditions of the contest are:

(1) The essays are to be typewritten and in English, and the eontests are to be open to everyone.

(2) Essays must contain not less than 5,000 or more than 20,000 words, exclusive of tables. They must be original

and not previously published.

(3) Essays must not be signed with the true name of the writer, but are to be identified by a nom de plume or distinctive device. All essays are to reach the Secretary of the Academy on or before January 1 of the years for which the prizes are offered and are to be accompanied by a sealed envelope marked on the outside with the fictitious name or device assumed by the writer and to contain his true name inside.

(4) Each competitor must furnish four copies of his competitive essay.

(5) The envelope containing the name of the author of the winning essay will be opened by Dr. McIntire, or in his absence by the presiding officer at the annual meeting and the name of the successful contestant announced by him.

(6) The prize in 1918 for the best essay submitted according to these conditions will be \$100.00; that of 1921 will

be \$250.00.

(7) In case there are several essays of especial merit, after awarding the prize to the best, special mention of the others will be made and both the prize essay and those receiving special mention are to become at once the property of the Academy, probably to be published in the Journal of Sociologic Medicine. Essays not receiving a prize or special mention will be returned to the authors on application.

(8) The American Academy of Medicine reserves the right to decline to give the prize if none of the essays are of

sufficient value.

The present officers of the American Academy of Medicine are: George A. Hare, M. D., Fresno, Cal., President; J. E. Tuckerman, M. D., Cleveland, President-elect; Charles McIntire, M. D., Easton, Pa., Treasurer, and Thomas Wray Grayson, M. D., 1101 Westinghouse Building, Pittsburgh, Pa., Secretary.

Cases of reported contagious diseases occurring in our neighboring states are frequently attended by West Virginia physicians and are not reported to the local health officers of the districts in which they occur. Physicians who attend such cases are hereby warned that they must be reported to the proper authorities. These physicians are liable to prosecution. Unless our physicians obey the laws of our sister states, they may be barred from this practicing across the line.

The Model Registration Law was refused passage by the House of Delegates, but the present law will be rigidly adhered to until the Model Law becomes enacted. Physicians are required by law to report all births within thirty days and deaths and cases of reportable diseases must be reported immediately. Birth and death reports are sent to the county clerk and disease reports are sent to the county health officer. Prosecutions for failure to report may be expected at any time.

STATE DEPARTMENT OF HEALTH.

# Society Proceedings

CABELL COUNTY SOCIETY

Huntington, W. Va., Feb. 15, 1917. Dr. J. R. Bloss,

Huntington, W. Va.

Dear Sir:—I am sending you a report of the following meetings of the Cabell County Medical Association. They are as follows:

A special meeting of the Cabell County Medical Society was called for February 2, 1917. In the absence of the President, Dr. Rowsey, Dr. Fitch was called to the chair. Dr. Bloss, a mem-

ber of the legislative committee, reported that House Bill No. 147, relating to the practice of chiropractors in the state of West Virginia, had gone to its second reading in the house and had been favorably reported upon and that it was up to the physicians of the state to do something. The society then passed a resolution which reads as follows:

This resolution passed by the Cabell County Medical Society, in special session in regard to section 12, chapter 11 of the acts of 1915 in relation to the practice of medicine and surgery in West Virginia, known as House Bill No. 147 presented by Mr. Conner and referred to the House Committee of Medicine and Sanitation.

Be It Resolved; That the members of the Cabell County Medical Society signing this resolution of protest, respectfully ask that you give for the welfare of our citizenship, your support to the defeat of this bill.

The Secretary was ordered to send a copy of this resolution signed by the members of the Cabell County Medical Society to the following gentlemen: Mr. Joe Thurmond, Speaker of the House; Mr. Wells Goodykoontz, President of the Senate; Dr. Harry H. Werner, Dr. Sinsel and Governor Hatfield.

This the Secretary has done as per

order.

It was moved by Dr. J. R. Hunter and seconded by Dr. Bloss that Dr. L. T. Vinson be appointed a committee of one to represent this society in an effort to defeat any adverse legislation against the medical profession in West Virginia. Carried.

The members present at this special meeting were: Drs. Taylor, Bloss, Watts, Fitch, Vinson, Prichard, Hunter and Pepper.

On motion the society adjourned.

The regular bi-monthly meeting of the Cabell County Medical Society met in room No. 216 of the Frederick Hotel February 8, 1917.

The members present were: Drs. Bloss, E. B. Gerlach, Morrison, Fitch, Cronin, Pickering, Reynolds, Watts,

Hunter, Yost, Rowsey and Pepper.

Dr. Bloss reported that House Bill No. 147 was killed at its second reading

in the legislature.

The committee appointed at a former meeting with Dr. E. B. Gerlach chairman, to obtain rooms in the City Hall for Medical Clinies, reported that the only rooms the commissioners could offer were the rooms now occupied by the Dental Clinie. It was moved by Dr. Hunter and seconded by Dr. Bloss that Dr. Gerlach's committee be thanked for their effort and that the committee be dismissed. Carried.

It was moved by Dr. E. B. Gerlaeh and seeonded by Dr. Bloss, that the members of the Cabell County Medical Society be assessed \$5 for a medical defense fund to pay an attorney to look after its legal interests. Dr. Hunter offered an amendment to this motion and seeonded by Dr. Watts, to strike out the \$5 assessment. The vote was taken and the amendment was lost and the motion carried.

The Secretary presented the application for membership into the Society of Dr. L. S. Henley, which had been approved by the eensors, and was duly elected to membership.

The bill of the J. R. Haworth Printing Company for letter heads, envelopes and government eards and the printing of same, amounting to \$13.50, was al-

lowed and ordered paid.

The president appointed the following committee to present or report elinical cases at the next regular meeting as follows: Drs. Watts, Reynolds, Merrison and Bloss.

On motion the Society adjourned. Fraternally yours,

R. H. PEPPER, See.

Clarksburg, W. Va., Feb. 14, 1917. Dr. J. R. Bloss, Editor,

W. Va. Medieal Journal.

The January meeting of the Harrison County Medical Society was a special meeting ealled to eonsider means to deal with any possible cases of poliomyelitis that might arise in the county. This was in view of the fact that poliomyelitis was reported present in Elkins and Grafton.

The society appointed a special committee consisting of Drs. Mason, ehairman; I. E. Wilson, Shentworth, Cherry, H. H. Haynes, to confer with the various boards of health of the county in order to adopt a uniform method of handling the situation and to urge such These boards action as is deemed fit. of health were at first all seen individually, and as soon as it became evident that they all meant to fall in line, a general meeting was held, first of all, the physicians and then of all the boards of health. The following plan adopted:

1. Printed circulars were distributed giving the people simple rules for the avoiding of contagion, as far as our

knowledge permitted us.

2. Physicians were asked to look upon all obscure illnesses in children when accompanied by fever of sudden onset as suspicious cases which were to be isolated until a diagnosis was made.

3. Whenever a case presented itself with sudden fever and signs of cerebrospinal irritation, a lumbar puncture was advisable. To insure early and accurate diagnosis, each board of health offered spinal fluid examinations free of charge to the patient. To further insureall available helps to the physician and to the community, a committee was named, to be known as the diagnostic squad. (Drs. H. H. Haynes, H. II. Esker, P.C. Showalter) to confer with physicians having in their charge suspicious or actual cases of poliomyclitis.

To allay popular excitement and to avoid the spreading of rumors, a publicity committee was formed, whose duty it was to keep in touch with the situation in Elkins, Grafton, Fairmont and in our own county and to publish daily a signed statement of actual facts. This work was left to the health officer of

Clarksburg, Dr. C. O. Post.

Up to the present time four cases were reported suspicious, though those were found not to have been poliomyclitis, and one is still under observation.

On the regular January meeting, held Thursday, February 15, 1917, the committees appointed by the society to confer with the various boards of health made its report and was ordered to continue in existence until further notice.

Dr. C. R. Ogden brought to the attention of the society a few of the bills before the legislature. The Model Bill for the reporting of vital statistics was endorsed, as well as the bill to prevent fee-splitting and the payment of commissions between physicians and surgeons. A bill for the erection of a sewage disposal plant to dispose of the effluent from the Weston State Hospital was also endorsed.

Dr. Ogden then presented a case of ancurysm of the sacral artery cured

by excision.

S. L. CHERRY, Sec.

## MERCER COUNTY SOCIETY

The Mercer County Medical Society met in the Chamber of Commerce on January 18, 1917.

The President, Dr. E. E. Vermillion, being absent, Dr. O. S. Hare presided. After the reading of the minutes of the previous meeting by the Secretary, it was unanimously adopted.

The next on the program was the election of the officers for the ensuing year which resulting in making—

Dr. H. G. Steele, President.

Dr. J. R. Vermillion, First V.-Pres. Dr. W. W. Morton, Second V.-Pres.

Dr. W. W. Morton, Second V.-Pres Dr. J. H. McGuire, Third V.-Pres.

Dr. E. II. Thompson, Secretary.

Dr. P. E. Peery, Treasurer. Dr. H. W. Hayes, Censor.

Dr. J. B. Kirk and Dr. W. C. Slusher delegates to the State Convention.

The next on the program was a rare treat to each of us; having Dr. J. C. King of Radford, Va., with us and he gave us a very interesting paper on "The Use of Salvarsan and the Treatment of Syphilis." Dr. King handled the subject in a very able manner. The discussion of the paper was by the following doctors: Dr. E. M. Easley, Dr. W. C. Slusher, Dr. A. H. Hoge, Dr. W. H. St. Clair, Dr. J. B. Kirk.

Dr. King closed the discussion. It is to be hoped that Dr. King will be with us as often as convenient for him to

do so.

Motion was made to adjourn and carried, after which we were served with a luncheon in the Chamber of Commerce.

This being a new work for your Secretary, it will certainly be appreciated if you will give him your hearty cooperation.

Yours very truly, E. H. THOMPSON, Sec.

### OHIO COUNTY SOCIETY

Wheeling, W. Va., Oct. 20, 1916.

Regular meeting of the Ohio County Medical Society held in First Branch Council Room, City Building, Dr. R. M. McMillen presiding. Meeting called to order at 8:30 p. m. In absence of Dr. J. W. Gilmore, Secretary, Dr. F. H. Ikirt was asked to act as Secretary for the evening. This being the first meeting of the year the first thing on the program was the election of officers, as follows: For President, Dr. J. E. Caldwell; for Vice-President, Dr. II. M. Hall; for Secretary, Dr. Chas. Keesor; for Treasurer, Dr. M. B. Williams; for Board of Censors, Dr. F. LeMoyne Hupp, Dr. Ivan Fawcett, Dr. J. J. Osburn.

Dr. M. B. Williams presented a petition from the Baer Drug Company and a contract from the same drug company between said company and Vinlax Company pertaining to sale of a remedy called Vinlax.

After general discussion by members, acting Secretary Dr. Ikirt was asked to read said petition and contract before the society.

Same was read. Motion made and seconded that said petition and contract be received as read and filed by Secretary and petition and contract returned to

the M. Baer Drug Company.

A general discussion followed as to the best method of dealing with fraudulent advertisements. Following the discussion Dr. Williams moved that committee of three members of the Ohio County Medical Society be appointed to act throughout the year, and investigate all fraudulent advertisements and to communicate with the Wheeling Commercial Association regarding the same. Motion seconded by Dr. Caldwell. Motion carried.

The following committee was appointed by the President: Dr. M. B. Williams, Dr. M. B. Kelley and Dr. Chas. H.

Keesor. Meeting adjourned.

The following members were present: Drs. Caldwell, Drinkard, Fawcett, Gaydosh, Hall, F. LeMoyne Hupp, Ikirt, Keesor, Kelly, McMillen, Osburn, Schwinn, Spragg, Williams, Andrew Wilson, Wingerter.

CHAS. H. KEESOR, M. D., Sec.

Wheeling, W. Va., Nov. 3, 1916.
Regular meeting of the Ohio County
Medical Society held in the First Branch
Council Room, City Building. Meeting called to order at 8:30 p. m. Dr.
J. R. Caldwell presiding. Minutes of
last meeting read and approved. No
report from Board of Censors.

No clinical cases exhibited. Dr. J. R. Caldwell made a short address. Paper of the evening, "The Diagnostic Significance of Bilirubin in Plasma and Other Serous Fluids," by Dr. C. F. Hoover of Western Reserve University

of Cleveland, O.

Dr. Caldwell introduced Dr. C. F.

Hoover.

Dr. Hoover stated he was here before the society two years ago and deemed it a great privilege and pleasure to again be asked to read a paper before the O. C. M. Society. His attention was first called to the bile-pigment or Bilirubin, in a study of the various forms of

jaundice, which he cnumerated.

Patient may have pigmented and apigmented jaundice. Bile salts may pass to ducts or lymphatics and vice versa. Formerly believed that pigmentation of urine was from plasma, but experiments have proved the contrary. We may have Bilirubin in plasma and not have jaundice. Tests for Bilirubin: (a) Nitric acid test; (b) plasma and milk of lime and centrifuge and we have bilicyanine formed.

Question: What becomes of bilirubin? Answer: Liver has first call on pigment. Cites an experiment on the dog; by injecting bile in the blood it gives a discoloration. The plasma is found discolored in blood drawn three minutes after having been injected with bile.

Bile pigment and bile salts are also found, but neither are recovered from the urine in three minutes, e. g. The

superior mesenteric artery of the dog after being clamped is injected with bile and gives color in plasma, release the clamp and soon the discoloration leaves. Bile salts are very dialyzable. Renal filter takes out salts and color to lipoids of blood. In primary ancmia we have bilirubin in the plasma, no salts in the urine. Illustrates the process of dialysis of bile salts from pigment as follows: A Collodion sac is used, being the same shape and form as a test tube. A certain quantity of water is placed in a large test tube. A collodion sac containing bile is now placed in this test tume. By the process of dislysis we find that the plasma and color or pigment will be retained in the collodion sac while we have water and bile salts in the test tube proper.

In primary anemia we find bilirubin in plasma, but no bile salts in the urinc.

Next discusses hematogenous jaundice and hepatogenous jaundice. Practical significance of bilirubin: Symptoms of jaundice enumerated, pain and etc. Pain in epigastrim due to one of several reasons. If by drawing off blood we find pigment we know there has been some obstruction in the biliary passages. We may have leucopenia and high color index in other cases than primary anemia. In scurvy and primary anemia the morphology of the blood is the same in each case. All anemias demand a blood test. In all primary anemias we have bilirubin present.

Cites a case of anemia produced in persons eating certain kinds of smoked

fish.

Discussion. Dr. Thornton opened the discussion by asking the question, "What has the plasma shown in obscure cases of carcinoma of stomach with anemias?" If bilirubin is not found is it a very diagnostic point? Answer by Dr. Hoover: Cytology of blood very difficult between primary anemias and carcinoma have seen cases of carcinoma with anemia and found no bilirubin.

Discussion by Dr. Drinkard: The study of bilirubin a very practical question to internist and surgeon. Dr. F. LeMoyne Hupp asks the question, "What benefits are derived or obtained from this test in non-operative cases of

jaundice?'' Discussion closed by Dr. Hoover.

#### REPORTS OF CASES

Dr. J. Schwinn exhibits an osseous mass or tumor of large size taken from inner and lower part of right femur from a young man 23 years old. Tumor largely cancerous masses and cartilaginous in nature.

Motion by Dr. Fulton that a vote of thanks be tendered Dr. Hoover for his excellent paper, and also that he be made an honorary member of the Ohio County Medical Society. Motion seconded by Dr. F. LeMoyne Hupp. Dr. Caldwell asked for rising vote. Dr. Hoover declared elected an honorary member of Ohio County Medical So-

ciety. Meeting adjourned.

The following members were present: Drs. Caldwell, Keesor, L. D. Wilson, Fulton, Andrew Wilson, J. A. Campbell, Dalbey, Schwinn, Hall, Haning, Abersold, Webb, Truschel, Frissell, Osburn, Barnett, J. C. Hupp, Wingerter, F. Le-Moyne Hupp, Howells, E. Megrall, Gaydosh, Drinkard, Kelly, W. P. McGrail, McGregor, Thornton, Gilmore, Best, Goin, Ryan, Marschner, Dickey, Pronty.

Visitors present: Dr. C. F. Hoover, Cleveland, O.; Dr. Hogue, Dentist of Wheeling; Drs. Wright and McClelland of Bellaire, O.; Dr. Wiedman of Shadyside, O.; Dr. John Fox of West Liberty; Dr. C. L. Ruggles of Wellsburg; Drs. Wilson and Woodruff of Martins Ferry,

Ohio.

Chas. H. Keesor, M. D., Sec.

## State News

Dr. Harry Solter of Marlinton was a recent visitor in Huntington.

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Dr. Wm. W. Golden of Elkins is spending some time with the Mayos in Rochester, Minn.

Dr. C. H. Scott of Bluefield, spent some days recently in New York City taking a vacation.

Dr. E. E. Vermillion, formerly of

Athens, has moved to Clarksburg to practice his profession.

Dr. W. H. Hayes has opened his office in Princeton and is specializing in eye, ear, nose and throat work.

Dr. R. H. Dunn of Charleston visited his brother in Huntington for several days recently.

Dr. H. W. Keatley of Wevaco, in the Cabin Creek District spent some time in New York City during February.

Dr. H. G. Steele of Bluefield is taking post-graduate work at the Elizabeth Steele Magee Hospital in Pittsburgh.

Dr. Chas. G. Hill a noted alienist of Baltimore was a recent professional visitor in Huntington.

Dr. Charles H. Clovis and Miss Mabel R. Codding, M. D., were married on January 11, at the bride's home in Findlay, O. After a short honeymoon spent with relatives in Ohio and West Virginia, Dr. Codding-Clovis began a few weeks of special laboratory work at the Ohio State University with a view to the special requirements of the position of Resident Pathologist at the Ohio Valley General Hospital, Wheeling, which appointment she has accepted to begin work March 1. Dr. Charles H. is doing some very good work in Roentganology as resident in that line at the O. V. G. They expect to locate permanently in Wheeling.

Dr. T. M. Haskins who has practised medicine for more than twenty-eight years in Wheeling, has gone to Tulsa, Oklahoma, where he will have charge of a hospital.

Dr. Jos. E. Rader, president of the State Association, is taking his winter vacation in Florida.

Dr. C. C. Hogg of Huntington, has been spending the winter vacation in Florida.

Dr. J. F. Miller of Huntington, has

returned from a several weeks' vacation in Florida.

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Dr. E. D. Wells of Hinton, has taken a position as eye, ear, nose and throat specialist with the C. & O. Hospital at Clifton Forge, Va.

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In spite of the failure to pass of the Model Law for the reporting of vital statistics, Clarksburg has set out to obtain a reliable record of eases of infectious diseases. The board of health is distributing to all physicians U. S. postal eards on which are printed all reportable diseases. To report a case the physician needs only to check off the disease he has diagnosed. Monthly meetings are to be held regularly and council is to be urged to carry into effect the milk ordinance recently passed and to enforce other laws and regulations on the books that arc sorely needed. The physicians on the board are Drs. H. E. Sloan and C. O. Post.

Drs. T. E. Wilson, H. E. Sloan, A. T. Post, C. T. Arnott of Clarksburg, attended the big meeting at Wheeling, February 9.

Dr. T. F. Williams of Clarksburg, left for Florida February 10, and expects to stay two weeks.

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The regular meeting of the Ohio County Medical Society of Wheeling, W. Va., was held in the Ball Room of the McLure Hotel Friday evening February 9. The program for the evening was:

Motion photographs as adjuvants to the teaching of Surgery with notes on the development of the Operation of Bloodless Amputation at the Hip Joint,"

by John A. Wyeth, M. D.

The Approach and Entrance to the Kidney for the Removal of Calculi. Illustrated by motion pictures. By Chas. H. Chetwood, M. D.

The Technic of Painless Radical Cure of Hernia under Local Anesthesia, illustrated by motion pictures, by John

A. Bodine, M. D.

Owing to illness Dr. Wyeth was unable to attend. The banquet was held and Gov. H. D. Hatfield presided as

toastmaster. Two hundred members and guests were present.

J. R. CALDWELL.

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The Ohio County Medical Society met in the High School Auditorium, Wheeling, W. Va., February 2, 8:30 p. m. Called to order by the President, J. R. Caldwell.

The meeting was public, given under the auspices of the Medical Society cooperating with the Board of Education.

Dr. E. A. Peterson, director of Medical Inspection and Physical Education of Cleveland, O., delivered an address on "Physical Education."

Discussions were given by Drs. Rob J. Reed, R. U. Drinkard, Wm. C. Etzler

and Andrew Wilson.

Two hundred and fifty were present.

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At the regular meeting of the Ohio County Medical Society, January 18, the annual banquet was served at the Windsor Hotel. Dr. John L. Dickey of Wheeling presided as toastmaster. Dr. Andre Crotti of Columbus, Ohio, was the principal speaker of the evening, and delivered an address on goiter.

Other speakers of the evening were Dr. J. R. Caldwell, president, and Mayor H. L. Kirk of Wheeling. The paper of the evening was discussed by Dr. James Schwinn, Dr. Frank L. Hupp, and Dr. Gregory Ackermann of Wheeling; Drs. Sherman, Diller, Beach, and Lichty of Pittsburgh. One hundred and thirtyone were present. On January 26, Dr. Harriet B. Jones, will address the society on Periodie Medical Inspection. On February 2, Dr. E. A. Peterson, who has charge of the Medical Department Inspection and Physical Education of Cleveland, Ohio, will address a public meeting under the auspices of the Ohio County Medical Society and the Board of Education of Wheeling. On February 9, Dr. John A. Bodine and Charles H. Chetwood of New York, will address the society. -0-

The Ohio County Medical Society held its regular meeting in the First Branch Council Chamber, Wheeling, W. Va., January 26. Dr. Harriet B. Jones addressed the meeting on "Periodic Medical Inspection." The paper was discussed by Dr. R. U. Drinkard. Dr. Robt. J. Reed on suggestion of the President, Dr. J. R. Caldwell, a motion was introduced by Dr. Robt. J. Reed that the address be published in the public press.

## Medicine and Surgery DRS. ENSLOW AND RADER

### **MEDICINE**

ENDEMIC GOITRE

In the July editorial on Physical Betterment reference was made to the observation of Dr. Thelberg on the increase of goitre among the freshmen at Vassar College. In the Proceedings ofEighth Congress of the American School Hygiene Association, Dr. Hale, Professor of Physical Education and Hygiene at the University of Washington calls attention to the problem of goitre as it exists in the mountainous regions of the Northwest. In his experience, half of the school children and adults show evidence of enlarged thyroid glands. From various sources, he produces testimony to support the contention that goitre is peculiarly a discase of the hills but has its origin in some exciting cause in the water supply. He attributes the crease of the disease to increasing organic impurity of the water and regards the toxic agent as inherent in the soil from which the water supply is drained.

On the theory that goitre is a toxcmia whose origin is in the alimentary canal, he believes that steps should be taken to treat incipient goitre by the administration of intestinal antiseptics. If goitre is a water borne condition and the result of toxemia, it is essential that prophylactic measures must attack the water supply. According to his experience chlorinization of the water supply suffices to inhibit the toxic agent. Mountain streams are free from human pollution and possess but a small amount of organic matter; hence the water from such sources lends itself to chemical treatment very easily.

Though no contagium has been isolated, it is believed that possibly some or-

ganism exists, which, lodging in the alimentary canal, multiplies and induces a low grade toxemia, a part of whose effect

is spent on the thyroid gland.

While this theory of origin still requires further proof, the fact that 19.5 per cent. of the boys examined were affected and 33.19 per cent. of the girls examined presented large thyroids indicates that the subject possesses more than academic interest. While it is not justifiable to parallel this condition with the hook-worm disease of the South, owing to the different effects which are produced, nevertheless, it is a subject deserving investigation by clinicians and physiologists, as well as by educators

The services of the thyroid gland are sufficiently important in human activity to require normal function of the gland. Its internal secretion is an essential in maintaining normal metabolism and in preserving mentality and the nervous mechanisms at the highest point of effectiveness. Disorders of nutritious, cretinism, exophthalmic goitre, and apparent toxemias are induced in varying degrees dependent upon the amount, nature and constituents of its internal secretion. A normal function of the thyroid gland is a necessary condition for the normal growth and function of practically all the organs and tissues in the body.

The presence of such a large proportion of goitrous individuals in a community should suffice to awaken the interest of the clinician, the physiological chemist, the pathologist, and the sanitarian. The goitre of adolescence is not understood any more thoroughly than is exophthalmic goitre. Each of them possesses important relations to the welfare and usefulness of those who knowingly or unknowingly are bearing these manifestations of a disordered thyroid se-

cretion.

## IS PELLAGRA CONTAGIOUS?

The prominence with which pellagra has come before the profession in recent years has caused all aspects of the disease to be investigated; thus we are gradually amplifying our knowledge of it. Many beliefs and theories, at first held by occasional observers, have been rejected in the light of more complete data. Others still hold sway, although as more and more investigations are being made, the ground tends to crumble from beneath them. The impression, for example, seems to be fairly widespread, although countenanced by practically no direct proof, that pellagra is contagious. It is true that it bears certain superficial analogies to many infectious diseases which are also contag-The only direct evidence of which we are aware which would seem to argue in favor of the contagiousness of the disease is the report of the successful inoculation of a monkey by Harris in 1913, with filtrate from pellagrous lesions. Later on, however, this same observer, in further experiments, got different results, as did Lavinder The question then was still undecided until the recent work of Gold-

Goldberger determined to test the matter by actually subjecting human subjects to exposure. A number of persons volunteered and fifteen men and one woman were selected. Thirteen of this number were physicians. The materials used were blood, nasopharyngeal secretions, epidermal scales from pellagrous skin lesions, urine, and feces. The blood was administered by intramuscular or subcutaneous injections, the secretions by application to the mucosa of the nose and nasopharynx, and the excreta were given by mouth. The pellagrous material was obtained from seventeen cases, varying in severity, and including three fatal cases. As insanitary methods of sewage disposals have often been alleged to be responsible for the transmission of pellagra, special attention was given to the excreta; the infectiousness of both urine and feces was tested six times. The blood was tested twice, the nasopharyngeal secretions twice, and the scales from lesions three times. No change was made in the subjects' diet or in their manner of living.

The experiment was carried on during a period of from five to seven months, and in none of the subjects did any symptoms develop to justify a diagnosis of pellagra. Goldberger (The Transmission of Pellagra, Public Health Reports, November 17, 1916) therefore concludes that pellagra is not a communicable disease, but one of dietary origin, brought about by faulty, probably deficient diet. The conclusion bears out the one at which he and Wheeler arrived in 1915, when a group of convicts received a diet deficient in certain elements, with the result that in a number of them the disease developed.

# Surgery

POST MORTEM CAESAREAN SECTION

J. A. Harrar AAmerican Journal of Obstetrics, June, 1916) discusses management of pregnant women suddenly dying undelivered. Many infants lives have been sacrificed through the confusion attending the catastrophe or the embarrassment or inability of the attendant or his inability to obtain consent for operative maneuvres upon the dead mother. Yet the legality of post mortem Cæsarean section even without the husband's consent has been demonstrated, and where such consent is not obtainable, while the fetal heart is still beating, it is not only permissible but imperative that the physician should immediately do everything in his power to save the child. Attempts at extraction made by version or forceps generally fail, unless death happens to take place during the second stage of labor. Among fifty women dying undelivered in the New York Lying In Hospital, post mortem delivery was undertaken in nineteen instances. Version was done seven times, but uniformly resulted in stillbirth. Two children whose mothers were already in the final phase of labor were extracted living through the normal passages. On the remaining ten women Cæsarean section was performed; only three of these were in labor at the time of death. Four died of heart failure, two of eclampsia, and one each of cerebral hemorrhage, tuberculous meningitis, ruptured uterus and hemorrhage of placenta prævia. Of the babies, three were stillborn and had probably died before their mothers. Four were born

with hearts feebly beating, but could not be resuscitated. Two were resuscitated but died later. Finally, two were discharged living and well-one having been extracted by Cæsarean section immediately after death in the apoplectic case, and the other seven minutes after death from broken compensation in mitral stenosis, the woman having been in labor nine hours. Obviously the success of the operation depends much upon the promptness with which it is done. That the operation should not be performed if the fetal heart sounds are inaudible is a wrong conclusion, as not infrequently babies are born normally whose heart it has been impossible to ausculate. Several valuable minutes may be lost in attempting to detect the heart sounds. Thus Cæsarean section should follow maternal death immediately, unless one already has positive proof that the baby is dead. Asepsis may be ignored, the abdomen and uterus being simply incised quickly and freely and the child extracted. Stress is laid on persistence in efforts at artificial respiration as long as any intermittent contraction of the infant's heart can be felt by pressing the fingers up under the left costal margin.

# PLASTER TECHNIQUE IN FRAC-TURES\*

By R. W. Knox, M. D., Houston, Tex.

From So. Med. Jour., Jan., 1917.

Fractures are viewed from so many angles at the present time that a standardization of method would seem most appropriate. The difficulty, however, of reaching that stage of progress lies in the fact that fractures differ so much in degree and severity that individual cases demand indivdual treatment and any rule that might be advocated must necessarily be often honored in its breach rather than in its observance. We have found this to be true in railway surgery where the injuries are often of

complex nature and rarely follow the rule.

In the usual run of fractures I have become convinced in recent years that our attention has been centered too much upon bone fixation by the use of foreign material directly to the bone itself and have not attached sufficient importance to the security to be found in a proper setting combined with external support. When by manipulation alone or by manipulation combined with open operation we can secure exact apposition in the original line of cleavage, the tendency to future displacement is usually a neglible qualtity, and in such cases the addition of wires, screws and steel plates are of no advantage but rather a positive detriment. I would not be understood as advising an entire abolition of any or all of these agents, but simply maintain that their absolute need is very infrequent.

It can readily be seen that a well-fitting external splint is of greatest value in holding in perfect alignment and without it no internal splint would be of value. The most frequent difficulty in getting proper adjustment of broken bones lies in the fact that the break is not a smooth surface, but very irregular in outline; often with jagged edges and one fragment rotated out of its original axis. The X-ray gives little or no help in this matter of reduction and in some cases only an ocular inspection of the bone itself will enable us to correct the difficulty.

The object of this paper is to call attention to the advantage of plaster as a fixing agent in the great majority of fractures, both simple and compound. Its advantage can be summed up in the fact that the fit is better and that it answers all purposes for which a splint is intended. They are light and not bulky and therefore more comfortable to the patient; they do not require frequent adjustment; are cheap and easily applied and well adapted for fixation of joints near the seat of fracture. Tight bandaging is not necessary with plaster splints and therefore there is no danger from pressure sores or nerve involvement. The use of plaster to many surgeons means only solid casts and while this is necessary in some cases, the ten-

dency at the present time is to use the splint where only the cast was formerly applied. The advantage over the cast is in lightness, better ventilation, easy adjustment, with lack of any possible constriction. Another item of interest in connection with plaster at the present time is its eheapness in comparison with the cost of its ready-made rival. these and many other reasons it bids fair to run out of business the dealer in wood, metal, felt and other fraeture aecessories many of which fit only by aecident. By its use the surgeon learns to do more of the actual work connected with his profession. This is certainly worth while in these times of high prices when everything connected with the surgical profession has reached the highwater mark. Such a knowledge would certainly be valuable in times of war if we should ever be so unfortunate.

Since interesting myself on this subject I have asked quite a number of my confreres, many of them excellent surgeons, if they use much plaster in their surgical work; and the invariable answer is "No." The main objection given is that they have not found it satisfactory. It was either bad plaster or they had difficulty in handling it. I find the medical schools do not take this matter up in detail in their curricula and there are few graduates who are well acquainted with plaster work even for simple fractures. In my experience, exeellent results are obtained in most complicated forms of erushing injuries to the long bones, such as are frequently found in railroad work. Many of these eases must be treated as open wounds and plaster can be so designed to keep the comminuted bones in good alignment and immobile until nature closes the gap. In these eases drainage is an important The first impression would be that satisfactory results would be im-

possible of attainment by the use of any form of plaster dressing. It is accomplished in a general way by connecting the plaster cast above and below the wound with a steel bracket which leaves room for cleansing and drainage. plaster can be covered with shellac or some other substance impervious moisture and that will prevent absorption of the discharges. This method is of especial advantage in severe injuries of the femur and tibia or such cases as we were once content to treat with the oldfashioned fracture box. This method is now known to be the breeder of much evil and many bad results. The bracketed splint preserves rigid alignment of the boncs and maintains some extension; in fact, all that can be seeured with safety in cases of extensive injury. One of its many advantages is that the patient can be lifted about without pain and the limb ean be suspended as with the Hodgkins splint if deemed necessary. Immobilization is here certainly the most necessary desideratum and gives nature a chance for making the repair needed for the future usefulness of the limb. At best these cases are tedious and require treatment over a long period of time. When the injury is at any point between the ankle and knee, the leg can best be held in good alignment by two lateral brackets fastened below to a strong plaster shoe and above to a cast extending above the knec.

In some instances where the tibia has been badly splintered at the seat of fracture and there has been an unavoidable loss of bone, a long Lane plate materially assists in maintaining the required extension and proper bony relation. This plate, as a temporary expedient, does no damage to the healthy bone where good drainage is secured. It is removed when healthy granulation is established and healing of the wound is well under way.

After this the external splint is all that is necessary to keep the leg in good position.

When solid bony union is delayed, as is frequently the case, I have found excellent results in hastening union with what we term the "Walking Splint," as it gives the patient the much needed exercise. In this respect it would seem to be greatly superior to the bone graft or other operative means. The splint is made after the style of the ordinary leg brace with plaster sides and steel supports fastened to the sole of the shoe. The splint can be made in any hospital and, while it is somewhat crude in appearance, the patient finds it quite comfortable. By fitting plaster splints accurately to the sides of the leg, from ankle to knee, the weight of the body is distributed between all points of the splint as well as the seat of fracture. Irritation thus set up facilitates firm bony union. Compound fractures of the femur are splinted in much the same way as the tibia by incorporating a large steel bracket into a pelvic spica and a leg cast from the knee to the foot.

If the fracture is high up near the trochanter and not compound the limb can be fixed in abduction with solid plaster cast reaching to the waist line involving the entire pelvis as well as a portion of the uninjured thigh. In this way both thighs are held in abduction and angulation at point of fracture is impossible. In a few cases it may be necessary to use the Lant splint in addition to the cast; if near the middle of the thigh and the muscles are not too badly damaged, an extension by weight and pulley is best used for a week before the bracketed splint is applied. In crushing injuries of the elbow joint the bracketed splint can be used in making any degree of angle desired between arm and forearm. This same splint can be used to advantage in simple fractures near the elbow joint, as it is probably more comfortable than any other that can be used. It has the advantage over any other form of splint in that the angle of flexion can be changed if desired. It is not necessary to mention the various splint models that may be devised for simple fractures of the bones and joints, as these will suggest themselves to the case in hand.

In my experience the most expensive plaster has not proven to be the best. The kind that I have used for many years comes from Kansas and is purchased in Chicago by the barrel at a cost of two cents per pound delivered. The cloth in which the plaster is incorporated is known as potato starch crinoline and costs approximately five cents per yard in forty-two-inch widths.

The bandages which are kept in stock are rolled by hand and immediately wrapped in paper and kept packed on loose plaster is sealed tin boxes. Only cold water is used for immersing the bandages and with a good plaster only a few seconds are necessary for this part of the work. We have found that hot water with the addition of salt sets the plaster more quickly, but the final crystallization is not so firm. A slow setting plaster is a great advantage to the surgeon in that it gives him a much needed time to fashion his more complicated splints without the loss of material or annoyance of having to do the work over again. It was my former practice, in making splints, to apply the plaster splint directly to the skin after anointing the latter with vaseline; but I now find it much better to line the splint with cotton flannel and use no other pad-Vaselinc can be used also and when these two precautions are adhered to no irritation of the skin is possible. It is an advantage when applying the plaster splint to allow some exposure to the air and to stiffen perceptibly before applying as in this way it has no disposition to wrinkle and presents a smooth surface to the skin.

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"A PRODIGAL SISTER"

By W. C. Slusher, Bluefield, W. Va.

She was in rags — filthy, ill-smelling rags; her hair, unkept and greasy, was tumbling from under a very old and dilapidated lace hat. The pallor of her skin, with its greasy, filthy coating, gave her a ghastly appearance.

She was living in unspeakable squalor -a small room with one window facing a back yard piled with ashes, tin cans, decayed food and dead rats. Her bed was some dirty quilts spread on the The furniture consisted of one chair, rescued, apparently, from some dumping ground; a small washstand standing all awry as if burdened by the weight of a basin and pitcher, both cracked and caked with dirt. The walls were black and searred, the plaster gone in many places and hanging ready to fall in others. For company she had rats and roaches; both were ever present. The rats had become so brazened by the quiet stupor of her dope debauehes they would stare inquiringly at one from holes in the floor of her room.

I was leaving an adjoining room where I had been ealled to see a sick baby; as I walked down the dark hall I heard a door open and someone say:

"Doctor, will you come in here for a minute?"

I recognized her at once. Almost everybody in the city knew her to be one of the most disreputable characters on earth. People paused to stare at her as she would slink along back streets and alleys, and avoid her as if she were infected with some plague. She had sunk as low as a woman could go. She would steal when she could no longer sell herself for money to buy morphine.

Yes; she was a despised dope fiend. She started down the seale of human depravity by taking morphine for neuralgia, prescribed, so she said, by a reputable physician.

Every time a doctor prescribes an opiate to be taken by the patient he should think of the plight of some dope fiend; many of whom all practicing physicians have knowledge.

For practically all of them blame doctors for their downfall. In the early stages of her enslavement, during the days of delightful dreams, before the benumbing effects were so pronounced, she left home under some delusion induced by the drug. This was the first step of the degradation which ended where I found her.

When I walked into her room she said, "Doetor, I am going to quit this dope; can you help me?"

"Not if it requires more dope," I re-

plied.

"I know you don't believe me, but I am going to quit it or die in the attempt."

"Think it over a few days and, if you are still convinced that you can leave it

off, let me know."

"Same old story," I mused to myself as I made my way along the silent street; but there was something in her look—a sort of humble pleading—that made me rehearse in my mind this meeting many times during that day, and I never failed to remember her wistful look.

Just before going to sleep that night, while relaxing, with my mind drifting in a semi-conscious state, passing lightly over daily events, I once more had a vision of her weary and wistful face, pleading with me to help her; then I resolved to see her again on the morrow.

The old saw, "I have troubles of my own," is just as applicable to this story as any recital of individual trouble; but there is an element of human interest and pathos in this particular case not found in the majority of drug habitues This woman was from a good family, reared in the country, accustomed to more than the average country person's pleasures and comforts; was not subject, like her city sisters, to the dangers of temptation resulting from privations, evil associations and covetousness stimulated by her prosperous and abandoned Both of the latter are accustomed to parade their beautiful clothes and prettiness; and the public should be pardoned in not being able to distinguish, at times, the one from the other.

So she came; she saw; but, unlike Cæsar, was herself conquered. When she called me into her room and declared she would die or leave off this habit, she was admitting defeat by the drug. No one ever began its use that did not feel it could be handled with safety.

Her mind through some unknown agency or influence had been prepared for the fight she knew to be ahead of her. No habit can be abandoned unless the mind has been thoroughly prepared in advance for the undertaking, regardless of the apparent triviality of the enslavement. If there is a mental reserv-

ation, however slight, the result will be failure. Most habitues desire above all things to quit their habit and often work them up to the point of leaving it off; but nearly always there is that little mental reservation—often in the subconscious mind—which means failure. It is spoken of frequently as lack of will power. Now, what causes this lack of will power or nerve force? And what will stimulate it or bring it to life? Everyone knows of instances in which men have performed what seemed to be superhuman feats under some sudden and powerful stimulus—such as lifting weights that two or more men could not lift under normal conditions; and drunkards have become total abstainers after a disturbing dream or calamity of some sort. These things supplied the stimulus that awakened a will power long dormant or thought non-existent.

Now, when she said, "I am going to quit this habit or die in the attempt," something told me—probably it was something in her look or manner—an indescribable something—that she would

go through with it.

I went backq to see her the day following this chance meeting and she seemed more determined, if possible, than when I first talked to her. I now explained the suffering she must endure —the terrible craving for the drug, the pains from its deprivation, the sleepless nights when things come and stare trying to test her determination; but I found no wavering. The treatment was then begun, I admit, with misgiving on my part, but her grim determination soon convinced me, and the fight was on! What a fight! Never was a human being endowed with such determination as this woman! After a few days of terrible suffering there were spells of muttering delirium in which she would refuse all medicine, declaring it was mor-This continued for about two weeks when she became so exhausted that at times a mild stupor came over her and she would lie as if dead unless aroused for nourishment, of which she took very little.

During one of my visits at this time I told the woman who was the nurse that the patient's condition was so pitiful

and hopeless that I would send some morphine to quiet her during the restless nights, and make her remaining few days more comfortable. She heard me and shook her head, being too weak and weary to say anything; after this she positively refused all medicine, though began taking more nourishment, and, to my astonishment, showed signs of improvement. In a week from this time she was entirely rational; but very weak. Her recovery was slow but continuous. In a few weeks more she was able to be up and out of the house—a changed woman.

She had no money with which to buy clean clothes, but by scrubbing and ironing the old ones were changed into a semblance of decency; her hair was combed, and when she walked into my office, wth a wan smile on her face, I beheld a new woman. With this regeneration came the desire to return to her home and live as she had formerly lived.

She is now safe at home, restored to health, ministering to a feeble but happy old father.

### THE INDICATIONS FOR OPERA-TION IN HEAD INJURIES.

ALEXIUS McGLANNAN, M. D., 114 West Franklin St., Baltimore, Md.

The term head injuries in this paper will be limited to include only the effects of traumatism on the skull and its contents. In this way we shall exclude simple scalp wounds and injuries to the face

Traumatism may cause a fracture, either of the base, or of the vault of the skull. Both varieties may be simple or compound, and the fragments comminuted or intact. The peculiar structure of the bones of the skull make it possible for a fracture to occur, in which the break of the outer table is a straight fissure, while at the same time the fragments of the inner table are comminuted and depressed.

Depressed fracture always requires operation for the elevation of the fragments. Trephining the skull for this purpose is one of the most ancient of

surgical operations. Modern study of the immediate and remote effects of neglected depression has proved the wisdom of the ancient operation.

The importance of fractures of the skull comes from the complications and secondary effects of their existence. These effects are the changes in the brain and meninges, or the cranial nerves, caused by the initial traumatism, or produced during the process of healing of the bonc or other lesion.

Hemorrhage is a constant factor in all broken bones. In fracture of the skull the blood may collect under the scalp, when it causes no great disturbance, or inside the cranial cavity when the degree of disturbance varies with the quantity and position of the extravisation.

This inter-cranial hemorrhage from the bone may be complicated with further bleeding from another source, namely, the lacerated brain itself, or a vessel of the meninges. Frequently all these sources of hemorrhage are active at the same time, and any one of them may be produced by an injury which does not effect the others. Thus we note that the broken bone itself is not an important factor in determining the treatment of the head injury.

The symptoms of an intra-cranial hemorrhage are those of concussion, contusion and compression of the brain.

The pathological and clinical relation of these three conditions is apparently so close that they are usually considered together. The actual existence of such a relation is the subject of controversy. Pathologists and clinicians are divided into two groups, those following von Bergman, who taught that concussion could exist with contusion, and those who believe with Kocher that in all cases of concussion there exist minute contusions scattered throughout the brain. If we follow the latter teaching, then these conditions become a sequence of changes increasing in severity as we pass from concussion and contusion into the state of compression of the brain. The sequence of increasing severity of symptoms is often seen in the clinical course of a patient suffering from a head injury.

The characteristic picture of an extra-

dural hemorrhage following fracture of the skull, is a period of concussion followed by a period of recovery, and this in turn followed by a period in which the signs of increasing compression become manifest.

Concussion. The essential symptom of concussion is a loss of consciousness that may be momentary or longer. This may be followed by simple lethargy or a condition resembling the sleep of drunkenness. With the restoration of consciousness there is usually headache, vertigo, nausea and other general signs of cerebral disturbance. There is confusion or loss of memory concerning events incident to the injury. In many cases the patient becomes irritable, and even violent.

Hyperalgesia of regions supplied by the upper cervical nerves may occur. The area involved depends on the amount of injury to the brain and is found on the same side as that of the lesion. The condition may persist for several months, or even years.

Contusion. Like concussion, this is always the result of injury. The degree of laceration varies in wide limits from a minute extravasation to an extensive laceration. Frequently the contussion is associated with a bursting fracture of the skull. The symptoms of contusion are practically an intesification of those of concussion. The period of unconsciousness is usually longer and signs of compression almost always Whenever an appreciable amount blood is extravasated, a rise of temperature occurs.

Compression. Compression, the result of injury, may be due to hemorrhage or to cerebral oedema from contusions. This oedema (serous amicrobic meningitis) is a frequent cause of compression following injury to the head which does not produce fracture of the skull, and of such irritative lesions as the depressed inner table of a fissure fracture of the vault. The pressure symptoms following an apoplexy are largely due to this oedema.

The danger point in compression is the medulla; a very little acute increase of the pressure here will cause rapidly fatal anæmia of the vital centers, while a much greater local pressure in the frontal or temporal region may be practically without symptoms. A marvelous protection to the medulla is provided by the arrangement of the cerebral membranes and the circulation of the cerebro-spinal fluid, as well as the blood inside the skull. With local pressure in the protected areas, the membranes guard the vital region and the free circulatory anastamoses quickly balance the blood supply. On the other hand, when there is general increased tension the protection must be vascular alone. Here we see a most elaborate system of pressure balance developed by the circulation of the cerebro-spinal fluid, and local and general variations in blood pressure progressively coming forth to protect the me-Of course an injury involving the medulla may at once destroy the vital centers, or an injury may be so severe that all the powers of compensation are unable to balance the pressure, and coma and death quickly follow.

Kocher's (Nothnagle's Spec. Path. & Ther., 1901) experimental study of increased intercranial tension furnishes the best practical classification of the pathology and symptoms of the condition. He divides the process into four stages, representing progressive increase of tension. These are:

First: The stage of compensation in which the escape of cerebro-spinal fluid and the narrowing of the veins makes the disturbance slight and without severe symptoms.

Second: Failing local compensation. Here the pressure is sufficient to lessen the amount of blood flowing through a considerable part of the capillary field, but without serious alteration in the nutrition of the vital centers.

Third: General circulatory involvement. Here the tension is sufficient to involve the medulla and call forth the general vaso-motor regulation for compensatory action.

Fourth: Failing general compensation.

The symptoms of compression vary with the stages and progress in a like manner. Serious cases pass rapidly on to the late stages. At first the symptoms may be mild and insignificant. Head-

ache is practically always present, and with it there may be some mental dull-Later, in progressive cases, or early in the more serious injuries, in addition to pronounced headache we note vertigo, restlessness, excitement or delirium. Now certain objective symptoms become apparent. Of these the rise in blood pressure and the state of the eye grounds are most important. The ophthalmoscope reveals dilation of the veins, which are also tortuous, and often a beginning oedema of the nerve. The external veins of the head, especially the venules of the eyelids, are dilated and the face is usually cyanosed.

In the third stage there is a marked rise in blood pressure; the respiration approaches the Cheyne-Stokes type; the pulse is slowed to 40-50 per minute and is bounding in character, of the vagal quality. Examination of the retina shows choked disk. As the fourth stage is approached there is a gradual failure of the compensatory action of the general circulation, the blood pressure falls, the pulse becomes rapid, the heart's action and the respiratory movements become irregular and the patient passes into coma and dies from respiratory paralysis.

Seeking the cure of the results of cerebral trauma we disregard the terms concussion and contusion and their significance, considering the symptoms only as they indicate degrees of cerebral com-

pression.

Whenever the symptoms of the third stage of compression persist longer than a few hours, the decompression operation should be performed. Or again, when symptoms of compression come on after a period of recovery from the initial effects of the injury, the operation should be performed at once.

It is of the greatest importance that the operation be done early. Experimental research has shown a definite alteration in the size of the brain cells produced by continued pressure. Such an alteration must produce a marked effect on their function, and many of the functional disturbances known to occur as sequellae of head injuries may be due to this cause.

Thickening of the dura-organization

of blood clot, with or without cystic change are known results of neglected intercranial hemorrhage. These late lesions with their usually distressing epileptic symptoms, could in most cases be prevented by operation at the time of the original injury. In this connection particular attention is directed to the intercranial hemorrhage of the new born. Obstetritians and neurologists, as well as surgeons, should recognize the frequency of this condition and insist on early operation as the only means by which life may be preserved and deformity prevented

The technic of the operations has been described in many places (Military Surgeon, Dec., 1908, Md. Med. Jour., Feb., 1911) and will not be repeated here.

### AN INTERESTING CASE OF MUL-TIPLE FIBRO CYSTIC TUMOR OF THE ENDOMETRIUM

By A. S. GRIMM, M. D., St. Marys, W. Va.

Read at Annual Meeting, Wheeling, W. Va., May, 1916.

Fibro cystic tumors of the endometrium are rare, and have been described by different authors as cysto-fibroma, cysto-myoma, cystoid and fibro-cystic tumors.

In an active practice of 31 years I have met with but one case. My object in reporting it is to hear from other

practitioners on the subject.

I shall not go into the histology of this variety of tumors, but shall only give the clinical features of the case. Permit me to say, however, that these tumors may develop in two different ways, it is claimed. First, a cyst may begin in the uterine tissue which envelopes it. Secondly, solid tumors of the uterus may degenerate by cysts forming in them.

I was called to see Mrs. S., 52 years of age, of German birth, and who was the mother of six children, all of whom were girls. I found her abdomen enlarged as much as a woman at full term of pregnancy.

She had a very foul discharge from

the vagina which came on suddenly and was so offensive and sickening that it was difficult to examine her.

Upon examination I found an obscure mass presenting at the os, and I inserted my hand into the uterus to the base of the growth, and without much difficulty peeled it loose from its uterine attachment. Upon removing the growth found it to consist of two parts, one of which was a solid mass like a fibroid tumor and the size of a man's fist; the other part consisted of a collapsed cyst, which had contained the offensive fluid. Upon inserting my hand again other growths of like nature were found and removed until several were taken away, and as the patient was becoming exhausted, I desisted from further efforts of removal until she could rally from the ordeal.

Next day I removed more of the growths, but did not succeed in removing all of them until the third day.

I feel safe in saying that there were as many as a dozen of the growths, but as I am speaking from memory, and as this occurred in the year 1900, I can not be more definite in this particular. Quite a number were as large as the one mentioned, but some of them were as small as a hen egg.

The usual douches for such conditions were afterwards used and aside from the exhaustion to be expected from the ordeal, and also from abdominal tenderness, as well as the fever for a few days caused from absorption of the decomposed fluid and necrotic tissue, she made a good recovery, and passed the menopause at the age of 57; she is a healthy woman today at the age of 68 years.

This is one of the conditions in which it is necessary to insert the hand into the uterus, so that the operator may know by the sense of touch just what he has to deal with.

Diverting somewhat, I will say that I prefer this method of removing small retained placentas following abortions. By sterilizing the hand as best as it can be done and inserting it, or at lease one or two fingers into the uterus, the uterus can be thoroughly explored and retained material removed safely.

Text books, as well as medical litera-

ture, do not have much to say regarding fibro-cystic tumors, and I have asked several practitioners of extensive experience and have not found much light on the subject; hence my object in bringing the subject before the West Virginia Medical Association, which I trust will fully discuss, giving its member's experience on the subject.

A REPORT OF SEVERAL CASES, SHOWING THE RESULTS OBTAINED IN TREATING PATHOLOGICAL LESIONS OF THE DEEP MALE URETHRA WITH THE AID OF THE MODERN URETHROSCOPE.

By Oliver D. Barker, M. D., Parkersburg, W. Va.

Read at Annual Meeting, Wheeling, W. Va., May, 1916.

The use of the endoscope for establishing a diagnosis, or in treating a definite pathological condition, is by no means a new procedure. The day of feeling for a diagnosis or treating in the dark is fast fading before the light of visual endoscopic examination. It is the means of gaining a definite knowledge and pathology and it becomes incumbent on those interested in this work to group the cases encountered and study such groups for the finer details and advantages so that in the end the whole stands out more clearly.

However, not until the last few years has sufficient attention been directed to the importance of treating disturbances of the deep urethra by means of the endoscope. The important part which diseases of the deep urethra and the Vera Montanum play in the production of severe, and oft-times exceedingly distressing symptoms, have been wrongly classed as the so-called prostatic neuroses. These cases have failed to yield to massage, dilitation, instillation, etc., while in some instances they have only been aggravated.

These manifold symptoms which result from an inflamed colliculus and the surrounding prostatic urethra, and

which have been ascribed to prostatitis, do not show, upon routine examination, evidences sufficient to direct our entire attention to that organ:

As a prominent symptom, pain presents itself in one or more of the following days: In the end of the penis; in the groin or testicles; sciatic pains; backache; and pain in the perineum.

Sexual disorders are frequently encountered, such as precocious ejaculations, painful e<sup>j</sup>aculations, frequent sem-

inal emissions and impotency.

Disturbances in urination, as frequency, burning, difficulty, hesitation and enurcesis. These symptoms may present

themselves singly or collectively.

Of the class of cases that I have encountered, I have been able from the history findings to place them practically into two groups. Those in which the antecedent history gives evidence of some form of infection, and those in which there is none whatever.

In the latter class of cases, when we search the histories carefully, we are able to find that either one or both of two conditions have existed, viz., that of excessive masturbation or some form of sexual misdemeanor.

The lesion is of essentially an irritative type, and so far as the findings are concerned, it is impossible to draw a hard and fast line that will distinguish them, so far as the appearance is concerned, in all cases.

Evidence of an exudate in the posterior urethra speaks more plainly for those of an infective type, but I consider it of importance to go into the histories of all these cases thoroughly. When there is no antecedent history of an infection the patient will practically, under all conditions, admit to the fact that he has been an excessive masturbator some time during life or some form of sexual overindulgence. There are instances where the act has been performed every day for over a period of years, or in some cases it has been repeated daily as long as an erection existed.

It is true that the sexual function, like all other physiological functions during the period of adolescence, grows with the excessive use of it.

The continuation of excessive or un-

satisfied libido, or the excessive masturbation due to the increasing and prolonged stimulation of the genital nerves, and especially the nerves to the blood vessels combined with the mechanical insults, that sooner or later a static catarrhal condition develops.

The changes that ensue are essentially proliferative in their nature, and these developing and spreading act in accordance or in similarity to those of an infective type in the production of the

manifold symptoms.

The sexual misdemeanor is the cause of the pathological changes in the beginning, but when these changes are once well established these in turn artificially stimulate the sexual desire.

The larger class of cases come under the head of an infection. Gonorrhea is responsible for the greater number. My experience has been in the examination of these cases to find a varying degree of changes in both the walls of the urethra and the colliculus itself. The changes may vary from that of a mild degree of inflammatory reaction to that of a highly congested condition occasionally associated with distinct localized ulcerations. On a few occasions I have observed a general varicose condition of the entire prostatic urethra which might be called hemorrhoidal in its appearance.

Even more pronounced changes are seen in the Vera Montanum, which likewise is the most frequent point diseased. Usually it is markedly increased in size, distinctly hyperemic, and very sensitive to the touch. The surface may be smoothe, of an ædematous character, or granular in its type and bleeding easily.

Distinct ulcerative changes on the surface are somewhat rare as compared with the changes just described. Particularly in the infective type of cases I have noticed that in the large distended type of vera that pressure of the endoscopic tube against the same would bring forth a sudden discharge of purulent material.

Frequently surrounding the orifice of the colliculus there is a distinct area of redness and somewhat granular, being of a much deeper hue than that of the surrounding membrane.

Text books are rather limited on the pathology of the Vera Montanum and

in most instances there is more or less repetition as to the size, shape and location. The detailed pathological structure has been described recently following the introduction of the complete removal of the organ in diseased conditions, and the concensus of opinion seems to be the same in all the findings that there is a general hyperplasia of the structures composing the organ of either a glandular or a stroma type.

The following cases that I wish to present will demonstrate clearly, I think, the results obtained through local measures in the treatment of the same:

Case No. 1: This is the non-infective type. Mr. C. R. H., age 23, unmarried, and by occupation a mail clerk. plaint, frequent seminal emissions. H. negative. P. H.—Had the ordinary diseases of childhood, with a good recovery. From early childhood up to the age of 21 was never ill enough to call a physician. At this latter age developed typhoid; was ill for seven weeks with a final recovery. Denies ever having had gonorrhea, any venereal sore, or syphilis. From the age of 12 to 16 masturbation was practiced daily, never missing a day and sometimes oftener. A few months past the age of 16 stopped the habit rather abruptly and has not practiced the act since that time. About the age of 15, and from that time on up until this habit was stopped, there would frequently be blood in the discharge.

Has never tasted alcohol, uses no tobacco, and is generally regular in his habits.

P. I.—The patient dates this from the age of 16 or near that time. As near as he can tell about the time he stopped masturbation he noticed that every few nights he would have a seminal emission. He at once saw a physician who prescribed some internal remedy but with practically no result whatever. He was then treated through deep instillations with a slight improvement only, and for a short time. The emissions would not occur oftener, at first, than twice a week, but during the past year they have occurred as often as two in one night. Four years ago he noticed a slight swelling in the left scrotum. This has not given him very much trouble. For the last three years has felt more or less soreness in the perineum and suprapubic pain.

Sleeps very poorly; has lost in weight during the last year and says that it is impossible for him to concentrate his mind on his work as he should.

P. E.—The general appearance of the patient is that of depression and uneasiness. Questions are answered with a certain amount of hesitation.

Local examination of external genitalia normal with the exception of a small varicoccle on the left side. No discharge from the urethra, urine in all three glasses clear.

Prostatic examination; the prostate is soft and flabby-like, though smoothe and regular. The secretion obtained from the same is microscopically normal.

Introduction of a Bougie Aboule size 18 F. detects no roughness along the anterior urethra. The patient is prepared in the usual manner and a size 26 F. Endoscope introduced without any difficulty.

Findings: The prostatic urethra is very much engorged and bleed easily. The vera montanum is enormously enlarged, greater than the size of the endoscopic tube. Its surface is rather irregular and highly congested.

The entire surface is severely cauterized with pure silver stick and mopped dry with a cotton applicator. A small amount of sterile oil is applied and the patient told to report at the end of twenty-four hours.

For the first two or three days there was some bleeding following urination as well as some pain. This however, was not severe. Ten days following the first treatment the vera was again cauterized and this repeated again each ten days until in all six treatments had been given. Even during the course of the treatment there was improvement noted. Three weeks after the first treatment there was no pain in the back or suprapubic pain.

Following the last treatment the patient was advised to take a rest of two months and report. At the end of this time there had been a gain in weight of fifteen pounds and during the entire eight weeks there has been only one seminal emission. Sleep is obtained without

difficulty, and it is remarkable to note the entire facial change. The vera montanum is practically flat with the floor of the prostatic urethra and the surrounding mucous membrane is normal in appearance.

Case No. 2, also of the non-infective type. Mr. M. A., age 26, M. W. S., by occupation a farmer. Complains of extreme soreness and tenderness in the perineum and rectum with burning urination and frequency. F. H. negative

tion and frequency. F. H. negative P. H.—This is of no importance. Ordinary diseases of childhood with a good recovery. During the first ten years of life troubled with frequent colds and swelling of the cervical glands. From ten years old up to the present illness has been perfectly healthy.

Denies any gonorrhoeal infection, any venereal sore or abrasion about penis, and as well syphilis. Uses tobacco moderately, denies alcoholism, and states that he has had sexual intercourse but a few times.

P. I.—At the age of eighteen thinks that he had somewhat the same trouble as he has now with the exception that it was not so severe and did not last as long. The condition at that time was readily relieved and was not bothered again for a period of about three months. At the expiration of this time it re-appeared again and has done so from time to time for the last five years. In September, 1915, the trouble became so aggravated that he was compelled to give up his work entirely. Prostatic massage was resorted to with but little or no improvement. Alkalies were given internally, as well as bladder irrigations, but without any relief.

When questioned as to masturbation he flatly denies this, also any sexual misdemeanor. He has had occasionally a nocturnal emission but these have occurred not oftener than one or two a week.

P. E.—The patient is well nourished and apparently in good health. P. E. chest and abdomen negative. External genitalia negative. Urine voided in three glasses negative, both macroscopically and microscopically.

The prostate size practically normal smoothe, soft flabby without what I

might term no resistance. The secretion expressed in a goodly quantity is microscopically negative.

Introduction of a Bougie A Boule detects no roughness along the course of the urethra and a No. 22 F. sound is admitted with ease.

From the prostatic findings and the total denial of any venereal infection, coupled with the remainder of my examination, I was strongly suspicious of some previous excess. When the patient is taken aside and questioned again, he finally admits that for a period of three years previous to the onset of his present symptoms he performed the act at least once a day and sometimes during the night. There were times that masturbation was carried on to the point that an erection no longer existed.

The act was abruptly stopped about two or three months prior to the beginning of his present symptoms. Following this evidence it was decided to do an endoscopy and the following noted:

There is an engorgement of the entire prostatic urethra which bleeds very freely. The Colliculus is larger than normal somewhat cauliflower in shape and the surface resembles a raspberry. The opening to the sinus is readily seen and the introduction of a Geraghty syringe fails to obtain any secretion. The vera is severely cauterized, mopped dry and a small amount of sterile oil applied.

This same treatment was repeated at intervals of ten days to two weeks for a period of about three months. At the end of this time the patient says he feels entirely well and has been able to resume his work.

He consulted me first in January and when asked some time during this month as to how he felt he replied as well as ever. I have, however, advised a mild prostatic massage for a while, about once a week and this has been carried out.

W. J. R., age 27, S. W. M., by occupation telephone lineman. F. H. negative. Case No. 3:

P. H.—Outside having had malaria in 1908 and the ordinary diseases of child-hood, there has been nothing which he could say that has confined him in the house a single day so far as general health is concerned.

Had gonorrhea for the first time in 1911. Immediately consulted a physician; was under his treatment for several weeks and pronounced cured. In October of 1914, had his second attack. In January of 1915 developed a right epididymitis and was unable to do any work for a period of about one month. Has never had a venereal sore and denies syphilis.

Sexual life has been moderate and the act always normal. Occasionally takes a drink, never to excess, and uses tobacco

moderately.

P. I.—This began a few weeks following the subsiding of the enlargement of the right epididymitis; from that time on had continued to get worse. The first symptom was that of burning along the course of the urethra following urination. He then noticed a pain and some tenderness in the perineum with backache.

Frequently there would be a feeling of fullness and a dull ache over the bladder. For the last month or two there have been frequent night emissions as often as three or four times a week and he also notices that when intercourse is attempted that no sooner than the act is started an orgasm will occur. He thinks that in comparison with the past that the sexual desire is very much increased.

Gets up from one to three times at night. Stream large, good force, and no terminal dribbling. There has never at any time been any blood in the urine so far as he could tell.

P. E.—The patient is strong, well developed, and well nourished in every way. Examination of the external genitalia normal. No discharge obtained from the urethra and with the exception of a few shreds in the first glass, the urine is normal and clear in all three.

Prostate fairly smoothe, no tenderness and soft. Secretion obtained contains only a very few leucocytes, abundant amount of lecethin and macroscopically clear.

Examination of the prostate urethra with a No. 26 F. urethrescope shows the following: Entire prostatic urethra intensely engorged and thrown into oedematous folds as it follows along the withdrawal of the endoscopic tube toward the

vera montanum. It bled very easily and freely. The vera is much larger than normal; highly congested and granular like as though it had been recently deared. The area is mopped dry with a cotton applicator and the surface of the colliculus severely cauterized with a pure silver stick. Following this treatment and for the next few days, the patient experienced some discomfort. At the end of the fifth day all bleeding had ceased, as well as some of the symptoms previous to his treatment.

At the end of two weeks a second application of silver was made. This was repeated at intervals of two weeks until four treatments had been given. At the end of this time the patient was greatly improved but was told to report in a month for further observation. This he did not do but at the end of two months wrote me from North Carolina that his symptoms had all disappeared and he was entirely well.

Case No. 4: Mr. T. F. S., M. W. S., occupation traveling salesman. Complains of soreness and extreme burning in urethra. F. H. negative.

P. H.—Had gonorrhea for the first time at the age of nineteen, and again at the age of twenty-one. Both times treated by a physician and pronounced cured.

At twenty-five developed a sore on his penis pronounced as syphilis. For this has received three years of rigid treatment. Five years ago had another attack of gonorrhea. This time considerably more trouble was experienced in clearing the same up than before. In fact he does not think it was ever entire-

ly cleared up.

P. L. began three years ago about six months after he had been pronounced as cured of last gonorrheal infection. The first symptom he noticed was that of excessive burning following urination, especially in the head of his penis. There was some terminal hemituria. This, however, was only slight and did not occur often. Was placed on treatment for prostatic trouble consisting of massage and irrigations twice a week. This seemed to relieve the condition slightly for a short time only. Six months ago had complete retention, was catheterized once. Has had no trouble since

that time. Sexual powers much below normal and for several days following intercourse his trouble is exaggerated. Urination occasionally more frequent than normal but stream is free and large.

P. E.—Patient well nourished and healthy looking individual, responds very intelligently to all questions. Examination of external genitalia. Evidence of old scar is found near the sulcus which corresponds to the some of some years past. There is no discharge from the urethra and secretion obtained on a platinum loop does not disclose anything of importance.

Examination of prostate shows it to be slightly irregular, somewhat tender, and in areas over the same indurated. Scretion expressed shows many pus cells but little leethin. Examination of urcthra with No. 18 F. Bougie A. Boule detects a slight roughness in the mid pendulous portion of the urethra.

From the symptoms just enumerated and the fact that the patient had already been on treatment for the chronic prostatitis it was decided to do an endoscopy.

After a preparation in the usual manner a No. 26 tube is introduced with ease and the following noted. The engorgement of the prostatic urethra is not extreme. The vera montanum is large and distended to a rather tense smootheness. The surface is not ulcerated but surrounding the opening of the colliculus there is an area about the size of a small rice grain that is very red and roughened.

By bringing pressure to bear on the vera through means of the endoscopic tube considerable muco purulent secretion is obtained. The entire vera was cauterized and the patient told to return in a week or ten days.

At the next treatment instead of cauterizing the vera severely as I had done at the first treatment I instead injected into the orifice and cavity of the vear a 1% solution of silver nitrate.

This was repeated again in ten days by increasing the solution to that of 2%. In all about six or seven treatments were given. His symptoms have cleared up remarkably. Not only the burning, but as well the sexual symptoms have improved a great deal. I have advised him

to now continue his treatments of massage and irrigation, which I feel confident will entirely relieve his trouble.

Case No. 5: Mr. F. A. C., age 40, by occupation a plumber, M. W. M. Complains of bladder trouble.

F. H.—One brother dead of tuberculosis; no history of any cancer.

P. H.—Had the ordinary diseases of childhood with a good recovery. Never had a serious general illness. Up to the beginning of his present trouble not considering the several genorrheal infections that he has had has been perfectly healthy. At the age of 21 had his first attack of genorrhea. During the next six years had two more attacks.

Denics any venereal sore and has never had syphilis. Up to the beginning of his present illness sexual intercourse was indulged in about two times a week. The act was always normal. Sexual powers always normal up to about four years ago.

P. I.—This began about three years ago. He at first noticed that he would have difficulty in holding his urine. Even at night when the desire would come on before he could get to the commode he would void. This gradually increased until he was at last compelled to wear a protection of some kind and for the last eighteen months never a night has passed without his wetting the bed.

He notices that whenever sexual intercourse is indulged in that the symptoms are aggravated. That also following the act for a period of about three days there is considerable soreness in the perineum and pain over the bladder with increased frequency.

He also complains of a great deal of backache. The stream is not as large as normal and there is a loss of force. It is extremely interesting in this case to go into the detail of the treatment in as much as there was no relief obtained until I treated the prostatic urethra locally. At first internal remedies of all kinds and description were tried. Next massage and irrigation was resorted to without any relief. The patient has also been cystoscoped on two occasions and the bladder pronounced negative.

A Wasserman made two years ago by a competent lafratory is negative. Phy-

sical examination fails to disclose anything that would lead one to accuse the

spinal centers of this trouble.

A routine examination shows that the prostate is slightly larger than normal, somewhat indurated and tender. The secretion obtained contains numerous pus cells and a reduced amount of lecethin. Introduction of a Bougie A. Boule detects some narrowing of the urethra at the bulbo-membraneous juncture. A No. 22 F. sound enters the bladder with ease.

The following day using a No. 24 F. endoscopic tube I introduced the same with a slight amount of difficulty. The finding, as you will see are evident of a sever type of veramontanitis and poster-

ior urethritis.

The colliculus is very much larger than normal granular and bleeds easily. The surrounding prostatic urethra is also very highly engorged and the walls oedematous. Pressure on the colliculus brings forth considerable amount of exudate of a mucopurulent type. The entire vera is cauterized with silver nitrate stick and mopped dry. This treatment was given on November 25, and on the twenty-sixth the patient reported to me that on that night he was able to control his urine without any difficulty. The above treatment was repeated in ten days and besides cauterizing the colliculus the cavity was injected with a 2% solution of silver. These treatments were repeated covering a period of about three months.

At the end of this time the prostatic urethra was practically normal and the vera montanum was level with the floor of the urethra.

Prostatic massage with dilatations with a Kollman dilator were carried on for a period of about six months and to say the least, the result has been charming.

It has now been eighteen months since thi streatment was started and there has never at any time been the slightest symptom of enuresis.

Sexual powers are greatly improved

as well as the general health.

In all the cases that I have examined or treated I have used the straight open air endoscope. Its sterilization is an easy matter which should be strictly adhered to in all cases. Sizth 24 and 26 F. are generally employed, the latter the most desirable as it gives a better field.

The area can be kept entirely clear through the use of a long canula and bulb attachment and cotton pledgets wrapped on the end of long applicator sticks.

But very little pain is complained of in the introduction of the instrument or in treating the prostatic urethra if first care is used in instilling a small amount of 4% Novocain solution.

In cases where it is necessary to inject the utricle a Geraghtys syringe can be used with ease.

Other drugs than nitrate of silver have been used for topical application but in my hands it has proved the superior either in solution or the pure stick.

I have never at any time during the last four years experienced any unpleasant results following the use of the pure stick in the prostatic urethra though I am willing to confess that it is a most heroic form of treatment. Soon as the cases show that they are responding readily to the treatment I sometimes use as a final application the solution of ten or twenty per cent.

I have found that the use of a small amount of sterile oil reduces the amount of annoyance to a considerable degree. This is not an original thought of mine.

Cases presenting symptoms referable to the deep male urethra should always be carried through the routine examination both as to physical and history findings. The response of the symptoms yielding to the use of silver is rapid and the results obtained I think are not only due to its cauterizing effect but as well other values. The application is made to the colliculus itself and the excess of the amount usually acts sufficient to influence the condition of the prostatic urethra.

# METHODS AND RESULTS IN SURGERY OF THE STOMACH AND INTESTINES

By G. W. CRILE, M. D., Cleveland, Ohio

Address read before West Virginia State Medical Association, Wheeling, W. Va., May 16, 1916.

Although during the last two decades the accuracy of the diagnosis of stomach and intestinal lesions has been greatly advanced and the inchanical technique of operations on these parts has reached a high degree of perfection, yet even in the best clinics the mortality of resection of sthe stomach and intestines has been reduced but slightly. Reflecting on this fact a few years ago, and being dissatisfied with my own results; I concluded that further progress could be made only through a fundamental change in our conception of the problem presented by these cases.

Laboratory and clinical researches were undertaken therefore, which soon disclosed certain facts which seemed to point the way to a far greater control

of the fate of these patients.

As a result a practical method was evolved which has now been employed by my associate, Dr. W. E. Lower, and myself, in 118 planned operations for lesions of the stomach and duodenum. Of these 118 operations, 25 were exploratory for inoperable carcinoma; 15 were resections for cancer or ulcer, and 78 were gastrojejunostomies. In this series there has been but one death.

A study of the case histories of patients operated upon by older methods shows that the principal cause of the former high mortality was not hemorrhage, not infection, not pneumonia, not a vicious circle—though each of these factors, especially infection, took a certain toll; but the principal cause of death was another insidious factor, which when once recognized became extremely obvious.

Let us first consider the clinical picture of a case with pyloric obstruction, presenting the typical symptoms of the first stages of final dissolution. His face is grave, his manner dejected, his am-

bition lost, the complexion sallow, the pulse soft, the extremities cold, the tongue furred, the temperature normal or less than normal, the respiration somewhat accelerated, the urine scant and high colored, and the tell-tale lips strikingly red. The slightest exertion causes exhaustion, and—of more significance—causes respiratory distress. The patient comes to the surgeon not of his own volition—he has no will for anything but wishes to be left alone. He comes because he has been advised by his physician to make one supreme effort to turn from the threshold of the tomb.

The history of one of my own cases illustrates well the former course and the fate of a patoent presenting such a picture as this. In this case, the lesion was a small but obstructing pyloric cancer. The patient was borne to the hospital on a stretcher, and a large transfusion of blood was given, as a result of which, the face became full and pink, the pulse strong, and the outlook for operation seemed bright. Gastroenterostomy and pylorectomy were perform-At the close of the operation all seemed well, yet the patient—without hemorrhage, without infection, without pneumonia, apparently without cause as it seemed to me then—gradually and continuously failed until his death on the second day. Literally a successful operation, but the patient died!!

Now the outstanding features of this case were a steady inexorable loss of muscular and mental power, an unexplained increase in the depth and the rate of respiration, pink lips, paradoxically pink lips, and acetone breath. What surgeon has not learned to fear for the outcome for the patient with increased respiration and pink lips? What surgeon but hesitates to give inhalation anesthesia to a patient with increased respiration and a subnormal temperature!

The cause of the death of my patient and of many like him was acidosis. His reserve alkalinity had been virtually expended before the operation. The acid producing inhalation anesthetic, and the extensive operation without local nerve blocking used up his entire reserve alkalinity and at the close of the operation

the patient was potentially dead.

On what basis is this statement made? Why was the respiration increased, the temperature low, the brain so power-less, the lips so red? First of all life is projected in an alkaline medium; and life ends when alkalinity is overcome. All the tissues and fluids of the body except urine, which is an excretion, are alkaline, and when the body fluids become neutral, or acid, death automatically follows. The maintenance of the body temperature, muscular action, physical injury with or without inhalation anesthesia, emotion - every process of life—is accompanied by the formation of acid by-products. Under normal conditions these constantly formed acid byproducts are neutralized and the normal alkalinity of the body is maintained by the alkalies and bases normally stored in the body, and by the regulative action of the respiratory system, the liver and the kidneys.

As one would expect, the main sources of the vast potential alkalinity of the body must be the alkalies and bases derived from food. When a patient is starved by vomiting, therefore his reserve alkalinity steadily falls until even the relatively slight acid production resulting from his diminished activities cannot be neutralized and consequently the reserve alkalinity of the body is diminished.

As the acidity rises the respiratory rate is increased in order that the Carbonic Acid Gas may be eliminated. idity interferes with the use of Oxygen and the power of the body to use Oxygen decreases simultaneously with the increased intake of Oxygen consequent upon the increased respiration, hence the pink lips and reddened mucous membranes-signs of the increased amount of free Oxygen in the blood. This condition is known as pink asphyxia and may be produced experimentally by giving an animal Hydrochloride Acid intraveoously. (Wells).

The intense thirst manifested by these patients is an acid phenomenon, water being necessary to acid elimination. Another obvious sign of vanishing alkalinity is the mounting temperature. The experienced clinician understands that

this last sign indicates the last critical stage before death. The physical chemist knows that it means that the available stores of alkalies and bases have become exhausted and that the acids are therefore combining with the ammonia of the living protein molecules, the destruction of which produces the fever.

If the real hazard in these cases is a depleted reserve alkalinity, as these premises would indicate, then the obvious problem is first—to ascertain the factors in the operation which make a further drain upon the reserve alkalinity, and second—to discover means by which to increase the reserve alkalinity.

It is obvious that no methods will avail in those cases in which the living molecules are beginning to break down. For the starved case with strikingly red and dry lips and tongue, and above all, with a rising temperature—resurrection,

not operation is indicated.

All cases should have food and water, and glucose and sodium bicarbonate pushed before operation. Those cases which are nearing their ultimate acidity may be rescued by the method of von Eiselberg; that is, by bringing up a loop of the jejunum under local anesthesia

and feeding through it.

As we have stated already, surgical trauma diminishes reserve alkalinity. In all but unquestionably good risks therefore in which the diagnosis is clear, a two stage operation is indicated. First a gastroje unostumy, resection being deferred until the functional balance is restored and the basic factor of safety is increased—usually in about ten days. Thus the surgical injury is not only divided but the second and major portion occurs under improved conditions.

In our clinic each stage is performed under the technique of anociation, that the acid by-products incident to surgical trauma may be reduced to a minimum. Nitrous oxid is given in preference to ether, since we have found that nitrous oxid measurably protects the brain, the adrenals and the liver against the damaging effects of trauma of the operation, while ether not only does not protect but of itself produces further damage.

In both the first and the second stage,

the patient is treated as if acidosis were expected. Saline infusion is given subcutaneously; sodium bicarbonate and glucose are given by the Murphy drip; and the patient's comfort is enhanced by the innumerable arts of a hospital force which is trained to consider the patient's welfare before all else, and to relegate to the background such rules, regulations and red tape as interfere with the patient's progress.

Sleep is induced by every possible means, for here again laboratory investigations have shown that the lesions caused by acidosis can be repaired only during sleep. It should be noted, however, morphin is contraindicated in cases in which acidosis is present or threatened since morphin while it prevents the further production of acids, also inhibits the neutralizing power of the body fluids to their normal alkalinity. Bromides per rectum are therefore substituted for morphin in these cases.

Aside from the protection afforded by the two-stage operation to patients in whom acidosis threatens, a striking advantage is found in cases of doubtful differentiation between cancer and ulcer-

Some years ago in a second operation upon a patient in whom a pyloric tumor had been diagnosed as cancer before and during the previous operation, six weeks before, I was astonished to find that the tumor had disappeared. Since then I have encountered three other similar cases, diagnosed as cancers before and during the first operation, but in each of which at the second operation; oneten; one-sixteen, and one twenty-one days later, the tumor had disappeared. Willy Meyer and Lilienthal have mentioned similar cases. Had I depended on appearances, and planned to operate in one seance, I should have made resections for cancer in each instance, and the end-results would have been uncertain, as in each case the patients were emaciated and starved.

The technique of the first operation—the gastro-jejunostomy—requires no special discussion. For the resection at the second operation the operative field will be found well protected against infection.

In other words the first stage and the

interval of adjustment accomplishes for these cases what the delay of a week accomplishes for fractures of the patella; what iodoform gauze packing accomplishes in the first stage of a laryngectomy; what acute salphingitis does for later salphingectomy. In each instance the reserves against infection are called out into the local field, and an immunity against infection in the later operation is thus guaranteed.

The technique of the resection need not be described in detail as it depends upon the number of adhesions and the location and extent of the growth. One point may be noted, however, the stomach is divided with the thermo-cautery between Peyer and the margins of the division are sterilized by the cautery. The object of this searing is not only to secure an aseptic division of the stomach, but also to coagulate the blood vessels and prevent ooz-Nor is that all—one of the commonest dangers in cancer is that of cancer implantation on the cut ends of the tissues divided in the operation. searing makes a dry charred surface which cannot sustain the growth of cancer tissue. To prevent leakage the divided ends are inverted and closed with the shoemaker stitch, and as a further protection a series of interrupted silk sutures reinforce the shoemaker stitch which is of chromic gut.

In case of ulcer the operation is not the end, but rather only a part of the treatment. To be definitely cured the patient must continue for not less than six months under the same routine treatment as if no operation had been performed. In ulcer of the stomach, as for exophthalmic goitre, long postoperative treatment is required to effect a fundamental and permanent cure.

#### SUMMARY

- 1. In cases in which resection of the stomach is indicated the reserve alkalinity is usually lessened, often reduced to a minimum.
- 2. In these cases, such measures should be employed as will obviate the further depletion of the body's stores of alkalies and bases, and the reserve alkalinity should be increased.

- 3. Because of its conserving action, and its pleasing subjective effect upon the patient, nitrous oxid is the anesthetic of choice.
- 4. The acid-producing effects of operative trauma should be reduced to a minimum by employing the technique of anociation.
- 5. In resection the operation should be performed in two stages—first gastro-jejunostomy, second resection after nutritional balance is restored.
- 6. Water; subcutaneous saline infusions; glucose and soda bicarbonate per rectum; increase the reserve alkalinity and consequently conserve the patient.
- 7. At all events rest and sleep must be induced as they are the only means by which the damage done to the energy—transforming organs by excessive acid by-products can be repaired.
- 8. Permanent definitive healing of ulcer requires a planned therapeutic regime for not less than six months after operation.
- 9. The division of the stomach by the cautery and the thorough searing of the cut edges with moderate heat sterilizes against pyogenic infections, and against cancer growth and prevents bleeding—three of the most important considerations in gastric resection.
- 10. The mortality for gastro-enterostomy should be held at or near 1%; for resection at or near 3%.

# Book Reviews

THE NEWER METHODS OF BLOOD AND URINE CHEMISTRY

By R. B. H. Gradwohl, M. D., Director of the Pasteur Institute of St. Louis and the Gradwohl Biological Laborato-

ries, St. Louis, and A. J. Blaivas, assistant in the same; sometime Technical, Pathological Chemical Laboratories, New York Post-Graduate Medical School and Hospital; former Assistant Chemical Laboratory, St. Luke's Hospital, New York City. C. V. Mosby Company, St. Louis, 1917.

This is a very interesting book containing in concise form much information of a valuable kind, collected from scattered sources and condensed into a convenient form for ready reference. Most frequently but one test under each heading is given, the one which in the opinion of the author has been found to be most reliable and easiest applied. An author's index follows the general index thereby enabling the reader to find a ready reference to more voluminous writings on the various subjects under consideration. The book is well illustrated and the technique of each procedure is fully and plainly set forth. A good book to have in your quick reference library.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1916, with the comments that have appeared in the journal.

This is a very valuable little book from the A. M. A. Press. You had better get it, doctor, as well as the copy of New and Non-Official Remedies for 1917. This last will give you a world of information that you can find no place clse.

Reports of the Trustees and Superintendent of the Butler Hospital, presented to the corporation, January 24, 1917, Providence, R. I.

# The West Virginia Medical Journal

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

#### Huntington, W. Va., April, 1917

THE JOURNAL issued on the first of each month.

\$1.50 per year 20 Cents Subscription Single Copies

All original articles for this Journal must be made 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.

should be given.

### CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten be-fore 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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ALTERNATE—B. B. Wheeler, McKendree, W. Va. CHAIRMAN OF THE COUNCIL-G. D. Jeffers, Parkersburg, W. Va.

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# Editorial

The session of the legislature recently adjourned has produced some very good legislation in which the medical profession should be interested. I am sending copies of several bills that were enacted into law and which have been approved by the governor and will become effective in ninety days. One of these provides for a sanatorium for colored tuberculous patients. Another makes it imperative on all students entering upon medical study after this date to take one year of college work in chemistry, physies, and biology in addition to graduation from a standard four years high

school. Therefore no medical graduate of 1921 or thereafter can be admitted to an examination by the Public Health Council or receive a license to practice in the state unless he has complied with this preliminary educational requirement. Physicians should now particularly note this, that prospective medical students may be prevented from entering a medical school until they have secured the required preliminary education. No discretionary authority is left with the Public Health Council, and all medical graduates of 1921 and later, from whatever school, must be excluded from examination and licensure unless they can give proof of the legal preliminary requirements.

Another new law is that which forbids the division of fees charged for a surgical operation or for other medical ser-The punishment for violation of this law is severe, namely, a fine of "not less than one hundred nor more than one thousand dollars for each offense, and in the discretion of the court or judge (the offender) may be imprisoned in county jail not to exceed twelve months in addition to said fine." It is also provides that 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."

There has been not a little of this fee splitting practiced in our state, and it is hoped that the new law will put an end to it

The legislature also acted favorably on a bill presented by the chiropodists of the state. This bill provides that all applicants desiring hereafter to practice this specialty shall appear before the Public Health Council and undergo an examination as to their fitness. This bill was allowed to become a law without the endorsement of the governor. It requires two years of high school education and graduation from a recognized school of chiropody.

The chiropractors, ever on the lookout to advance their interests, through one Jones of Huntington, introduced a bill which provided for their entrance into practice by simply excepting from the provisions of the medical license law this class of fakers. Jones appeared before the house committee on medicine and sanitation and gave his case away by claiming that measles, pneumonia, and even smallpox and some other diseases can be cured by "adjusting the spine." Strange enough, even after this exhibition of nonscnse, a majority of the committee voted to report the bill favorably, but it failed to get through the House of Delegates, which prevented the Senate from having an opportunity of knocking it in the head, which it would have promptly done.

To Dr. H. R. Werner, of Thomas, chairman of the house committee on medicine and sanitation, must be given great credit for the defeat of this bill. By his skillful management he succeeded in arraying one element against another and finally they became so mixed that they did not know "where they were at." To Dr. Anderson, the secretary of the State Medical Association, and the activity of a number of physicians in different parts of the state in telegraphing and otherwise reaching members of the House, is due much credit for changing a number of votes on this bill. This should convey an important lesson for the future, for it is doubtful if any legislature will ever pass a bill that is opposed by the united medical profession acting in the interest of the public good.

Sincerely yours, S. L. Jepson, State Health Comr.

### TWO-YEAR COLLEGE WORK SENATE BILL No. 93. (By Mr. Sinsel

Introduced January 17, 1917, by Mr. Sinsel. Referred to the Committee on Medicine and Sanitation. January 22, reported back with the recommendation that it do pass. January 24, read a first time and ordered to a second reading.

#### SENATE BILL No. 93.

A bill to amend and re-enact section eleven of chapter one hundred and fifty of the code of West Virginia, relating to preliminary education and fees for medical licensure.

Be it enacted by the Legislature of West Virginia:

That section eleven of chapter one hundred and fifty of the code of West Virginia be amended to read as follows:

Section 11. Every applicant for licensure after the first day of January, ninctech hundred and twenty-one, shall furnish prior to any examination satisfactory proof to be passed upon by the state department of schools, that he has had a general education of not less than that given by a standard four year high school course or its equivalent, 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, provided, that the state department of schools may accept as satisfactory proof of preliminary education a certificate of pre-medical preliminary education from any state whose requirements are equal to those herein provided in lieu of original school and college credentials, and shall pay to the public health council a fee of ten dollars, which fee shall not be returned to him if a certificate is refused him, but he may present himself for re-examination at any future examination within a year without the payment of any additional fee, and if a certificate be again refused him, he may as often as he sees fit thereafter, on the payment of a fee of ten dollars, be examined as herein provided, until he obtain such certificate.

All other persons who shall be granted a license to practice medicine in this state under the provisions of section nine of this chapter, shall pay a fee of not less than twenty-five dollars to the public

health council.

Section twelve of chapter one hundred and fifty of the code of nineteen hundred and six is hereby repealed.

# TUBERCULOUS SANITARIUM FOR COLORED APPROVED FEB. 23, BY GOV. HATFIELD

SENATE BILL No. 15.

Introduced January 22, 1917, by Mr. Hall. Referred to the Committee on Humane Institutions and Public Build-January 24, reported back with the recommendation that it do pass. January 25, read a first time and ordered to a second reading.

#### SENATE BILL No. 15.

A bill to establish the state colored sanitarium, and to provide for its control and maintenance.

Be it enacted by the Legislature of West Virginia:

Section 1. There is hereby established for the care and treatment of colored persons afflicted with tuberculosis, or consumption; a state institution to be known as the state colored sanitarium. It shall belong to that class of institutions mentioned in section three of chapter fiftyeight of the acts of one thousand nine hundred and nine, and shall be managed and controlled as provided in said act, all the provisions whereof shall be as applicable to said sanitarium as if the same were named in said section three of said act. The chief executive thereof shall be the superintendent, who shall be a legally qualified physician of at least six year's experience in the practice of his profession and shall be a person of good executive ability, and shall be appointed by the governor with the advice and cousent of the senate.

Sec. 2. The State Board of Control and a committee of three colored physicians, citizens of West Virginia, appointed by the governor, shall jointly select a suitable site for such sanitarium and provide plans for the necessary buildings, as soon after July 1, 1917, as practicable; when the necessary appropriations for carrying out the provisions of this section shall become available. Thereafter all the provisions of said chapter fifty-eight of the acts of one thousand nine hundred and niue, shall govern as

far as applicable.

Sec. 3. There shall be admitted into said sanitarium colored residents of this state who may be suffering with tuberculosis, which persons shall be divided into two classes, namely; first, those unable to pay the expenses of their care and treatment. Second, those who are able to pay and shall pay the same. The reasonable expenses of poor persons admitted at the request of the authorities of any municipal corporation or county shall be paid by such municipal corporation or county. Regulations may be made to receive persons who are able to pay part but not able to pay all the expenses of their care and treatment. Schedules of rates to be paid by patients shall be made by the State Board of Control.

> SENATE BILL No. 79. (By Mr. Sinsel)

Introduced January 17, 1917. Referred to the Committee on Medicine and Sanitatiou; January 23, reported back with the recommendation that it do pass; January 24, taken up in regular order for consideration, read a first time and ordered to its second reading.

#### SENATE BILL No. 79.

A bill for the protection of patients by prohibiting the division of fees of physicians and surgeons with other persons. Be it enacted by the Legislature of West

Virginia:

Section 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 whatsoever, charged for a surgical operation or for medical services, with any other physician, surgeon or other rerson, 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.

We are planning to make the May issue of the State Journal a "Vacation Number." To make this a success the cooperation of the members of the State

Association will be necessary. We want a number of short papers dealing with the subject of "vacations." If you take yours in the mountains, tell us about it. If at the seashore bring it to us who may have to stay at home. A hunting or fishing trip, with the locality where it took place will be interesting to the men who get tired of the everlasting grind, but who do not always get away from it. We are going to count on several papers on these lines mentioned. Among the men of our association we also find many who merely like "vacation" time because they feel that time is their own, to do as they please, and they go away to still work, attending clinics and lectures with a clear conscience, and no "hurry up" calls to bother them. We expect papers from these men, telling of the interesting work they have seen and done; help to stimulate the "other fellow."

It depends altogether upon you, as to whether or not we will be able to make the May number a "Vacation Number."

# Health News

OPPORTUNITY FOR YOUNG MEDI-CAL MEN—GOVERNMENT FILL-ING VACANCIES IN PUBLIC HEALTH SERVICE.

According to a statement just issued by Surgeon General Rupert Blue, young medical men between the ages of 23 and 32 will be given an opportunity each month to demonstrate their fitness for admission to the grade of Assistant Surgeon in the U. S. Public Health Service. There are several vacancies in the government's mobile sanitary corps, which is now in the 119th year of its existence, but in order to be recommended to the president for commission, a physical and professional examination must first be passed. As the tenure of office is permanent and the Public Health officers are ordered to duty in all parts of the world, they are required to certify that they believe themselves free from any ailment which would disqualify them for service in any climate. Boards will be convened at Washington, Boston, New

York, Chicago, St. Louis, Louisville, New Orleans and San Francisco, but permission to take the examination must first be obtained from the Surgeon General. The examination is searching and includes, in addition to the various branches of medicine, surgery and hygiene, the subjects of the preliminary education, history, literature and the natural scienc-The commissions will be issued as assistant surgeon and after four years of service, the young officers are entitled to examination for promotion to the grade of Passed Assistant Surgeon, and after twelve years of service to another examination for promotion to the grade of surgeon. The annual salaries are: Assistant Surgeon, \$2,000; Passed Assistant Surgeon, \$2,400; Surgeon, \$3,000; Senior Surgeon, \$3,500; Assistant Surgeon General, \$4,000. When the government does not provide quarters, commutation at the rate of \$30, \$40 and \$50 a month according to grade is allowed. All grades receive longevity pay, that is, 10% in addition to the regular salary for every five years until the maximum of 40% is reached. When officers travel on official duties they are reimbursed their actual traveling expenses.

Gregor Mendel, peasant boy, monk and abbot of Brunn, an experimental botanist whose work in his cloister garden laid the foundation of that exact knowledge of heredity which is now being extended in many directions, was born July 22, 1822.

He died in 1882. Eighteen years later began the appreciation of his labors. His doctrines, which are called Mendelism, form the scientific basis of the science of Eugenics, "The science of being well born." Mendel's work made it possible for us to predict with precision whether good or bad traits will or will not appear in future offspring and to forecast with mathematical accuracy the proportion in which certain characteristics will appear and re-appear.

This is important to the public health because defective persons breed defective persons and an increased knowledge of heredity means an increased power in the prevention of the creation of degenerate and insane persons on the one hand and normal, efficient people on the other.

The population of the United States increased about eleven per cent. between 1904 and 1910, while the number of persons in insane asylums during the same period increased 25%. A single family of defectives cost the state of New York in five generations over one million and a quarter dollars.

When it is realized that not only mental, but also physical traits such as deaf mutism, color blindness, gout, short sightedness, alcoholism, epilepsy, imbecility and insanity may all be transmitted to offspring, the importance of Mendel's work to the public health and pub-

lic pocket book is readily seen.

The prevention of the propagation of defectives may be controlled by the education of parents so that they will endeavor to prevent a union of their children with children of defective families; legislation requiring a medical certificate of parties applying for marriage licenses and surgery which aims to render defectives incapable of procreating. Indiana, Wisconsin and California have laws permitting such operations.

The segregation of defectives has not proven practicable; in fact in the case of deaf and dumb, it serves to increase rather than to decrease their number.

Mendel's experiments were made with the common pea, but the principles which he deduced from his studies are applicable not only to mankind but to all of the lower animals, and are hence, of importance to the public health worker, the botanist and the agriculturist.

# Miscellaneous Announcements and Communications

El Paso, Tex., March 14, 1917.

Dr. J. R. Bloss, Editor, W. Va. Med. Journal, Huntington, W. Va.

Dear Doctor:—I have just read Irvin Hardy's letter, and your comment on Dr. McDonald's letter, relative to contract practice, and wish to say, though I am biting the hand that feeds me, that these two gentlemen are striking a note that makes music, not only to competi-

tive practitioners, but to hundreds of West Virginia contract doctors, who are not criminals, as Dr. Hardy would have us believe, but big hearted, honest, hard working doctors who are following a rule that has existed since West Virginia's big industries were in an embryonic state; a rule which, at least, should be modified if not abolished entirely.

Dr. Hardy is making his "medicine" too strong for the average contract doctor to take, for all of us contract doctors know, and God knows, that we do not rake in thousands of unearned dollars. Neither do we take on the "Alexander Selkirk attitude," live in peace and plenty or waste our time in "riot-

ous living."

Any doctor, who has done contract work, knows that the man who pays his fifty cents per month usually makes it his business to get his money's worth and usually succeeds in getting his and that of his chum, too; or some mine official, who has a visiting aunt or mother-in-law imposed upon him, is not supposed to pay anything for the many small annoying calls to said aunt or mother-in-law, but the doctor is supposed to "go at once" because it is a relative of the "boss."

Then when the doctor has treated all his real cases like Typhoid, Pneumonia; all the acute infectious diseases; has taken care of all his accidental cases; cared for all his confinement cases (at \$5 per, as the rule says), and given fifty or a hundred families cough syrup to eat on their bread; paid ten per cent. for collecting his just dues (as the rule says he must do), and with drugs riding on airships, I would like for Dr. Hardy to explain where the thousands of unearned dollars come in.

No, doctor, you are too far-reaching for 98% of contract doctors in West Virginia. The time was when doctors had "pie" in contract work, and 2% of them still have, but 98% of contract doctors would welcome the day when West Virginia's legislature makes a law absolutely forbidding contract work in any sense. Then he would be able to study his real cases and enter into progressive medicine; he would be a respect-

able citizen and not an undesirable; he could do good work and charge accordingly; as drugs soared, he could soar with them; we would all be good American citizens, each one having the right to put his services in cold storage and keep them for bigger and better prices.

Yes, Dr. Hardy, I hope you get your legislation. Agitation has already started and we can only hope that education

will follow.

As for me, I have done contract practice since my graduation in 1907, but am not afraid to take my chances with any member of the respectable and competition side of medicine.

W. BYRD HUNTER.

March 7, 1917.

Dr. J. R. Bloss, Editor.

Dear Doctor: Permit me to say a few words relative to the letters by Doctors McDonald and Hardy in the February and March issues of the Journal, respectively.

I feel it my duty to speak in behalf of the physicians who do contract prac-

tice in this state.

First, I want to state that I think it is plain to every physician who read the letters written by McDonald and Hardy that they were not inspired to do this writing by their heart-felt sympathy for the sick and suffering, but it looks like an open confession that they are suffering with Pathological conditions that requires nothing less than gold dollars to effect a cure, and instead of landing the big contract practice they felt so certain of a few months ago, Doctors Smith and Jones (who were a little more popular than they) are now occupying their newly-constructed air castles.

I am at present doing a small contract practice, so small that no one envies me; I also do some private practice. When I am called to see a patient under contract, I take the same precautions and care as if he or she were a private patient, and make regular visits all through the illness as though I were receiving the one or two dallars per call.

There is no man who gets more or better medical services for his money than he who employs a physician by contract.

I am acquainted with most of the phy-

sicians in the Pocahontas coal field, as I meet them frequently at local medical societies and I venture to say there is no better class of physicians in West Virginia or any other state than are these gentlemen, they are not only well vers ed in the different branches of medicine and surgery but they are conscientious and discharge their duties faithfully.

I am in favor of cancelling the membership in our societies of any physician and surgeon who kieks his professional brother on such unquestionable selfish grounds.

J. E. Hatfield.

Winding Gulf, W. Va. March 1, 1917.

Jas. R. Bloss, M. D., Ed. W. Va. Med. Jour., Huntington, W. Va.

Dear Doctor:—I have often heard of people carrying needles, pins and other foreign bodies in them for numbers of years and then having them removed, but I have always had my doubts until the following history was given Lady, age 60 plus, was washing some clothes one day in April, 1884, while so doing run a needle in the ball of her thumb on right hand, part of which was removed at that time, thinking that all had been removed further notice of it was forgotten until about ten days ago she received a burn on this same finger on top. I dressed it one or two times, but it was very reluctant to treatment, so on February 27, 1917, she complained of great pain in that finger, so coming to my office very much excited saying that she had found the needle (then she told me the history). So I opened the place and found a splinter about half inch long. Laughingly said to her, here is your needle. The following day, February 28, 1917, she still complained of very much pain, like something sticking her, so dressing the hand again I found the needle projecting from the opening. Withdrawing it I found it to be corroded bluish but was not rusty. She claims to have carried it in her hand for 33 years this coming April, 1917.

Thanking you for your patient's patience, I remain.

Yours fraternally, J. C. Jett, M. D. February 28, 1917.

To the Editor of the

W. Va. Medical Journal,

Huntington, W. Va.

Dear Sir:—The second examination to be given by the National Board of Medical Examiners will be held in Washington, D. C., June 13, 1917. The examination will last about one week.

The following states will recognize the

The following states will recognize the certificates of the National Board: Colorado, Delaware, Idaho, Iowa, Kentucky, Maryland, North Carolina, New Hampshire, North Dakota and Pennsylvania. Favorable legislation is now pending in twelve of the remaining states.

A successful applicant may enter the Reserve Corps of either the Army or Navy without further professional examination, if their examination papers are satisfactory to a Board of Examiners

of these services.

The certificate of the National Board will be accepted as qualification for admittance into the Graduate School of the University of Minnesota, including the Mayo Foundation.

Application blanks and further information may be obtained from the Secretary, Dr. J. S. Rodman, 2106 Walnut

Street, Philadelphia.

We will appreciate a notice of this coming examination in your journal.

Very truly yours, J. S. Rodman, Secretary.

Baltimore, Jan. 16, 1917.

Dear Sir:—The Journal of Urology has been founded with the above board of editors, and the first number will be issued in February.

This journal is intended to be the archives for papers dealing with the urinary tract and correlated subjects, whether from a medical, surgical, clinical or

experimental point of view.

All such papers produced hitherto have been scattered among a great number of periodicals: the special journals of anatomy, physiology, chemistry, etc., on one hand, and the great general medical or surgical journals on the other.

Urological surgeons have had perforce to publish their surgical investigations in general surgical journals. The Journal of Urology will bring together such papers in a readily accessible form, and present them to a more interesting, yet more diversified audience.

Renal disease does not concern the urologist only, but its vast importance to general internal medicine has also made it the subject of attack by numer-This has made possible ous internists. the development of a true medical urology, which will stand in the journal side by side and in its proper intimate relation with surgical urology.

Every branch of laboratory research now makes its contributions to urology. Chemistry and bio-chemistry are concerned with such problems as lithiasis; composition of secretions; retention of waste products and changes in metabolism associated with renal disease, and many others. Physics is now applied broadly in connection with radio-therapy of all sorts, especially valuable in the urinary tract.

Many of the most absorbing problems in embryology, anatomy, and physiology lie in this domain, and advances in these branches are most essential for the future progress of the new urology. Of especial interest arc researches in the function of the testicle, pituitary, pineal, adrenal and other endocrine glands.

Specific pharmacology is really in its infancy, and has many opportunities in urology. The pathological changes in nephritis are as yet largely undeciphered, and tumor formation in the urinary tract offers peculiarities found nowhere else in the body.

The Journal aims to publish a certain number of interesting historical papers.

Mechanically, as to type and illustrations, the Journal will conform to the highest standards.

This brief resume will give you a synopsis of the scope included by the Journal, and of the aims of its editors. If you have any papers ready or nearly completed which would be suitable for the Journal of Urology, we will be very glad to have them for early publication.

Very sincerely,

THE EDITORS.

# Society Proceedings

Huntington, W. Va., March 21, 1917.

Dr. Bloss, City.

Dear Dr. Bloss: I am sending you a report of the last two meetings of the

Cabell County Medical Society.

The regular meeting of the County Medical Society convened at room 216 at the Hotel Frederick at 9:15 p. m., February 22, 1917.

President Rowsey in the chair. Dr. Pepper, the Secretary, being absent, Dr. Fitch was elected secretary pro tem.

The members present were Drs. Rowsey, Watts, Hunter, Schultz, Mathews, Bobbitt, Kessler, Yost, McGuire, Fitch, Hume, and Hardwick.

Dr. Watts reported a case of facial paralysis. Report of a case of grippe by Dr. Schultz. Report of a case of Diventiculum operated upon. Report of a case by Dr. Rowsey of Thrombosis of the mesentery in child, operated upon and died with symptoms of intestinal paralysis and obstructions. On motion the society adjourned.

F. A. FITCH, Sec. Pro Tem.

## CABELL COUNTY SOCIETY

The regular bi-monthly meeting of the Cabell County Medical Society convened in room 224 at the Hotel Frederick, March 8, 1917.

In the absence of Dr. Rowsey, Dr. Yost was elected chairman pro tem. The minutes of the past two meetings were read and approved. The members present were: Drs. Yost, Mathews, Reynolds, Fitch, Hogg, Morrison, Guthrie, Hawes, I. C. Hicks, J. C. Kessler, Cronin, Hunter, Henley, Steenbergen, Rowsey and Pepper.

Dr. C. O. Reynolds reported a very interesting case of cystic goitre, which brought up an interesting discussion.

Capt. Slayton, of the Salvation Army personally appeared before the society and offered the Salvation Army Building for the use of public clinics. It was moved by Dr. Fitch and seconded by Dr. Reynolds that a committee of five be appointed to meet with Capt. Slayton and

perfect plans for cooperation. Carried.

Dr. Rowsey appeared at this time and occupied the chair. He appointed the following committee to meet with Capt. Slayton: Drs. I. C. Hicks, chairman, J. A. Guthrie, Fitch, Hunter and Hawes.

Dr. J. C. Kessler presented a case of a man who had fallen and received an injury of the cervical vertebrae, to the extent of which could not be clearly determined by physical examination, and Dr. Pepper offered to make a radiograph gratuitously of the case. This was accepted.

The following committee to present or report clinical cases at the next regular meeting: Drs. Yost, Hogg, Hawes and Henley. On motion the society ad-

journed.

R. H. Pepper, Secy.

### HARRISON COUNTY SOCIETY Clarksburg, W. Va., March 3, 1917.

Dr. J. R. Bloss, Ed.

The regular February meeting of the Harrison County Medical Society was given over to the discussion of poliomyelitis. Dr. Carrol Bull of the Rockefeller Institute, who was then studying the epidemic at Fairmont, was good enough to accept our invitation to come over and give us a talk. He delivered a short extemporaneous lecture and was asked a number of questions by several who were present.

He emphasized the fact that abortive cases first described by Witmor constituted the most important epidemiological problem, and favored rigid quarantine of all under 16 during epidemics. The most important clinical aids to the diagnosis are fever (103° or more) hyperesthesia, drowsiness and rigidity of the muscles of the back of the neck and spine. The finding of an increase in cells in the spinal fluid, (15 or more) makes the diagnosis more certain. In doubtful cases it is well to quarantine until a diagnosis is sure.

The following were elected members: D. Cole, Clarksburg; H. H. Esker, Clarksburg; H. H. Rosenthol, Gypsy. Dr. Bull was voted a rising vote of thanks. The following members were present: Drs. C. F. Wehner, S. E. Wil-

son, C. O. Post, B. F. Shuttleworth, H. E. Slaon, S. L. Cherry, T. M. Hood, P. C. Showalter, H. H. Haynes, R. A. Haynes, C. T. Arnett, W. Gaston, I. D. Cole, W. Towers, S. M. Mason, W. T. Gocke, C. M. Kessler, D. C. Louchery.

Dr. J. R. Bloss, Ed.

The third scientific meeting of the Harrison County Medical Society was held at the Hotel Waldo, February 28. Dr. Diller of Pittsburg was the invited guest and read an instructive paper on "Diagnosis and Treatment of Brain Tumor." According to his records, Dr. Diller has studied 100 brain tumors in the past twenty years; of these operations brought about complete recovery in two, but many others were relieved of optic neuritis, headaches, etc., following decompression operations.

The featuring symptoms of tumors are, first, the gradual development of the symptoms over a period of months, or even years. Second, headache; third, vomiting; fourth, optic neuritis.

These may or may not be accompanied by staggering and localizing symptoms. Having determined that a brain tumor is present the next step was its localization. If this could not be done at decompressior operation was indicated, preferably over the right temporal region.

The possibility of cerebral syphilis should always be ruled out by Wasserman test of the blood or spinal fluid, or by the cell count and globulation esti-

mation of the spinal fluid.

The meeting was enjoyed by every-It was preceded by a dinner at the Waldo at which 23 men were present. The list follows: Drs. W. T. Gocke, T. M. Hood, S. E. Wilson, H. H. W. T. Haynes, W. T. Owens, J. C. Corder, S. M. Mason, H. E. Sloan, S. L. Cherry, C. N. Slater, E. F. Wehner, J. Blomfield, D. C. Louchery, C. A. Willis, I. D. Cole, O. S. Gribble, P. C. Showalter, W. Gaston, C. M. Kessler, S. Folk, C. C. Jarvis, B. F. Matheny, C. T. Arnett, B. F. Shuttleworth, A. T. Post, all of Clarksburg; Drs. C. O. Henry, Graham, Johnson, J. E. Offner, of Fairmont; Dr. S. C. Forman of Buckhannon; Rankin and Blake of Tunnelton.

Wheeling, W. Va., Nov. 10, 1916. Regular meeting of the Ohio County Medical Society held in the First Branch Council Room, City Building. Dr. Cald-

well presiding.

Meeting called to order at 8:30 p. m., Dr. Caldwell announced that Dr. Keesor could not be present until later and asked Dr. Gilmore to act as Secretary until he arrived. Minutes of last meeting not read. No report from Board of Censors.

The first paper of the evening was "Cerebral Decompression for Brain Tumors," read by Dr. F. LeMoyne Hupp.

Brain tumor is always fatal if not operated upon except in specific cases.

In cerebral trauma decompression operation is a life saving method. History of a case was given in which patient died. Patient was in desperate condition before operation.

In cerebral contusion great benefit may be had. In epilepsy: Results rather discouraging, except in cases of traumatic origin. Reports three cases

with excellent results.

Method of procedure: General surgeon should know the gross, pathalogical anatomy of the structure to be dealt with. He should also be familiar with the topographical anatomy of the part to be explored. In above mentioned cases and conditions we have greatly increased intracranial pressure as in many other forms of brain tumor.

Decompression operations might be divided into pretentorial and subtentorial or suboccipital. Subtent orial decompressions (Bow and arrow incisions) is much more dangerous than pretentorial due to nearness to lateral sinuses.

Refers to the work and writings of Dr. Ellsburg in decompression operations for epilepsy.

Dr. Hupp says great care must be used in making lumbar puncture, in cases of cerebellar tumors. Infiltrating

gliomatous growths or tumors do not produce same amount of pressure as in case of some other forms.

Spastic paralysis or Dr. Little's disease in children another disease associated with brain tumors. Ophthalmoscope will aid and in most cases decide

which cases are operable.

Cases of epilepsy cited in which a boy was kicked on the forehead and fracture occurred over frontal sinuses; epilepsy followed with cyst formation, and operation cyst removed containing two ounces of fluid, celluloid plate used to close opening. No recurrence of epileptic seizure in fifteen years following operation.

Discussion opened by Dr. Noome: Says he corroborates statements of and papers read by Dr. Hupp. Advises spinal puncture in toxic conditions but

not decompression.

Dr. Ackerman believes the pretentorial site the best on the right side. Danger of aphasia following operation on left side, owing to the brain centers on that side, especially in cases of high blood pressure. Description of operation: Trephine skull and make opening by use of rongeurs. In ten days open other side. Deepen anesthesia just before opening dura. In brain tumors do not remove it at first operation but in one week to ten days. Third Phase: Paralysis, high blood pressure. Spinal puncture may help some. Centers are paralyzed and failure of respiration occurs.

Discussion by Dr. Coyle: Early eye symptoms in usual accord with other premonitory symptoms. Vasometer and pneumogastric centers are affected by this high blood pressure and intro cranial pressure. Next respiratory centers becoming affected and we have Cheyne-Stokes breathing.

Dr. Kelly in his discussion cites several cases that have come under his observation, among them he cites a case of a young man who had been exposed to hot sun and was unable to see. He was not operated. Treated medically and recovered.

Dr. Schwinn demonstrated the action of pressure on brain and cord centers and also of the results obtained by decompression operation. He deserves great credit for the unique and complicated apparatus by means of which he so clearly demonstrated the above eonditions. He states that in the first phase we have anemia and low blood pressure. In the second phase hyper-emia and high blood pressure. In acute conditions of the brain, e. g., hemorrhage and perforation we have hypertension in all cases. In these cases the intra-cranial pressure eauses anemia of the parts. The vasomotor centers may overcome this if condition is not too severe.

Dr. Kelly reports cases: First case had been formerly reported on April 19, 1912. Had no vision in left eye for one week; was operated upon. Beneficial result. Second case: Child five years of age had been unconscious for five days. Operated over sphenoidal lobe; no evidence of tumor. Died four days later. Postmortem diagnosis was hydrocephalus.

Dr. Hupp concludes discussion. Conclusions: First fatal tendency in cases of cerebral contusion; second, no deleterious effect in epilepsy; many relieved. Bilateral no better than unilateral operation. Pretentorial operation less fatal and easier performed. Exploration in two thirds of cases operated, tumors have been found in 17% of causes.

Selection of site of operation very important. Experimentally pretentorial are easiest sites. Influence on headache and vomiting, relief given in two out of three cases operated. Dr. Schwinn says for croke-disc, operation must be done early.

Second paper of the evening: "The X-ray in Relation to Diagnosis and Treatment of Tumors of the Brain," by Dr. L. S. Goin. Dr. Goin read a short but very interesting paper on the X-ray relating to brain tumors. Owing to the lateness of the hour there was not a considerable discussion of the paper, and those appointed to discuss the paper were unable to be present.

Report of case by Dr. W. P. McGrail: Vesicular Mole; a disease of the earliest stages of growth of ovum; its foctal origin verified by its usually occurring in twin formation; very rare condition. Most vesicular males expelled before

sixth month of pregnancy. In this case the woman was about 35 years old and appeared to be about six months pregnant. Diagnosis: When vesicles are found in the discharge from uterus and Aberhalden's test.

Dr. Ackerman states the usual cause as being syphilis either in the patient herself or in the parents. Wassermann

reaction usually positive.

Drs. Abersold and Fawcett exhibit a case of a man who had fallen four stories and lit on the vertex—has asphasia. X-ray picture by Dr. Goin shows a depressed fracture. Case to be operated

upon in next few days.

Miscellaneous business: Dr. Keesor, Secretary, presented Dr. F. LeMoyne Hupp, member of the Board of Censors, eight applications for membership in the Ohio County Medical Society and one application for membership by transfer for their examination, as follows: By transfer: Dr. John Fox of West Liberty. By application: Dr. Geo. W. Abersold, Dr. H. B. Copeland, Dr. Lowell S. Goin, Dr. John C. Hupp, Dr. Emerson Megrail, Dr. Edward M. Phillips, Dr. Chas. J. Ryan and Dr. Fred W. Wiche.

The following members were present: Caldwell, Ackerman, Noome, Hanning, J. A. Campbell, Schwinn, Ivan Fawcett, McMillen, Coyle, Wingerter, Truschell, Kelly, Abersold, Reed, Gilmore, Osborn, L. Cracraft, F. LeMoyne Hupp, Williams, Wiehe, W. P. McGrail, Shields, Thornton, Goin, Frizelle, Ryan, Staats, Keesor, Fulton, Gaydosh, Hall, McGregor, Andrew Wilson and Emerson McGrail.

Visitors present three: Drs. Blake and Nolte of Benwood; Dr. Stewart of Ohio

Valley General Hospital.

Announcements: Dr. Wm. M. Beach of Pittsburgh, Pa., will read a paper on November 17, subject, "Usc of Local Anesthesia in Surgery of the Lower Bowel."

Meeting adjourned.

Wheeling, W. Va., Nov. 17, 1916. Regular meeting of the Ohio County Medical Society held in First Branch Council Chamber, City Building. Dr. J. R. Caldwell presiding. Meeting called to order at 8:30 p. m. Minutes of last meeting read and approved.

Report of Board of Censors: Eight applications for admission to membership in Ohio County Medical Society approved and presented to the Secretary for the ballot of the society. No clinical cases exhibited. The paper of the evening was read by Dr. Wm. M. Beech, of Pittsburgh, Pa. Subject: "Use of Local Anesthesia in Surgery of the Lower Bowel." Dr. Beech states that there are two ways to approach a patient in local anesthesia. First, by conduction, for example, Spinal Anesthesia. Second, by infiltration, and this is the matter to be discussed largely at this time.

Preparation of patient. Same as for general anesthesia. Cleanse the bowel 24 hours or as much as the second night before the operation. Give cathartic pills second night and castor oil the first night previous to operation. It is well to use two or three enemas previous to operating. May give glass of milk one hour before operation and may give chloretone or morphine sulphate, 1/4 grain, one hour before operation and 1-6 grain one-half hour before operation. Patient must be perfectly quiet after these drugs have been administered.

Preparation of operating room. Have little or no noise, as few nurses as possible, make patient as comfortable as possible, no whispering in the room.

Solutions to use. Safest is novocain. Parke, Davis and Company have a substitute for novocain called apothesin. It is almost identical with novocain. Contains adrenalin chloride 1-1200 grain, and apothesine 1-3 grain. In using novocain, use 1-10 to one per cent. Dr. Beech recommends using one per cent. In making abdominal incision about three hypodermic syringes full is about the amount used. Use carbolic acid at the point where the needle is to be inserted, then infiltrate the skin five inches in length, wait four minutes and cut through the skin down to the fascia.

Urea hydrochloride of quinine is used in injecting the muscles.

For the peritoneum, novocain is used, also in the peritoneal cavity.

Dr. Crile of Cleveland uses 1-8 of one

per cent. for the peritoneum and peritoneal cavity. Next explore the cavity, being careful in technique. Just as little handling of the viscera as is possible. Vomiting is often due to rough handling of the mesentery. Avoid tension as much as possible. Infiltrate the mesentery before handling it. He states there are three great steps in medicine. First: History of the case; second, anesthesia; third, asepsis.

Colostomy operation: Use rubber instead of glass tube in temporary colostomy. It produces less pain. If colostomy is to be permanent use no tubes. After anchoring the bowel open it in twenty-four to forty-eight hours, then use aseptic dressing as in any other case.

Rectal operations: In these cases a local anesthesia is specially indicated.

Technique for hemorrhoidectomy: A general anesthetic had better be given in very neurotic patients. In those cases having a tight sphincter and in cases with an extensive fistula and where there is a dense stricture.

Preparation of patient: .The same as in abdominal cases. Put the patient on his left side. Keep out of his sight. How inject in local cases? In the posterior commissure, half inch from the orifice use one-half of a syringe full of one per cent, novocain. Withdraw the needle to the point and then inject to the other Always keep the finger in the bowel. Continue to inject in the usual way, always keeping within the wheel. Now wait for four minutes. Get the confidence of the patient. Use mouse tooth forceps, on the four points of the compass, and thus expose the field. Have the patient bear down, next inject the hemorrhoid with Eurea H. C. L. of Quinine, one per cent, until they are well filled. Train the finger and do away with the specuram.

Technique of operation: After infiltration, Pennington of Chicago, advises cutting off the hemerrhoid and letting it go. Hirschman of Detroit advises sewing up carefully. Dr. Beech takes the position between these two operations, stating that no rectal wound heals by first intention.

The Operation: The hemorrhoid is exposed. Catch and pull down the larg-

est one on the left side. Use No. 2 cat gut. Transfer the mueosa of the hemorrhoid. With eurved seissors cut from below upwards, including any tags, and make only one wound. Dissect out the veins down to the sphincter muscle. Put one suture in the wound and fasten through the skin below. Never allow two wounds to eome together. Always leave an isthmus between and no strictures will follow. We may inject about the suture with eures H. C. L. of quinine as a post-operative treatment, and thus lessen the pain.

For post-operative pain: Use eures hydro-ehloride of quinine. In small anal fistulas use local anesthesia. In pruritis ani make stallate incision and dissect the skin upwards.

Principles used in local anesthesia: First, relieve the patient of fear or anesthetic. The patient can talk to you if necessary during the course of the operation. Second, it lessens vomiting if any at all. Third, it lessens the pain. Fourth, it lessens shock. Fifth, it lessens post-operative pneumonias, and post-operative kidney diseases. Sixth, it lessens the time in the hospital. Seventh, it simplifies the surgical technique and detail. Eighth, it requires the least handling possible of the tissues.

Discussion opened by Dr. Noome. He asks of bowel is brought out through rectus muscle or at what other point. Discussion by Dr. F. L. Hupp. Dr. Hirsehman uses beta eucaine, one per cent. and curea hydrochloride of quinine 5 per cent. Asks the question as to the necessity of doing colestomy preliminary to McCaskey operation for resection of gut. Dr. Tuttle says not to do a preliminary operation.

Question 2: How treat a horse-shoe fistula? I am now using Beck's paste in a ease of horse-shoe fistula as shown by the X-ray. Two drams are injected and it later comes out at the other opening. My experience with the white head operation is that incontinence often follows. Dr. Hupp uses Clamp and Cautery and cauterizes the entire pile off.

Discussion by Dr. Ackerman. Cystotomy and prostatectomy he uses the clamp and cautery, loosens the pile from

below up and then elamps and eauterizes.

In rectal strictures as to syphilis, some handle it by operation same as eancer. Dr. Ackerman uses the white head operation. At times, but uses fine silk sutures. In horse-shoe stricture the opening is usually along the side.

There were 44 members present; three visitors: Dr. Beech of Pittsburgh, Dr. Glass of Beech Bottom, and Dr. Nolte

of Benwood.

Following the motion for adjournment, a luncheon and eigars were served.

Chas. H. Keesor, M. D., See.

Wheeling, W. Va., Nov. 24, 1916. The regular meeting of the Ohio County Medical Society, held in First Branch Council Room, City Building.

Dr. J. R. Caldwell presiding.

Meeting ealled to order at 8:30 p. m. In the absence of Dr. Keesor, Dr. Gilmore was asked to act as Secretary for the evening. Minutes of last meeting read and approved. No report from Board of Censors.

Exhibition of elinical cases: Several presented by Dr. Sehwinn in connection with the reading of his paper. Papers of the evening by Dr. Jas. Schwinn, subject, "The Diagnosis of Tumors of the Breast in Relation to Surgical Treatment." He gave a most excellent paper dealing with the fibro addnoma, fibro cystic diseases, carcinoma and sarcoma. Several interesting specimens of the different types of tumors of the breast were presented by Dr. Schwinn.

Two important points in regard to breast tumors in relation to operative procedure. First: Limited mobility of tumor. Second: As to metastasis.

Discussion of the paper followed by Drs. Reed, Truschell, Gilmore, Noome, Ackerman, and F. L. Hupp. Dr. Schwinn closed the discussion. No cases reported.

Miscellaneous business: Dr. Gilmore read a letter from the committee on Red Cross Medical Work of the American Medical Association. In the letter read they described the objects of: Workmanship, Qualifications and Compensation as regards Red Cross Medical work in its relation to the American Medical

Association. They also asked that a committee from our society be appointed by the president and the secretary be instructed to send the names of said committee to the Secretary of the National Committee on Red Cross Medical Service at Washington, D. C.

Announcements: At our next meeting Dr. John T. Thornton will read a paper, subject: "Starvation Treatment

of Diabetes."

Members present: Drs. Caldwell, Ackerman, Schwinn, F. L. Hupp, Reed, Wingerter, W. P. Megrail, Truschell, Howells, Frissell, Drinkard, Noome, Gaydosh, Osburn, Gilmore, Emerson Gegrail.

Chas. H. Keesor, M. D., Sec.

# State News

Dr. and Mrs. R. H. Pepper of Huntington, recently spent some time in Cincinnati, O.

Dr. T. O. Ford of Talcott, Va., was visiting in Huntington during March.

Dr. Etley Smith of Fairmont, was in Huntington recently. Dr. Smith was formerly of Kenova, and is well known in Huntington. He graduated from Jefferson Medical College in Philadelphia in 1911 and has since been located in Fairmont.

Dr. Thomas J. McGuire of Parkersburg, and Dr. John McGuire of Clarksburg, visited Dr. Wm. C. McGuire of Huntington recently.

Dr. J. O. Hicks of Huntington, is in New Orleans taking a special course in diseases and treatment of the eye, ear, nose and throat at Tulane University. He expects to be gone several months.

Dr. D. P. Morgan of Clarksburg, died at his home on March 10. He was a well known physician.

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Dr. E. E. Rose of Huntington, has charge of the inspection of the Huntington schools while Dr. J. E. Rader is out of the city.

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Dr. Foster of the E. R. Squibbs and Sons Company of New York, was a business visitor in Huntington recently in connection with the firm he represents.

Dr. H. W. Keatley of Wevaco was called to Huntington in March to testify in a murder trial.

Dr. S. G. Backus and Dr. A. C. Lambert of Charleston have opened a private hospital of eight beds in South Charleston.

Dr. Morris I. Mendeloff and Miss Esther Cohen both of Charleston, were married March 25. Congratulations are extended to the doctor.

Born, to Dr. and Mrs. Robert J. Wilkinson of Huntington on February 23, a son, Robert J. Wilkinson, Jr. We extend our congratulations to the parents.

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Dr. C. M. Hawes of Huntington, well known specialist in the eye, ear, nose and throat diseases, has purchased the residence property at Eleventh Street, formerly owned by Dr. C. E. Haworth, and is making his professional head-quarters there. He is planning to have the second floor re-arranged, and will use it as a private hospital for his patients.

Dr. E. R. Hunter, federal surgeon, spent several days in Huntington with the Red Cross car, and gave a number of lectures. The tour of the car was not for the purpose of organizing a Red Cross society in Huntington, the visit of the car was primarily for "safety first" lectures.

Dr. J. A. Washington of Logan, was a recent visitor in Huntington.

Dr. and Mrs. H. P. Gerlach of Huntington, have returned from quite an extended visit south.

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Dr. H. L. Goodman of Thayer, W. Va., has been appointed superintendent of the Miners' Hospital at McKendree by Gov. Cornwell. Dr. B. B. Wheeler formerly held this position,

Dr. L. V. Guthrie, superintendent of the Huntington State Hospital at Huntington, and Dr. Jas. R. Bloss of Huntington, have been recent visitors Wheeling where they were summoned to act as alienists in a case being tried in the Criminal Court of Ohio County.

-0-Dr. and Mrs. W. D. Hereford of Huntington, spent several weeks in Baltimore in March.

Ohio County, W. Va., Medical Society. The regular meeting of this society was held in Wheeling, Friday evening, February 16, at the Hotel Windsor. Dr. J. A. Lichty of the Western University, Pittsburg, Pa., read a paper on the Clinical Consideration of Peptic Ulcer. Forty-three members were present.

### Propaganda for Reform

PUS AND POLITICS

THE MENACE OF SO-CALLED HEALTH INSURANCE

A plot to force through a half-crooked so-called Health Insurance measure and make the General Practitioner a contract doctor under political domination is immediately impending in the following states: Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, West Virginia, Wisconsin, Wyoming, States in which legislative sessions are held this year.

The Medical Council does not oppose proper Health Insurance to be provided for after the Medical Profession has had time to study the intricate problems involved and formulate proper legislation, but we are fighting the plot which would hastily jam through dangerous and unjust legislation formulated almost wholly by laymen. Doctor, read this, and then get busy.

Illinois Medical Journal says: "It is often noticeable that pus and politics go together; and he who shaves the medical fce piles upon compensation expenses. A stingy man hires a poor surgeon and begets many infections and much disability. A firm in Bavaria spent \$8,000 in the highest priced medical fees and \$160,000 were saved in compensation expenses." Politics: medicine :: incompetence : pus.

The American Association for Labor Legislation, an organization of sociologists and not of union labor workers, published under date of November 1916, their third draft of a "model bill" for Health Insurance. They did so after thorough study from their point of view, and they are entitled to much credit for their well-meant efforts. But active practitioners of medicine in the United States were very little consulted in the plan and the rank and file of practitioners not at all. The amiable plot to which we refer consists in the actively promoted effort to jam this halfcooked, done-on-one-side bill through the lay-controlled legislatures of as many states as possible before the medical profession has a chance to "make a kick."

This editorial is not upon the many admirable features of Health Insurance, as such, but is directed at the weaknesses and injustice of this ill-considered legislation; and we urge its defeat and the postponement of all similar legislation until after the profession at large has had time—say two years—to study, along with all interested parties, every angle of this complex problem. If state medicine must come, let it come decently and in order—gradually, constructively, sanely and with proper regard to the rights and duties of the main party involved, the doctor.

#### WORKMEN'S COMPENSATION

Compensation acts are in force twenty-one states, some of them being good acts and some of them very poor, but not one of them, as yet, giving exact justice to the surgeon. The profession was asleep at the switch when they were passed, but now is actively waving the red flag and sending out S. O. S. calls. Probably, in five or six years from now,

compensation will be upon a decent surgical basis. The fundamental idea is a good one, but the active working thereof is, as yet, largely experimental. Compensation is enough of an experiment to digest at present; it is all the medical profession should be asked to undertake now. But the workmen of the country are being asked to demand Health Insurance as well. They are not doing so. They realize that lay control of medical work is unfair and stupid and defeats the ends for which the workmen strives; and they also know that, in Massachusetts in 1916, \$770,000 was paid for all of medical attendance \$980,000 as agents' profits in handling compensation insurance. (See Boston M. and S. Jour., p. 904, Dec. 21, 1916.)

#### UNION LABOR

Dr. B. S. Warren said (N. Y. State J. of Med., p. 606, Dec., 1916): "The labor man's point of view as represented by the National Civic Federation and the American Federation of Labor, we can consider as opposed to compulsory health insurance." In the same journal, p. 610, Mr. Alfred E. Ommen said: "The labor point of view in this matter is that they are perfectly willing to go into it provided that the employer pays it. As far as they are concerned they do not want to pay a cent." And he throws a sidelight on why the "labor" urge is so insistent when he says: "In the city of New York today there are thirty-two hundred persons, half doctors of this city or two-fifths of them who do nothing but stir up these questions; they get from six hundred a year to ten thousand a year; year in and year out they stir up these questions because they make a living out of them. are known as professional social workers and they are at Albany all the time. They are teaching you how you shall wash and how you shall shave and how you shall cut your hair." New York has no monopoly of this plan. Also in the same journal, p. 612, Dr. E. V. Delphey said: "Mr. Samuel Gompers, president of the American Federation of Labor, said distinctly that he did not want compulsory health insurance. He is satisfied with voluntary insurance. \* \* \* \* Organized labor does not want it. I do not know about the rest of the laborers. I have heard of no mass meetings throughout the state asking for it."

The Bulletin of Pharmacy, December, 1916, commenting upon the attitude of Mr. Gompers and his associates, said: "They realize that on the one hand it would weaken the character of the laboring man, and that on the other it would be impossible for the state to provide health insurance and medical attendance as cheaply and efficiently as they can be provided by private means."

#### EUROPE VS. THE UNITED STATES

Arguments have been made both for and against panel practice as based upon German experience; but an outstanding fact is that the Federation of Insurance Societies in Germany refused to recognize the right of physicians to organize in protection of their individual rights The result was that only 150 physicians out of 32,000 would accept positions under the insurance societies. There is constant conflict between physicians and the autocratic Krankenkasse, that would rob a physician of his self-respect and his income alike. Professional strikes have been frequent. In Austria the position of the panel physician has become intolerable. Better conditions prevail under the Insurance Act in England, largely because the industrial centers there were so poverty stricken that a contract system was almost imperative in order to provide medical care for a large proportion of the workers. And yet, even there, where 20,000 of the 22,500 physicians are on the panel and the average sum paid (gross) to panel physicians is only slightly under \$100 per month, one-fifth of the panel physicians are in hard financial conditions. Nevertheless the panel system has been, in many ways, a good thing for the laborers of England, for large numbers never enjoyed any adequate medical service before; and it is also true that in the industrial centers the average income of physicans has been increased.

Except in a few industrial and mining centers, parallel needs to those of Eu-

rope and England do not exist in the United States; and it is a perversion of statistics and of common sense to urge the European system as applicable to us. Some perfervid enthusiasts are obsessed with the erroneous notion that all the advances in public health and medical efficiency are to be attributed to the political control of the medical profession.

#### PREVENTIVE MEDICINE

So-called health insurance is really sickness insurance, the prevention of disease not being involved to any appreciable degree. But the plan has dubbed health insurance because health officials wish to control it. proposed that the inspectors are to be health department men and are to pass upon the diagnosis and treatment of the attending physicians, most of the latter, presumably, not knowing enough about medicine to be entrusted with its practice without supervision from the Department of Health. Of course the officials of this latter department are all Class A and the practicing physicians Class B or C men! Some exceedingly onesided articles are appearing in some of the journals, evidently inspired by health officers and some written by them.

Permit us to take direct issue with this plan. In a former relationship we were in touch with the work of every state health board in the country and have personally inspected the work in about half of our big cities; and it is notoriously the fact that the weakness of state and municipal hygiene in the United States is an incompetent personnel. We have few thoroughly trained sanitarians in this country outside of Federal Government service, and about half of those others we have were "fired" because they did not suit the politicians and are now working for more enlightened corporations than is the average state administration. There is just as great a proportion of incompetent sanitarians as there is of incompetent general practitioners of medicine. Preventive and clinical medicine simply can't be mixed, in their administration, without precipitating one wrangle after another and interfering with the legitimate work of both. This is our deliberate opinion, after wide study of the prob-It will be a serious mistake for the health officials to try to control clinical medicine through a political system of medical practice, health insurance or any other; and if the practicing physicians of the country have any red blood in them they will never submit to it. Preventive medicine is groaning under the weight of politics that hangs like barnacles upon it now; it needs more medical control itself instead of trying with the aid of the politician, to control clinical medicine. Pus and politics go together.

#### INSURANCE FEATURES

Dr. Davies, of New York, who has made a study of health insurance, said at a recent conference: "The men advocating it are the men in the insurance business. Now, has the practice of medicine arrived at the point when we are to say to the world, we ask the state and we ask the insurance men to be with us at the bedside? \* \* \* The laboring men spend hundreds of millions for whiskey and tobacco, but we must have the state and the insurance company come in and help us out at the bedside! There is no reason for this law. It is gotten up by professionals entirely independent of the great body of practitioners, and our experience with the (New York) Workmen's Compensation Law has been that it was the most outrageous bunco game on the doctors that was ever perpetrated."

These insurance companies, or "carriers," as they are called in the "model bill," would pit one doctor against another in order to get a low bid for service, the question of medical ability hardpanies should be shut clear out of any health insurance scheme. The trouble is they won't be.

#### THE GENERAL PRACTITIONER

Some time since a physician addressed a circular of inquiry regarding health insurance to the secretaries of medical societies throughout the Union and the replies received showed that the profession at large hardly knew of the existence of such a plan. And yet it is the physician who is most vitally interested and whose income is apt to be suddenly cut to one-half by such a plan of panel work.

This winter the profession in some of the states will have to fight for the right of independent practice and their bread and butter, or else meekly surrender to the plan of being an employe who will be paid less than a freight train con-

ductor.

This is not a plan for looking after the poor, but one for the regularly employed not to exceed \$1,200 per year. They are to be compelled to be insured. The people too poor to make a profit for the insurance companies are graciously left for the physicians to attend free: there's nothing in their business, and the doctor may have it. Also the rich man may employ whoever he sees The result will be that the most capable physicians and those with the most prosperous following will refuse to go on the panel; and the rich and the very poor will have the best attention, while the great middle class will get just what they get. The best off physicians will remain independent practitioners, and the state will pay meager salaries to the rest of us. When we welcome union-labor physicians employed by the trust, we won't even have the advantage of an eight-hour law, like other union-labor workers, but will have to pay for our own gasoline and keep going fourteen hours a day to keep our families in comfort; and it will hit the country doctor just as it does the city man. But the average prosperous physicians will be automatically robbed of half of their practice in a day, robbed by the state, the same state that licensed them to freedom of practice within its borders, but whose license is apt to be no good outside. If the state was reducing the value of saloon licenses, a great howl would go up to reimburse the liquor interests. Doctors, however, don't count; they are all rich naturally! .

#### CUT-RATE CONTRACT PRACTICE

The advocates of this scheme are hoping that most of the physicians in the eountry will become panel physicians. Perhaps they may. Then what? The state won't do a thing for, but they may do much to, the man who refuses to serve on the panel. Doctor, if you believe you have rights and refuse to go on a panel, what is your outlook unless you have a large practice among the wealthy? You will have to cut to panel rates, probably two dollars a year for medical and minor surgical attendance to each person you eontract with. You will be right up against an illegal combination in restraint of trade and engineered by the state itself.

#### WILL THIS BE?

Unless the physicians wake up to their interests, yes. But the profession is waking up. We are upon an active eommittee in Pennsylvania and are "going after" the politicians hard. ferences are being held here to defeat every move to push any health insurance through unless it is approved by the profession and we prefer that none at all pass. If the profession sustains us until the menaee is over, we have a good chance to win out in Pennsylvania; but if the profession goes to sleep what ean a committee do? We know that equally energetic work is being done in some of the other states. Doctor, what is your state society doing? What are you doing? It will do no good to get angry and swear. You must get out and work, and do it now.

#### THE FUTURE

Ultimately there will be a readjustment of the conditions of medical practiee and it will be correlated to the public health work; but this desirable end will come to pass, not through politics, sociologists or insurance companies, but by the logic of the medical uplift now so auspiciously begun taking hold of more and more of the profession, until all will be in agreement upon a plan that will impose any hardship upon any legitimate interest will be necessary to put it into effect. Until that time comes, it will be well for laymen to leave the medical porfession alone: it will work out its own problems.—Advance proof Medical Council, Philadelphia, Pa.

#### MEDICINE

THREE MILLION LUETICS

Propagandists for the elimination of venereal diseases have been accustomed to make use of various statistics to indicate the wide distribution of syphilis. Guesses, estimates, and approximations made before the Wassermann test was introduced possess merely the argumentative force of all other guesses, estimates and approximations. Syphilographers had announced syphilis to be existent to the extent of 12 to 15 per cent. of the population in large foreign capitals.

In this country the statistical evidence as to the prevalence of syphilis has only recently been placed upon a more scientific basis. Vedder (Bulletin 8, War Department, June, 1915) in studying the prevalence of syphilis in the U. S. Army, estimated that 16.77 per cent. of recruits are syphilitic at the time they enter the service. His conclusions were based upon Wassermann tests. Inasmuch as the recruits studied were pieked adults from all the principal occupations, it is reasonable to believe that his figures represent one criterion for the existence of syphilis among vigorous male adults. Owing to the fact that many applicants were rejected for other reasons before Wassermann test was applied, Vedder estimated that "about  $\hat{2}0$ per cent. of the young adult male population of the class from which the army is recruited are infected with syphilis." From an investigation of the students at West Point, he reached the conclusion that about 5 per cent. of the young men in our colleges are syphilitic.

Tests for syphilis applied to all patients admitted to Bellevue Hospital and to the Presbyterian Hospital of New York gave a percentage of 20 to 25 syphilitics. In the Peter Bent Brigham Hospital in Boston, an institution without a service for venereal diseases, 15 per cent. of the patients were found to react positively. Hospital figures of this character, of course, are unreliable and do not represent a cross section of the population.

The New York Health Department, in the study of men and women either

awaiting trial or serving in a penitentiary, a work house or a reformatory, including, of course, a large number of prostitutes demonstrated 25 per cent. to be syphilitic. No conclusion can be arrived at as a result of studies of the degenerate and criminal parts of a population.

Pollitzer (American Journal of Obstetrics, May, 1916) places particular value upon the result of examinations of applicants for peddler's licenses in New York City among whom 8.2 per cent gave a positive Wassermann reaction. He makes due allowance for the fact that in any group under investigation many syphilitics may be Wassermann negative at the time of examination and arrives at the conclusion that "not less than 10 per cent, and not more than 20 per cent. of the population is luetic." After making due allowance for the fact that syphilis is more common among men than among women, in the ratio of 5 to 2, as evidenced by tests made upon applicants for treatment at dispensaries, he arrives at a ratio of syphilitics to the general population of approximately 10 to 15 per cent. Thus the scientific data is found to accord with the estimates made by syphilographers previous to the availability of the Wassermann test. Accepting a minimum basis of 10 per cent. of syphilis among adult males and 4 per cent. among females, there would be a total of about 3,000,000 adult syphilities in the United States.

The authenticity of scientific estimates of this character is scarcely to be impeached. The gross figures, conservatively stated, are astounding and appalling. While unscientific estimations were the only available criteria there was always a latent belief that these were beyond corroboration, were untrustworthy and merited prompt denial by those whose optimism and faith in the public morals led them to believe in their falsity.

The problem of syphilis now appears to be more serious. It is times that the truth was faced with frankness and determination. Legislation alone can not reduce the morbidity from syphilis. Contemplation of the enormity of the problem suggests that the solution can only be found in some fundamental and far reaching remedy. The utilization of drugs, either for prophylactic or therapeutic results cannot be depended upon as the primal agency in combatting this disease.

It is probable that medical schools and hospitals must reorganize their methods of instruction regarding syphilis their plans for treating it. The symptomatology of syphilis should no longer be taught by the professors in several departments, but the entire subject should be placed in charge of a single teacher, as is now being done at the University of Michigan. Hospitals must sooner or later recognize that their work is not complete when the syphilitic patient is relieved of his troublesome symptoms, but that there is responsibility for the cure of the constitutional infection after the proper diagnosis has been made. Wards for venereal diseases are a public necessity, as are clinics adequately fitted for the treatment of this disease. Probably no part of our hospital or dispensary systems is so open to criticism as are their inadequate arrangements for the diagnosis, observation and cure of symptomatic and asymptomatic syphilis. The medical profession at least, is in possession of the facts and should be the leader in promoting its own education for the palliation of this scourge, the elimination of which belongs to some Utopian period.

## RUPTURE OF UTERUS UNDER PITUITARY EXTRACT

Five cases of fatal rupture of the uterus are reported by V. Marcondes from the Maternity at Sao Paulo, Brazil. The women had all been attended by midwives who gave the pituitary extract, and they were practically moribund when brought to the hospital, Dr. Marcondes protests against the use of pituitary extract by the ignorant, urging that midwives should be prohibited from using such a powerful remedy. In Spain this has been done. The Revisa de Medicina y Cirugia of Havana has also published a recent article warning against the use of pituitary extract in ignorant hands. The writer, Arteaga, reports a

case in which the midwife had given large doses of pituitary extract without effect and he found transverse presentation, but he was able to perform version and the woman escaped mishap. Rio physicians have also recently been discussing the dangers from abuse of pituitary extract. Marcondes exclaims in conclusion that in lay hands it is actually a social scourge. His article appeared in the Annaes Paulistas de Medicina e Cirurgia, 1916, ly, 84.

## THE FUNCTION OF THE PITUITARY BODY

William Boyd (Journal A. M. A., January 13, 1917) briefly reviews the functions of the two lobes of this structure, particularly those of the posterior lobe. He also points out that the histology of this lobe is not such as to suggest that its secretion reaches the blood stream directly through its own blood supply. It is well known that the infundibular process extends into the posterior lobe in some animals and that globules of the colloid secretion of the lobe make their way into the infundibulum. It has further been proved that the spinal fluid produces effects, when injected, which are similar to those produced by tracts of the posterior lobe. These observations have pointed to the infundibulum, third ventricle, and spinal fluid as the course by which the secretion finally reaches the blood stream. He cites a case which seems to support this view in a striking manner. The patient sufferred from symptoms characteristic of the lack of posterior lobe secretion and on autopsy it was found that there was no pathologic lesion of this lobe, but that a tumor encircled its stalk, completely cutting off its communication with the third ventricle by way of the infundibular process.

### NORMAL BLOOD PRESSURE FOR ADULTS

Woley, after studying the blood pressure in a thousand persons, found that the systolic average for males at all ages was 127.5 mm., while that for females of all ages was 120 mm. He found the average in persons from 15 to 30 years to be 122 systolic; from 30 to 40, 127 mm.,

and from the ages of 40 to 50, to be 130 mm.

Lee examined 662 young men at the average age of 18, and found that the average systolic blood pressure was 120 mm., and the average diastolic 80 mm. Eighty-five of these young men, however, had a systolic pressure of over 140. It is not unusual to find that a young man who is very athletic has an abnormally high systolic pressure.

Barach and Marks, in a series of 656 healthy young men, found that the systolic pressure was above 150 in only 10 per cent., and that in 338 cases the diastolic pressure, read at the fifth phase, did not exceed 100 mm. in 96 per cent.

Nicholson believes that with a low Eystolic pressure and a large pressure pulse there is probably a strong heart and dilated blood vessels, while with a low systolic pressure and a small pressure pulse the heart itself is weak, with also, perhaps, dilated blood vessels. If there is a high systolic pressure and a correspondingly high diastolic pressure, the balance between the vessels and the heart is compensated as long as the heart muscle is sufficient. He believes the velocity of the blood in the blood stream may be roughly estimated as being equal to the pressure pulse multiplied by the pulse rate.

Faber examined 211 obese patients, and in 182 of these there was no kidney or vascular disturbance. In 52 per cent. of these 211 persons the systolic pressure was under 140, while in the remaining 48 per cent it ranged from 145 to 200 mm.

#### BLOOD PRESSURE IN CHILDREN

May Michael, after a study of the blood pressure in 350 children, came to the conclusion that the blood pressure in children increases with age, principally because of the increase in height and weight, as she found that children of the same age but of different weights and heights had different blood pressure.—

J. A. M. A., 7-29-16.

BAD TEETH AND THEIR EFFECTS ON EFFICIENCY Carl E. Smith (Journal A. M. A., Jan.

13, 1917) presents some striking figures as the result of 30,000 mouth examinations, made on 17,000 Americans and 13,000 foreigners. Only four per cent of the whole number had clean, healthy mouths, nine per cent were without cavities, and ninety-six per cent. required some form of dental service. In the total number of cases about 60,000 cavities were found, 40,000 teeth had been extracted, and 18,000 extractions were necessary. The presence of a cavity in a tooth is a source, in his experience, both of inefficiency and of actual monetary loss to a laboring man, for an aching tooth impairs his working capacity and may cause him to be absent from his work on several occasions. If neglected it will certainly lead to the formation of an abscess or to the involvement of other teeth and to the impairment of digestion through interference with proper mastication. It is a conservative estimate to state that each diseased tooth will cost the man two dollars, through waste of time and cost of repair. The trouble should not be attacked by examination of adults and restoration of their mouth to a normal state, but rather it should be attacked from a preventive standpoint. This prevention should not be delayed until the time of routine sehool examination, but should antedate it to the extent of beginning in infancy with the eutting of the first tooth. In New York city eighty per eent of the failures of promotion of children in the public schools could be laid to defective teeth. The vast importance, from an economic aspect, of the proper prophylactic and therapeutic care of the teeth is emphasized by the figures just cited.

In pyorrhœa alveolaris we have a definite disease entity caused through infection by badly maintained and diseased teeth. The specific organism believed to be at the bottom of this condition is an amæba. In well developed eases the symptoms are rather characteristic. There is the formation of pus pockets about the teeth, and the exudation of pus therefrom, loosening of the teeth and their loss, bleeding of the gums, recession of the gums, and at times even the hypertrophy of the gums at the gingival

margin. But these are rather the later and end symptoms. There is then little doubt as to the nature of the condition but a great deal of difficulty in treatment and in effecting a cure. To be of value the recognition of this condition must occur early before much destruction has been accomplished. Suspicion should be aroused in the direction of this condition when pus cells are found in the scrapings from about the teeth roots. It is in the early stage that prophylactic measures and treatment can be best instituted. It is in this stage that patients are most likely to consult the physician for the indirect or general results such as general anemia, malnutrition, intestinal and digestive disturbances, arthritic symptoms, and the like. Perhaps the only adequate method of prevention of dental disturbances is the frequent periodic examination of the teeth both by the naked eye and by bacteriologic means.—N. Y. Med. Jour., 2-3-17.

# TONSILLECTOMY DURING THE COURSE OF ACUTE RHEUMATIC FEVER

Morris (Jour. of Laboratory and Clinical Medicine, Dec., 1916) reviews briefly the literature dealing with the relationship between tonsillitis and acute rheumatic fever. In particular he discusses those articles which deal with operative treatment of the tonsils in such conditions. The general tendency has been to defer operation until the arthritic condition, as well as the tonsillar, has quieted down. Morris, however, believes that there may be certain dangers in waiting. If the tonsils are the source of infection there is not only the possibility but the probability that secondary involvement of the heart may occur. As a result of his limited experience he believes that when there are no longer any visible indications of an acute inflammation of the tonsils, the danger of allowing them to remain is probably greater than that of removing them. Before operating, he advises the use of salicylates in full doses so as to relieve the pain in order to allow more freedom of motion.

### THYROID DISEASE AND SEPTIC TONSILS

Thyroid disturbances, including typical Basedow's disease, are associated with septic tonsils so often and show in some cases such marked improvement in all the symptomatic conditions after tonsillectomy that the relation of cause and effect is proved as more than a suspicion. And persistent thymus with status lymphaticus has been demonstrated in so many instances as associated with the need of tonsillectomy that coincidence does not satisfactorily explain it.—Wm. S. Tomlin in the *Indianapolis Medical Journal*.

# HEART DISEASE IN INFANCY AND CHILDHOOD

Cases of rheumatism in children are treated by Goodman in the following manner: During an acute attack give the patient sodium salicylate, if this is not well borne by the mouth, use it per rectum. If there is already an accompanying heart condition use fluidextract of digitalis and spartein sulphate in rather large doses. If there is no accompanying heart complication, give smaller doses and examine the heart at frequent intervals to observe any occasion for increasing the dose. The children are kept in bed until all vestige of pain has disappeared, and the heart sounds have improved or become normal. The children's guardians are then warned of the socalled "growing pains," and the moment the pains reappear, or difficulty in walking is noticed by the parents, the children are at once placed in bed and the salicylate given every hour or two until the pain has disappeared. Give the salicylate, after an attack, two or three times a day for two weeks longer. Children with rheumatism should not be subjected to extremes in temperature. Rapid evaporation from the surface of the body should be avoided. In summer light cotton underwear should be used, and in winter a mixture of wool and cotton will be found more serviceable, as it is not so heavy as the wool alone, and, absorbs perspiration more readily than the all wool garment.

The children should receive daily lukewarm baths, never hot and never cold

followed by a brisk rubbing with a coarse bath towel. If there exists any adenoid growth or enlarged tonsils they should be removed. When the children come in from the street after play their stockings should be removed, their feet rubbed dry, and a fresh pair of stockings sub-Damp dwellings should be stituted. avoided. Parents with children subject to rheumatism should be told that they may not live on the ground floor. sleeping room should be sunny and have a southern exposure, if possible. In reference to diet: Beef should be avoided, especially beef juices or extracts; spiced and fried foods should not be permitted. Sweets, such as candy and pastry, should be forbidden, and, above all, coffee, tea and alcohol.

### Surgery

#### THE RECURRENCE OF GALL-STONES

Of much interest will be found the article in this issue, on the Recurrence of Gall-stones, by John B. Deaver, based on an experience than which few surgeons, living or dead, have had larger.

Recurrence of symptoms, requiring a second operation, developed in a little over 4% of his cases. What is especially significant, it seems to us, is that most of these recurrences (and in his latest, tabulated, series, all of them) were in patients in whom eholesystostomy, not cholecystectomy, had been performed. Secondary operations were required in some cases for adhesions, but in most cases for stone; and in 60% of the cases the secondary operation was required within one year after the first. We are quite prepared to accept Deaver's conclusion that in the majority of these cases the stones were not new formations, but had merely been overlooked at the first operation.

This study adds another convincing argument to the desirability of the primary removal of the stone-bearing gall-bladder. Comparatively few are the anatomically and physiologically normal gall-bladders containing stones that give symptoms. Even those that appear thus normal at operation might better be re-

moved, in our opinion; and as a rule, all the others should be. A gall-bladder sick enough to be operated upon is too sick to be left in. There are, of course, cases in which exceptions should be made to such a rule, viz., in the occasional aged patient and in the very debilitated individual, where only the minimum surgical shock should be inflicted; in the presence of a long-established cholemia; in certain cases where prolonged drainage is desirable, provided that drainage of the ducts through the gall-bladder is not made impossible (as it often is) by stricture at the bladder neck. In the hands of an inexperienced surgeon, too, a cholecystectomy may be fraught with grave dangers, and for him cholecystostomy is much the wiser course. For the experienced abdominal surgeon, however, the removal of the gall-bladder, albeit by no means always a simple procedure, possesses no difficulties beyond his technical skill.

As Deaver repeats, "Under good conditions the mortality figures of the two operations do not greatly differ." We are inclined to believe that the greater mortality of cholecystectomy which some surgeons emphasize as an argument in favor of primary cholecystostomy is attributable, in part at least, to the technic employed. If a straight vertical incision is carried up to the costal margin itself; if the gall-bladder (emptied, if need be, by aspiration) is seized with an ovarian ring clamp and, with much of the liver, is thus dragged out of the wound, if the cystic vessels then exposed to view or to touch are at once tied: if. after protecting the field with packings the visceral peritoneum is incised from the cystic duct to the bladder fundus. and the serous envelope is peeled back, the gall-bladder can be thus removed bloodlessly, with perfect surgical toilet (with no raw liver surface requiring tamponade), and as a rule, no drain will be needed other than a small tube led down to the ligated duct to provide against leakage or into the open duct when biliary drainage is planned. With such technic the mortality of cholecystectomy, in our experience, is very small. To be sure, this method cannot be pursued when dealing with gangrenous gallbladders and in other cases where the

physical conditions make it inapplicable. But by whatever method the gall-bladder is removed by experienced surgeons, the mortality of the operation is not high; and if we include in the figures for cholecystostomy the deaths following secondary operations made necessary by the failure to remove the gall-bladder primarily, the mortality of cholecystostomy may be found to be even higher than that of cholecystectomy in the larger clinics!

Secondary operations on the bile tract are most often made necessary by symptoms produced by a diseased gall-bladder left in situ, and by those arising from a stone or stones also not removed at the primary operation. As important, therefore, as the radical treatment of the gallbladder condition is the determination that the ducts are free from concretion. For this mere palpation, which is important, is usually not sufficient. cystic, hepatic and common ducts should also be explored with a large probe or sound or small scoop—into the primary branches of the hepaticus and well into the duodenum. If the duct does not admit the sound or if, being dilated, it may permit the sound to pass by a stone, it should also be split open. Occasionally the hepaticus is crowded with small stones or bile sand. In such cases, especially, this duct should be freely drained; and Deaver points out an important lesson in urging the need of prolonged drainage in some cases of duct lithiasis.

We must be prepared to recognize, however, that, in a fortunately small number of cases, there is a re-formation of stones after a complete operation. These may form in the ducts (or gall-bladder after cholecystostomy). We incline to believe that in some cases they originate in the liver.

Deaver, with others, regards infection as the etiology of cholelithiasis, and surely infection plays an important role. It seems to us, however, that there are other potent factors. Precipitation of the inorganic salts of the body occurs elsewhere, e. g., in the urinary tract, in individuals having recognizable metabolic diatheses. Lime salts precipitate in certain necrotic tissues without infection.

The peculiar deposit of lime and other mineral salts that is so often found under the inflamed subdeltoid (subacromial) bursa in or about the supraspinatus tendon, is not produced by infec-Biochemical disturbances probably also, in part at least, responsible for gall-stones. The studies of Henes, Rothschild and others have shown that cholelithiasis is usually associated with a hypercholesterinemia. Typhoid fever is generally given as a frequent cause of gall-stones but, in our experience, very few patients with cholelithiasis have had typhoid infection. Gall-stones are much more common in women than in men, and in many cases the symptoms are referred, in origin, to a pregnancy. During pregnancy the cholesterol content of the blood is much increased!—W. M. B. Editorial in A. J. S., Feb. 1917.

# BLOOD TRANSFUSION SIMPLIFIED

Deductions from nineteen cases; eleven human and eight on the dog. J. T. Nix, Jr., New Orleans, La., New Orleans Medical and Surgical Journal, De-

cember, 1916, p. 435.

An apparatus was devised consisting of two extra large glass syringes (200 c. c.) one of which was to contain sodium citrate solution and the other to aspirate or inject blood. The blood syringe was connected by a short rubber tubing to the shaft of a Y-tube. One arm of the Y-tube was connected with a special glass transfusion tip which was inserted and tied in the vein of the recipient. The other arm of the Y-tube was connected with one arm of a T-tube. The shaft of the T-tube was connected with the citrate syringe, and the distal arm of the T-tube was connected with another transfusion tip which was inserted and tied in the vein of the donor.

The donor's blood is mixed with citrate as it is extracted and the tubes and connections are constantly kept bathed with citrate from the syringe. The apparatus is supported on a metal frame,

all of which can be boiled.

When disconnected, single transfusion can be done with either syringe and the separate transfusion tips.

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#### A VACATION!

A. P. Butt, Davis, W. Va.

In response to your request for some "Vacation Notes; Medical or Otherwise" will say—

I don't know that I ever had a real

vacation.

My idea of a real vacation would be to leave home without a time piece, with little or no idea of where I was going or when I was to return.

To seek some place far removed from phones and telegraphs, to eat when I was hungry, sleep when I was sleepy, get up when I could sleep no more.

Last summer I spent three days in that part of Pendleton County known as

the "Smoke Holes."

One of the wildest and most beautiful spots I know of. It should have been a sort of vacation but I worked so hard elimbing mountains after squirrels, wading streams, cutting wood, etc., that I came home worn out. On the last day after the tent was packed there was a wait of twenty minutes for the wagon to come after our camping outfit. During this time I lay on my back on the warm ground gazing at the sky and a large hawk soaring above and thoroughly enjoyed myself. This twenty minutes I regarded as a real vacation.

My last medical excursion was to New

York with a very short stop in Baltimore and Philadelphia.

At the Hopkins I was interested to note their continued faith in radium. In the nose and throat, urological and gynecological departments I found they were using it constantly.

"Why mention this? Does not every one believe in radium and x-ray," I

hear some one say.

In reply will say I have read nothing and heard little concerning either lately.

This I do know, that those patients who have come under my own observation after having taken the radium treatment have not done well. The number of cases were very small. Nearly all of them took it in good time, none were benefitted.

This has also been the experience of a Philadelphia surgeon with whom I talked. Not only this, but several cases he knew of that were almost positively made worse. His explanation was that the dosage not being known, an insufficient amount might actually stimulate the growth. I saw Dr. Burns removing the glands in a case of earcinoma of the penis. The patient had been on the radium treatment for some time and was so very much improved that it was not thought necessary to remove the penis.

thought necessary to remove the penis.

I was much impressed with Dr.

Crowe's tonsil work. By far the best I
have ever seen. He does a most com-

plete dissection, going down almost as far as the epiglotis. Ties all the vessels, uses no snare. The work he does would be impossible without the use of a special apparatus for the anesthesia and a trained anesthetist. It is done about as one would dissect a wen from the head.

The first surgeon I saw in New York was Dr. Sharp at the Polyclinic Hospital. He is certainly doing some beautiful work on the nervous system. How much benefit is another question. In some instances it looked like an attempt to defeat the law of the survival of the fit-His first case was one of brain tumor on which a decompression operation had been previously done. Tumor was found to be too large to take out safely. Next drainage for hydrocepha-Says he has had 46 cases wth 14 lis. deaths. He s also dong some work on poliomyelitis victims. Anastomosing nerve roots shortly after emergence from the cord.

I had been asked to see Polak of Brooklyn. I found him a most interesting man and competent surgeon. I had the pleasure of spending several hours with him owing to the courtesy of Dr. Babcock of Philadelphia. Like Joseph Price, he makes it very plain to you that by preference he is a gynecologist and obstetrician, but that he is being forced into abdominal surgery. Of course he blames this on the general surgeon. only saw him operate upon one patient, hepatic and common duct stones. Fowler position which gave a most excellent exposure. His operative treatment may be of interest. Immediately after operation adrenalin, morphine gr. 1-12 every four hours as a preventative of pain. All the water the patient wants. times a couple of ounces of olive oil. This he thinks aids in elimination of ether. A rectal tube is inserted and a five-pound bag of sand placed on the abdomen. If I remember correctly nothing is done to move the bowels. will move of their own accord in five or six days. He showed me a large number of cases recently operated and I must say they all seemed to be doing fine. He strongly advises against much meddling in certain acute pelvic inflammations. Showed me charts where a digital examination had elevated the temperature. Believes these patients do better on the roof with forced feeding. Certain cases of puerperal infection where drainage seems deficient are propped up and a tube left in the uterus. Through this antiseptic solutions can be run if desired.

Plenty of work of an excellent character was being done at the Post Gradu-

ate Hospital.

I found Boldt using rather heavy doses for his spinal anesthesia; also preceded by morphine. The anesthetist was having a great time to be sure the patient was breathing. I suggested to her that she use the Babcock plan of a wisp of cotton fastened to the nose with collodion.

Robert Morris was to me a most interesting character. As you know he does most of his work with only scissors and needle. Very quick, yet without undue haste. It seemed to me his exposure of the liver ducts was a little better than anything I had seen. I saw him but one afternoon, but came away with the impression that he was a great man and a great surgeon.

Albee was the man I particularly wanted to see. As with all men who have made names for themselves, he has worked out a superb technique. Knows just exactly what he wants to do and how to do it. He is certainly very skillful in his use of the motor saw. Good as his work is I could not but feel that it was not up to the Murphy standard.

The only thing I saw of special interest at Belvue was a series of prostatic abscesses being operated supra-pubically.

No deductions as yet.

Two cases at different hospitals of tubercular peritonitis were operated. Both were women and I was surprised to note that no special effort was made to reach and eradicate the focus of infection. One case operated by Dr. Downs at St. Lukes was acute, apparently of only five days duration. The first case of the kind he had ever seen. While I think a more extensive operation would have jeopardized her life nevertheless, it should have been done.

I recall a case of my own operated about 13 months ago. The young woman

had been bedfast for months, double pleurisy as a complication. I reasoned thus: This girl is of no use to herself or family. I will endeavor to remove the focus of infection. If she dies, she dies. I did remove it, both tubes, and she did almost die from the shock. However, she has apparently recovered; certainly she has more than regained her lost weight and appears to be in her usual health.

One operator, Dr. Campbell of Brooklyn, said many of these cases were incorrectly reported as cured when they were merely operative successes. If looked up after 5 years most of them would be found to have died of tuber-

culosis in some form.

Dr. Campbell recalled the fact that he was unable to give any satisfactory explanation as to the reason many of these cases recovered when nothing was done save opening the abdomen. Some operators attribute it to the entrance of air, some operate only on sunny days and expose the viscera to the sun. One I saw draw the abdominal walls up and down to try to get in more air.

Mayo's idea looks by far the most reasonable to me. He says the fimbriated ends of the tube are kept apart by the ascitic fluid. Opening the abdomen and withdrawal of the fluid allows these ends to fall together and adhere. Thereby the infecting material is shut off and recovery of the abdomen and its vicera

other than the tube, cnsues.

I met Haubold at Harlem Hospital. He was performing his first operation in some nine months. Has had a terrific infection of his right arm and hand. He hopes for 75% return of function. Good to be sure, but had enough for a surgeon and an expert fencer. Downs, at St. Lukes, is doing good work. He is most emphatic in his belief in the two stage operation for prostatics.

From what I saw and heard New York is tying off the appendix, not burying the stump. Lilicnthal has made some investigations and as you know Wyeth made some years ago, which seem to show that this is the best way. As I have almost never done anything else I was glad to find that I was strictly in it. So much for the good work, what of the other? There is plenty that is not good.

At a certain hospital the surgeon-inchief, a very accomplished operator, did a couple of operations, made his excuses and left. His first assistant did a couple and departed, after saying to me, "A couple of hours of this makes me tired." Then the third mcn down the line took Whether they were students or interns I do not know. Certain it is they were working for the experience and were slicing away at a great rate. At one place where this sort of thing was going on, they were running three tables. At this place the surgeon who had not left the building, came back and stepping up to me said in an aside, "Just look at the fellow doing the very thing I told him not to."

I found the surgeons I met not averse to talking of the financial side and as was to be expected, different views were expressed. A Philadelphia surgeon said in effect that most of his practice was referred by physicians. That taking them all in all he found them square and wanting to do the right thing. Some of course were different. He knew a few who were not, as soon as they called him on the phone he knew they had patients whom they would represent as unable to pay anything and he knew these repre-

sentations were not always truc.

The New York man said he got but few patients from the physicians around him, he had no confidence in them; they were not square. As an illustration he related the following: A doctor called him on the phone and told him a lady was coming for operation and he had informed her it would cost her \$50. surgeon told him he would fix the fee when he saw the lady. She came and informed the surgeon that she wanted the best room in the hospital and two special nurses. She mentioned the fact that her physician had told her the surgeon's fee would be \$50. He informed her his fee would be \$300. Upon her demurring he told her that if she would enter a ward and be operated before the students he would do it for nothing. She did not like this idea and soon consented to pay the \$300. I immediately asked him how he treated the family physician. He replied that his plan was this: When the patient entered the hospital

his family physician was notified by letter of his whereabouts, told on what day the operation would take place and invited to be present, and also to call and see the patient. After the operation he was notified as to what had been done and certain lines of treatment suggested. Both surgeons have large practices but seem to work alone different lines.

I spent but two days in Philadelphia. Saw Babcock in the morning, Deaver in afternoon. I have written so often in the Journal of their work that I shall not bore you again to any great extent. With Dr. Babcock I saw an interesting case brought in from outside the city A very old woman, decrepit, life's sands almost run. Senile dementia I suppose. This is out of my line. Anyway her physician for some unknown reason thought she needed a hysterectomy to restore her mental faculties and brought her to Dr. Babcock for that purpose.

A catheter removed her pelvic pathology and she was sent home to die, let us hope in peace.

Deaver's first ease was what Price used to call "surgical junk." The patient had had a gastro-enterostomy some time previously without relief. Deaver, exclaiming "seeing is believing," opened up her stomach large enough to insert a hand. Nothing, gall bladder seemed entirely normal, but was removed. Now Deaver was doing exactly right, but why is it we can't do some of that sort of surgery in this country without criticism?

As usual I worked very hard while I was away. Coming back from Philadelphia on the boat I went to bed at 6 in

the evening and awakened at 6:30 next morning.

Perhaps in some far-off, dim and distant day I shall have a real vacation on the "Beautiful Isle of Somewhere," if so, I shall try and write you a full description. Perhaps I shall delay so long that some doetor will pick me up, take me like the above mentioned old woman, to some specialist and have some organ, likely my brain, which may be as useless as her uterus, removed.

Anyway "so long" for the present.

ADDRESS DELIVERED BEFORE THE EASTERN PANHANDLE MEDICAL ASSOCIATION AT MARTINSBURG, W. VA., MARCH 7, 1917.

By W. W. Brown, President of the Association.

Gentlemen:-

It has been said "Some men are born great, others achieve greatness, whilst others have greatness thrust upon them."

The medical profession was born great. Everything that has for its being the prolongation of life, the alleviation of pain, the restoring of sight to the blind, ministering to a mind diseased, is heaven born; it was eonceived by the mercy of God and delivered by the ingenuity of man for the perpetuation of the race. It has the commendation of the Christ, who left the command to heal the sick, with the promise that they who minister to the sick would be placed upon His right hand in His Father's Kingdom.

The medical profession has achieved greatness.

Medicine as an empiricism is of great antiquity. Before Moses and centuries before Christ, the Bible speaks of the healing art, and Moses was likely the first authority of note to write on sanitary medicine. The rite of circumcision was practised by him, and before him, not altogether as a religious rite, but as a sanitary measure also.

The American Indian squaw and the slave woman of the south had an intelligent conception of healing herbs. In fact, the desire to heal and be healed is instinctive and intuitive not only in the

human but the animal as well. Originally, medicine was likely found only in the herb,—in plant life—but soon the skies, the earth and the sea were searched for remedies, the excrement of birds and animals, the venom of reptiles, and everything else that fancy or genius could

suggest were tried.

Ancient medicine was a mixture of mysticism, witchcraft and humbuggery —and we are not free from it altogether yet. The literature of ancient medicine was sacred. The Egyptian priest was its sole custodian. The same veneration was shown it in early Greece, although Hippocrates, the father of medicine, tried to rescue his child from the control of the priesthood. The same superstition existed in the Dark Ages when medicine fell into the hands of ignorant monks, who taught that all power, wisdom, and knowledge belonged to the church; for instance, if a new remedy were needed, the church would reveal it. Exceedingly bold indeed was the spirit who ran counter to this teaching, as he would probably lose his head for his pains. In keeping with the spirit of this age, Servetus and his manuscripts were burned at the stake through the influence of John Calvin, on a mere quibble, because he chose to think and act. Under this system, medicine, the allied science, and almost history itself lay dormant for a thousand years. Nor was it until efforts began to be made to separate state and church and the spirit and knowledge of Free-Masonry began to spread, that light broke, men began to think, and modern medicine took its first step.

The discovery of America was another link in the chain of progress, as our country is the birth place and dwelling place of great inventors. There is no telling what inspiration of thought is given men through our liberal system of government, nor what is due to our leaders of forethought and vision-men like Thomas Jefferson, Abraham Lincoln and "We hold these Woodrow Wilson. truths to be self-evident, that all men are created equal, that they are endowed by the Creator with certain inalienable rights, that among these are life, liberty and the pursuit of happiness," said Thomas Jefferson. Said Abraham Lincoln, "That this nation shall under God have a new birth of freedom and that government of the people, by the people and for the people shall not perish from the earth." Says Woodrow Wilson, "Governments derive all their just powers from the consent of the governed." I sometimes think we are in the millenium age, that Christ is here, not in visible form but in the great inventions and methods of taking life and saving it, as well as in the triumphant march of a progressive democracy, modeled after our form of government where the people and not the Ruling House of Romanoff or Hohenzollern rule.

War has its horrors but war has its compensation. Mars mutilates and kills, but Aesculapius heals. Mars carries the sword but Aesculapius the "Balm of

Gilead."

So expert have the surgeons been on the battlefields, that if the soldier is not killed outright, they will come pretty near saving his life. These may be some of the "greater works" promised. These battlefield emergencies and wonders.

The progress of medicine was still slow for it was not until the seventeenth century when William Harvey discovered the circulation of blood that physiology became a dynamic science. The greater discoveries have been made, however, during the last fifty years: the machines of war, the battleships, submarines, and the knowledge of the power of electricity. Chloroform was first used in 1847 and antiseptic, sanitary and preventative medicine are products of our day.

Medicine has always been a rationalism; Hippocrates began with the theory that diseased action was caused by impurities—humors, he called them—and the proper thing was to get rid of them. Galen followed and strengthened this theory with his declaration, "No one can be saved unless nature conquers the disease and no one dies unless nature

succumbs."

The medical profession has had great-

ness thrust upon it.

The ancients began by creeting temples to their God, Aesculapius, and monuments have ever since been erceted to men of skill and genius—not so much in cold marble, but in testimonials which

will live as long as life lasts or gratitude remains—by linking the name of the individual with his discovery, for instance: the "Circle of Willis," Bright's Disease, Dover's powders, Mayo's Method, Hawkins' operation, etc. But it is to the profession at large and not to the individual that the greatest monuments are being built. In the vast sums given by philanthropy and the state for the erection and maintenance of hospitals and institutes for research work; in the standing the profession has in the affairs of state and in the honors that society have been thrusting upon it.

The doctors' responsibility.

A doctor is not a mere vender of pills; that member who thinks his mission in life is to make the dollar and get it, has not caught the vision. A doctor is at least supposed to be a component and constructive member of society, a director of its energies, the guardian of its health and the conservator of its morals, combating evil, correcting errors, and instructing ignorance. Twenty millions of our people (one-fifth of the population) are believers in a drugless healing; three million Christian Scientists with one thousand churches, and a number of others of like false doctrines are among us. In such instances a physician is and should be a watchman on the walls. Not that it may bring corn to his mill because he is a watchman. Unless a doctor is a great citizen, he cannot be a great doctor. I think a doctor should enter politics, particularly in these times of riot, mad socialism, and more particularly when efforts are being made to enact compulsory health insurance, etc. A crooked piece of legislation, in my opinion, even if the A. M. A. does advocate it.

I trust, gentlemen, that harmony and good cheer will prevail in our Association as we know that harmony is the strength and support of all institutions and should be in this association.

THE CAUSES AND TREATMENT OF ARTERIO SCLEROSIS.

By Dr. Chas. O. Grady, Charleston, W. Va.

Read at State Meeting, Wheeling, W. Va., May, 1916.

The question of longevity is largely a vascular problem and the trite saying "That a man is as old as his arteries" is quite true. Arterio Sclerosis is one of the principals in the fatal triad Cardio Vascular Renal disease which is devastating the middle aged of twentieth century civilization. The condition of the heart and kidneys must be taken into consideration in any rational scheme of treatment. Hypertension is given as the first cause of Arterio Sclerosis, but the cause of hypertension itself is quite obscure. Whether it is the over-secretion of the adrenals or under-secretion of the thyroid, has not been absolutely determined. However, Arterio Sclerosis has been produced experimentally in animals by injection of Solution of Adrenalin.

Age enters as a cause as most cases are found after middle age. However the very old often are found with soft arteries and their "Vital Rubber" as Osler calls it, is in good working order. The remarkable case of Thomas Parr who died at 152 years and whose arteries were examined by Harvey is given as the singular instance, they were free from any evidences of degeneration.

In regard to sex, men are naturally found more prone to hardening of the arteries than are women from their habits and from the more laborious work and their greater exposure to the elements, as soldiers and their other occupations. The question of race seems not to have much effect, although in this country there are many beautiful cases from a clinical point of view occurring early in the negro race from the combination of causes of hard physical labor and syphilis. Note the many cases of Aneurism we see in the middle aged darkies,

Certain occupations are said to produce hardening of the arteries, especially those of hard physical and mental

labor and those carrying heavy responsibilities. Lead workers and painters from the gradual absorption of lead in the system, develop hardening of the arteries, as do stevedores and men in other laborious occupations, bank presidents and heads of other financial institutions and large manufacturing establishments. from the natural mental wear and tear. Infectious diseases have been thought by some clinicians to cause hardening of the arteries. It is certain that syphilis is a frequent cause, as Osler has claimed that all Aneurisms under 30 years were due to this cause alone, while Thayer has shown how much more palpable are the arteries of those who have had moderately severe and severe typhoid fever, than those of the same age, who have not had this disease. Syphilis most generally attacks the large vessels and often the coronary arteries too. Certain intoxications from drugs and other substances have been given as frequent causes. Such causes are lead, tobacco, alcohol, tea and coffee are included in this list by many writers. In regard to alcohol, Cabot doubts very much whether it ever produces Arterio Sclerosis. Warfield says that tobacco used in moderation has no ill effects. It is, however, true that tobacco, tea and coffee, all raise the blood pressure temporarily, while alcohol lowers it.

Over-eating has been given as a cause by many writers, and from the high readings of many corpulent, patents of the Spygmamanometer and the readiness with which the readings reduce when these patients are put on a strict diet, there can be no doubt of it. So that the remedy of the Cardinal Borromeo, fasting, is not amiss in this affection.

Other causes are excessive muscular work, athletes, oarsmen, and others who train for long periods and bring on hypertension. Worry has also been given as a frequent cause, and lastly Renal disease itself is a frequent cause of Arterio Sclerosis and must be differentiated from the other in order that the best treatment may be given. The urine must be carefully studied and examined for albumen and casts, and the mistake must not be made of treating the arteries when the kidneys are alone to be considered.

Remember also, that in many cases in old age differentiation will not be of much value as you will find the triad all working together.

The treatment of Arterio Sclerosis can be considered under four heads, Dietetic, Physical, Medical and Symptomatic.

In the question of diet, authorities differ, many recommend milk and Karell recommends it exclusively for long periods, while Scandola believes that Arterio Sclerosis is caused by a retention of calcium in the system, hence he condemns the use of cheese, milk, eggs and many fruits, and recommends bread, potatoes, rice and meat. Warfield recommends the abstemious use of red meats on account of the excessive Purin forming substance contained therein. French physicians condemn the use of the red meats but allow white meats. Rumpf who has studied the question of Atheroma is inclined to believe in the retention of calcium theory and hence recommends a diet containing little calcium, as meat, fish, bread, butter, cream, sugar, potatoes, rice, cucumbers, weak tea or weak coffee. He also recommends the administration of Sodium Lactate to increase the Alkalinity of the blood and favor diuresis. Most clinicians, however, favor the use of milk and the method of Karcll should be carefully considered. It is used principally in Nephritic Arterioscerosis with a failing heart.

General abstemiousness in eating may be recommended in most cases unless in those who are losing weight. In the obese a reduction of the fats and carbohydrates will be found to be a great help.

The physical side of treatment is of great value, provided, the cases are not too far advanced. Walking is probably the best form of exercise and should be recommended in most cases, but not excessive distances. Golf is another form of exercise to be highly recommended as it occupies the mind as well. Fishing for the same reason is to be highly recommended while more active forms are swimming, canoeing, rowing and horseback riding moderately may be advised in certain cases where there is no cardiac insufficiency. Baths, electricity and massage can be advised in other cases. The Nauheim bath has been used advantageously in many cases, also the electric light bath, both of which will reduce the

blood pressure for several days.

The medical treatment is a very valuable aid for the relief of distressing conditions. The most universal remedy in this condition is Sodium Iodide which does good in all cases, and the dose need be only five grains three or four (3 or 4) times daily. It was first recommended by Huchard. There have been a host of other Iodine preparations used since. Other drugs for the reduction of blood pressure are Nitroglycerine, Sodium Nitrite, Erythol Tetranitrate and Amyl These are all classed as the Nitrite. Nitrites. Still others are thyroid preparations, Alkalies, Chloral, the bromides, Aconite and Veratrum Viridi. Of all these drugs Warfield prefers Sodium Nitrite one to three grains in water every four hours, the patient being watched Next he prefers Spiritus earefully. Atheris Nitrosi and Aconite together or the Spiritus by itself. He has used them over long periods with no bad results and with a satisfactory reduction of blood pressure. In advanced cases of Nephritic Arterio Sclerosis, Fisher's Solution can be highly recommended.

To consider treatment of symptoms and complications would cause too long a paper and these complications can only be named Coronary Sclerosis, Chronic Myocardial Insufficiency, Tachy Cardia, Arrhythmia, Adam Stokes disease Vertigo, Headache, Neurasthenia, Senile Epilepsy and intermittent claudication.

INFORMATION REGARDING THE CORRELATED ACTIVITIES OF THE COUNCIL OF NATIONAL DEFENSE AND THE ADVISORY COMMISSION, THE MEDICAL DEPARTMENTS OF GOVERNMENT AND THE COMMITTEE OF AMERICAN PHYSICIANS FOR MEDICAL PREPAREDNESS.

MEDICAL PREPAREDNESS.

Under existing conditions it is desirable that every physician as well as every other loyal citizen of America should be prepared to render active service to the Federal Government, remembering that the protection afforded by the govern-

ment has made it possible for its eitizens to enjoy liberty, peace and prosperity.

The avenues through which the most effective service can be rendered by members of the medical profession have taken definite and concrete form. Briefly, the plan is that all medical activities should cooperate with the Council of National Defense.

It would seem desirable at this time to state explicitely just what the Council of National Defense and its various agencies are.

The Council of National Defense was created by Act of Congress, August 29, 1916:

"Sec. 2. That a Council of National Defense is hereby established for the coordination of industries and resources for the national security and welfare, to consist of the Secretary of War, the Secretary of the Navy, the Secretary of the Interior, the Secretary of Agriculture, the Secretary of Commerce, and the Secretary of Labor.

That the Council of National Defense shall nominate to the President, and the President shall appoint, an advisory commission, consisting of not more than seven persons, each of whom shall have special knowledge of some industry, public utility, or the development of some natural resource, or be otherwise specially qualified, in the opinion of the council, for the performance of the duties hereinafter provided. \* \* \* \* \* \* \* \* \*

That the Council of National Defense shall adopt rules and regulations for the conduct of its work, which rules and regulations shall be subject to the approval of the President, and shall provide for the work of the advisory commission to the end that the special knowledge of such commission may be developed by suitable investigation, research, and inquiry and made available in conference and report for the use of the eouncil; and the council may organize subordinate bodies for its assistance in special investigations, cither by the employment of experts or by the creation of committees of

specially qualified persons to serve without compensation, but to direct the investigations of experts so em-

ployed."

A committee of distinguished physicians was asked to present to the President, names of medical men suitable for membership on the advisory commission. Dr. Franklin H. Martin of Chicago was selected.

The following statement was issued by President Wilson on the night of October 11, 1916, in announcing his appointment of the civilian advisory members of the Council of National Defense:

"The Council of National Defense has been created because the Congress has realized that the country is best prepared for war when thoroughly prepared for peace. From an economic point of view there is now very little difference between the machinery required for commercial efficiency and that required for military purposes.

"In both cases the whole industrial mechanism must be organized in the most effective way. Upon this conception of the national welfare the council is organized in the words of the act for 'the creation of relations which will render possible in time of need the immediate concentration and utilization of the re-

sources of the nation.'

"The organization of the council likewise opens up a new and direct channel of communication and cooperation between business and scientific men and all departments of the government, and it is hoped that it will in addition become a rallying point for civic bodies working for the national defense. The council's chief functions are:

"1. The coordination of all forms of transportation and the development of means of transportation to meet the military, industrial and commercial needs of the nation.

"2. The extension of the industrial mobilization work of the committee on industrial preparedness of the naval consulting board and complete information as to our present manufacturing and producing facil-

ities adaptable to many sided uses of modern warfare will be procured,

analyzed and made use of.

"One of the objects of the council will be to inform American manufacturers as to the part which they national can and must play in emergency. It is empowered to establish at once and maintain through subordinate bodies of specially qualified persons an auxiliary organization composed of men of the best creative and administrative capacity, capable of mobilizing to the utmost the resources of the country.

"The personnel of the council's advisory members, appointed without regard to party, marks the entrance of the non-partisan engineer and professional man into American governmental affairs on a wider scale than ever before. It is responsive to the increased demand for and need of business organization in public matters and for the presence there of the best specialists in their respective fields. the present instance the time some of the members of the Advisory Board could not be purchased. They serve the government without remuneration, efficiency being their sole object and Americanism their only motive."

As indicated above, the Council of National Defense therefore consists of six members of the cabinet, as follows:

The Secretary of War, chairman.

The Secretary of the Navy. The Secretary of the Interior. The Secretary of Agriculture.

The Secretary of Commerce.

The Secretary of Labor.

The Advisory Commission of the Council of National Defense consists of seven civilians appointed by the President. The members of the Advisory Commission are as follows:

Mr. Daniel Willard, president of the Baltimore and Ohio Railroad, chairman. Mr. Hollis Godfrey, LL. D., president of Drexel Institute, Philadelphia, Pa.

Mr. Howard E. Coffin, of Detroit, (who is also chairman of the committee on Industrial Preparedness of the Naval Consulting Board.)

Dr. Franklin H. Martin, of Chicago. Mr. Bernard Baruch, Financier, of New York.

Mr. Julius Rosenwald, vice-president of Sears, Roebuck & Co., Chicago.

Mr. Samuel Gompers, president of the Federation of Labor.

The two bodies meet in joint session at frequent intervals for the purpose of considering problems relating to national defense.

The executive activities of the Council of National Defense are coordinated and carried out through the medium of the Director of the Council of National Defense, Mr. W. S. Gifford, and the chiefs of the various departments represented by the members of the Advisory Commission. Dr. Frank F. Simpson is chief of the Medical Section of the Council of National Defense.

#### THE ADVISORY COMMISSION

The organization of the council and of the Advisory Commission provides that each member of the Advisory Commission shall gather about himself for the most effective coordination of the activitics he represents, a committee or board consisting of representatives of governmental departments on the one hand, and civilian members on the other hand.

The Medical Committee, of which Dr. Franklin H. Martin is chairman, consists of:

Wm. C. Gorgas, Surgeon General of the U. S. Army.

Wm. C. Braisted, Surgeon General of the U. S. Navy.

Rupert Blue, Surgeon General of the U. S. Public Health Service.

Col. Jefferson R. Kean, Director General of Military Relief of the American Red Cross.

Dr. Wm. H. Welch, member of the National Council of Research.

Dr. Wm. J. Mayo, chairman of the Committee of American Physicians for Medical Preparedness.

Dr. Frank F. Simpson, chief of the medical section of the Council of National Defense, and Secretary of the Committee of American Physicians for Medical Preparedness.

Many medical problems which have bearing upon the national defense are considered by Dr. Martin's committee and by the advisory commission and the Council of National Defense before being put into action by the governmental departments concerned.

COMMITTEE OF AMERICAN PHYSICIANS FOR MEDICAL PREPAREDNESS—ITS COM-

#### PONENT PARTS

#### NATIONAL AND STATE COMMITTEES

In April, 1916, the national committee was appointed by the joint action of the presidents of the American Medical Association, the American Surgical Association, the Congress of American Physicians and Surgeons, the Clinical Congress of Surgeons of North America, and the American College of Surgeons. that committee was delegated the responsible duty of formulating plans whereby the civilian medical resources of the United States might be ascertained and effectively coordinated for such purposes as might be required by the Federal government.

The national committee organized, selected a chairman and secretary and an executive committee, and appointed a state committee of nine strong men in each state of the union.

It is the fixed policy of this committee that all presidents and secretaries of the various state medical societies shall be members of their respective state committees during their incumbency in office. From the first it was contemplated that at the proper time the organization of committees would be perfected in each county of the country. That time has now come and county committees are being rapidly organized.

In each instance the state committees are expected to select the county committees and to supervise their formation.

### NAME AND PERSONNEL OF COUNTY COMMITTEES

It is the fixed policy of the Committee of American Physicians for Medical Preparedness that the various important medical interests and activities of each county shall be represented on the county committees. This is done for the purpose of coordinating the important interests and activities so that the medical profession of the nation may present a compact and effective organization for the purpose of aiding effectively in the national defense. In order that this

plan may be carried out with uniformity and precision throughout the country, the various state committees have been requested to have all county committees bear the following distinguishing name, to-wit, The Auxiliary Medical Defense Committee of County, in State. The state committees have also been requested to provide that the county committees shall include the following in their list of members:

1. All members of National Committee of American Physicians for Medical Preparedness, resident in the individual

county.

2. Members of the State Committee resident in or near the individual connty.

3. Representatives of the U. S. Army resident in the individual county.

4. Representatives of the U. S. Navy resident in the individual county.

5. Representatives of the U. S. Public Health Service resident in the individual county.

6. Representatives of the State Board of Medical Examiners residing in the individual county.

7. Representatives of the State or

City Public Health Service.

8. Ranking medical officer of the National Guard.

9. President and Secretary of the local Medical Officers' Reserve Corps Association, if there should be such an organization.

10. Deans of medical schools.

11. President and Secretary of the County Medical Society.

12. President and Secretary of any other important medical societies.

13. Medical Director of the local Red Cross Units.

14. Other representative medical men.

DUTIES OF COUNTY COMMITTEES

From time to time specific duties will be assigned to the various state and county committees. These duties will be in accord with the policy of the Council of National Defense, and should be executed promptly and precisely by those who are called upon to cooperate in this manner with the Council of National Defense.

The committees will call to their assistance those who have been appointed

field aides by their various state committees and such other physicians as they may desire to have cooperate with them.

Among the specific duties which the county committees are requested to perform at this time are the following:

First: That these committees cooperate with the National and State Committees of the Committee of American Physicians for Medical Preparedness in their efforts to gain needful information regarding the civilian medical resources of their own communities, and in their efforts to coordinate civilian medical activities for prompt mobilization in case of need.

Second: That they secure applicants:

(a) For the Army Medical Corps. If the President should call the full complement of troops already authorized by Congress, the regular army would need about 1,200 additional officers. If a million men should be called, a corresponding increase would be required.

(b) For the Medical Officers' Reserve Corps. If war should come, 20,000 to 30,000 medical reserve officers should be

enrolled.

(c) For the Naval Medical Corps which needs about 350 additional officers.

(d) For the Coast Defense Reserve Corps of the Navy. Several hundred high class reserve medical officers are desired.

(e) For the National Guard, such numbers as may be required to bring your local National Guard to full strength.

In the preparation for National Defense the first thing needed will be medical officers.

Physicians recommended for such service should be of the highest type. They should be free from suspicion of addiction to drugs or drink.

Medical officers who go to field duty should by preference be under the age of forty-five.

Third: That they cooperate, individually and collectively, with the Medical Department of the Army, Navy and Public Health Service and with the Council of National Defense.

Fourth: That they cooperate with the Red Cross in their efforts to bring that

organization to the highest point of efficiency.

COMMITTEE OF AMERICAN PHYSICIANS:—
ACTIVITIES ACCOMPLISHED AND IN
PROGRESS

On the 26th of April, 1916, the Executive Committee of the Committee of American Physicians tendered the services of the committee to the President of the United States. He expressed inimself as being pleased with the patriotic tender of services and regretted that existing laws did not permit the acceptance by the Federal Government gratuitous services, but stated that the matter would be referred to the Secretary of War and the Secretary of the Navy for the purpose of devising plans by which the good offices of the medical profession could be accepted and utilized to best effect by the Federal Government. He further stated that the plans would be referred to the Committee of American Physicians for comments and suggestions. The Executive Committee was permitted to make suggestions regarding the bill creating the Council of National Defense.

During the last year this committee and its various subsidiary bodies have been actively engaged in formulating and carrying out various activities in couformity with the general plans for national defense, which have been undertaken by the Federal Government.

The splendid work done by the various state and other committees was of such extent and value that the Council of National Defense at its first meeting requested the Committee of American Physicians to continue their various activities under the guidance of the Council of National Defense, and asked the Secretary of the Committee of American Physicians to act as chief of the Medical Scetion of the Council of National Defense. Since that time the various activities have gone forward with renewed energy.

Some of the activities which have either been completed or are well under way, follow:

1. Some 20,000 medical men selected from all parts of the country have been classified according to the training and the kinds of work which they do best.

2. An inventory of hospitals and other medical institutions is well under way.

3. It has been the fixed policy of the Committee of American Physicians to aid the American Red Cross in bringing its medical department to the highest point of efficiency. With that object in view, and in order to foster the spirit of cooperation, the members of the National Committee of the Committee of American Physicians accepted invitations to become members of the national committee of the medical department of the American Red Cross. In order further to promote the harmonious cooperation of the two organizations, most of the members of the various state committees of the Committee of American Physicians were also made members of the state committees of the American Red Cross. The various county committees will also be expected to cooperate in carrying out the plans of the two organizations.

4. The establishment of military training for senior medical students in a large percentage of the high grade medical

schools of the country.

5. The establishment of more effective military training for hospital groups for members of the Medical Officers Reserve Corps, for dental students, and

others.

6. The appointment of a committee for the standardization of Medical and Surgical Supplies and Equipment. The purpose of this work is to designate a list of articles essential to the successful conduct of civilian and military medical and surgical activities so that in the event that it should become necessary to curtail production all of the energies of the drug and instrument makers would be devoted to necessary articles rather than to those which are desirable but not essential. On this standardization committee are representatives of the army, the navy, the public health service, the Red Cross, the Council of National Defense and a number of the most distinguished members of the various specialties of civilian medicine. In their work of coordination and standardization this committee will take council with the manufacturers of the various supplies under consideration.

7. Much valuable information sup-

plied by medical and other observers who have worked in the war zones of Europe is being gathered and classified.

The presidents of important national medical organizations of the country have been requested to suggest to the medical section of the Council of National Defense the kinds of work which members of those organizations are best fitted to perform, and to suggest plans whereby their activities and resources might be utilized to best advantage. This request does not contemplate an inventory and organization of these resources. The purpose is that having received suggestions offered by the various organizations, those suggestions will be maturely considered and such as conform to the plans of the Council of National Defense and can be utilized to advantage, will be adopted. The various organizations will, in that case, be requested to cooperate fully and promptly in perfecting the plans of the Council of National Defense.

The foregoing memorandum embodies only a very small percentage of the problems now under consideration. It is neither wise nor desirable, however, to present them in detail at this time.

#### COLUMBUS MEETING

By J. E. Cannaday, M. D., Charleston, W. Va.

The K. & M. and T. & O. C. local surgeons met in Columbus the evening of February 21. A delightful dinner had been provided at the Elks Club by the railroad company. Dr. Hugh Baldwin was the toastmaster for the evening.

Thursday, February 22 at nine o'clock, the meeting was called to order in the assembly room of the Neil House. Among those in attendance from West Virginia were Drs. E. J. Mossman of Point Pleasant, J. A. Work and Black of Bluc Creek, W. A. McMillan, M. P. Malcolm and J. E. Cannaday of Charleston.

The usual subjects of fractures and the various traumas incident to railway travel and work were discussed. Dr. Hugh Baldwin gave an interesting resume of the progress of surgery during the year 1916. Dr. Chas. F. Bowen, the radiographer to the Grant Hospital, gave an interesting talk on the radiography of fractures. He thinks it best to show the X-ray plate to the patient and explain it to him. In other words be honest with your patient and thus secure his confidence. Always take a second picture after the surgeon has made his adjustments in order to properly check up the work.

Dr. Lewis Miller of Toledo, discussed traumatic neuroses from the standpoint of a professional neurologist. He commented especially on the well known fact that these cases get immediate immediate improvement and usually a complete cure after winning damages.

Dr. W. A. McMillan of Charleston was elected president of the association.

#### TREATMENT OF HEMATEMESIS

Frank Bethel Cross (Long Island Medical Journal, January, 1917) emphasizes the great importance of physical and physiological rest of the patient in bed. Morphine should be given freely and all food should be avoided by mouth. When food is resumed it must be given with the utmost care during the first few days. Where the hemorrhage is small or the stomach is probably fairly empty as the result of vomiting, the oral administration of from ten to twenty drops of a one to 1,000 solution of epincphrin may aid in controlling the bleeding. Gastric lavage with icc water may be tried or large doses of bismuth may be administered. Capsules of 0.6 gram of gallic acid should be considered and calcium salts may be tried, but they are seldom applicable because they are not well borne by the stomach or rectum and are likely to be expelled before they arc absorbed. The injection of twenty mil doses of normal horse serum, one or two doses of coagulose, or the administration of fresh, whole human blood, fresh human blood serum, or the infusion of normal salt solution subcutaneously are all methods which merit trial. In very severe cases with exsanguination the use of the Murphy drip is of great value, and the direct transfusion of blood should be tried if possible.

### 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., May, 1917

THE JOURNAL issued on the first of each month.

Subscription Single Copies \$1.50 per year 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.

should be given.

#### CONTRIBUTIONS TYPEWRITTEN

It is much more satisfactory to all concerned if authors will have their contributions typewritten be-fore 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.

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

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#### THE DOCTOR NEEDS A VACATION

The profession of medicine if well followed is nerve racking, high pressure work. The physician must take frequent vacations if he would maintain a high standard of efficiency in his work. Each vacation should be made for the benefit of both mind and body. When you feel tired and bored and find you are not quite up to the mark, run away for a brief contact with medicine and surgery at its best in some medical center. The change will rest the body and you will return brimful of new ideas and enthusiasm for your work. Show me a man who never takes a vacation and you will show me an unprogressive, down at the heel individual.

When I say take a vacation, I do not

mean go off somewhere and loaf—a change is the real vacation. Keep the body and mind active and thus avoid atrophy and dry rot. When a doctor tells you he is too busy to attend the medical society or read a medical journal or take a vacation, you know that man's mental processes have begun to retract. His mind has gotten in a vicious circle from which there is no escape. His clock has struck twelve and it is not likely that it will strike twelve again. Long vacations are not needed. A short vacation or change will give, figuratively speaking, a new lease on life.

Let us try to keep the open receptive mind that sees things without prejudice and if our bodies grow old let us stay young in spirit and mentality like Ford

Bryce and our own beloved doctor, William Williams Keene of Philadelphia. Of both these men it can be truly said, they have found the fountain of mental and spiritual youth and have drunk deeply.

J. E. C.

### SHOULD PHYSICIANS TAKE VA-CATIONS? UNDOUBTEDLY, YES.

First: For rest. They need it both for body and mind. Other professional men-ministers, lawyers, and teachers, take vacations. The duties of many of the professional men call them away from their local work. They obtain rest by change. But the physician's work is in the "round of his practice." If not varied, the physician's work may become a monotonous grind. Other professional men have their holidays; they have their evenings and Sundays. The physician has no day (not even Sunday), or night, that he can call his own. Therefore every physician should plan to take a vacation to recuperate his physical and mental powers.

Second: He should take vacations for study; to visit centers and ascertain the latest developments in his own specialty.

Third: He owes a duty to his family and should plan periodically to devote time to social and domestic life.

Dr. D. W. Cathell in his treatise on "The Physician Himself," says: "Many busy physicians . . . foolishly postpone necessary relaxation . . . till from prolonged mental tension and physical strain, they become prime candidates for one or the other of the physician's two afflictions—organic heart disease or sclerosis of the cerebral arteries. A short rest will actually make you more philosophical and and a better physician when you return to your books and to your duties among the sick. Recreation is Re-creation.

#### WHERE?

That depends on his means, his tastes, etc. Some prefer the quiet of the mountain or seaside resort. Some go fishing or hunting. Others go to the cities where they get the advantages of libraries, clinics, etc. There are desirable trips by water to Alaska, up the Hudson; on

the Great Lakes. There are the Yosemite, Yellowstone Park, the National Glacier, the Grand Canyon, the lakes of Michigan and Wisconsin; and the whole coast line, from Eastport, Me., to Tatoosh, Wash. Almost every state has its own watering places, or mountain resorts. This summer the American Medical Association Convention in New York City will be made the occasion of combining many of these features—the National Convention, the city, the seashore, the mountains, etc.

Doctor, let us suppose that you plan to pass through Chicago on a summer trip to the lakes. Why not drop off there a couple or three days and visit the Chicago Polyclinic or The Post-Graduate Medical School? See the work they are doing there and then go on to the lakes and think it over. It will be fine to watch the "other fellow," see his work and remember he has a very "devil of a time," just as we do, only he has sense enough to know he must get away often, if only for a few days.

Then let us suppose you may pass through Battle Creek. Suppose that you try stopping off there for a few days. You can rest there to "beat the band" if you try (or can work your whole party "plumb to death"). Take your choice. Try it and tell them you are from West Virginia and are a member in "good standing" and that you stopped off to see them because they are interested in "our Journal." Do it, fellows.

#### "MONTANI SEMPER LIBRI"

In this issue of the Journal appears an article explaining just what "Medical Preparedness" amounts to. Your editor hopes that you will all read this very carefully. Our country faces a crisis, possibly the most serious of all, and it is so very needful that we, as physicians, take stock of ourselves and our abilities and what we may do to help.

Please do not neglect to read this article and then sit down and think a while. Since West Virginia has been a state she has never failed; before that time she never failed "The Mother State." Each of us will do his part!!

#### DUES ARE DUE.

As the members of the State Association know, there is a clause in the bylaws to the effect that dues must be paid by April 1 or membership is lost.

The Secretary, Dr. Anderson, writes me that dues have not been coming in so very promptly. The only way the editor has of correcting the mailing list of the Journal is from the lists sent to him by Dr. Anderson.

Postal regulations are such that after this issue it will be required that I remove from the mailing list the names of all members who have not been certified to me by Dr. Anderson, as having paid the dues. So if you fail to receive the Journal next month, don't get sore. Just pay your dues.

### Health News

"He died of typhoid fever on the 14th of December, 1861."

To be the consort of a queen, to be beloved by her people both high and low, to be the real but unobserved adviser of the affairs of the empire, these are achievements worth while. To be cut off from all of them at the prime age of 42 by a wholly preventable disease seems wanton. "The good Prince" Albert, consort of Queen Victoria, patron of the arts and sciences, a skillful administrator and an upright man was sacrificed to a filth disease.

Typhoid fever is found only in man. It is caused by a short rod-shaped microscopic vegetable, which enters the body through the mouth and leaves it in human discharges to enter another human mouth to which it is carried by fingers, flies, fluids and food. It is essentially a disease of young adult life. Older people are less apt to have it probably because they have suffered from an attack of the disease in their youth.

Typhoid fever is known by various names, "slow fever," "low fever," but whatever name it is called by it kills about 8% of those whom it attacks. A certain percentage of those who recover become carriers, that is, persons who though well, excrete the organisms of the disease in their discharges. Carriers

are largely responsible for the perpetuation of typhoid fever, but the installation of proper sewer systems which not only take away noxious wastes but also do not deposit them in some one else's water supply, the abolition of flies, cockroaches, and other filth insects, the maintenance of a pure food supply, and the intelligent care of the typhoid patient, these are the measures which will rid us from this disease. Until very recently typhoid has been the scourge of armies but now the anti-typhoid inoculation has reduced this danger to a minimum.

The Prince-consort was universally mourned. The grief of the queen was deep and lasting and the whole nation sympathized in the truest sense with her in her sorrow. How many other widows of less exalted position mourn also because of the rapacity of typhoid fever?

No country, no race, no sex, no color is immune to tuberculosis. Similarly no tissue, no member, no portion of the human body is immune to its inroads. The catholicity of the disease, both as to people and tissues brings about strange results. Tuberculosis of a bone or a joint is very different in its manifestations from tuberculosis of the lungs, the skin or the brain. When some of the internal organs are attacked, for example the suprarenal capsules, the consequences are even at wider variance from the commonly conceived picture of the devastations of that minute vegetable, the tubercle bacillus.

Thomas Addison, sprung from the English yeomanry of Cumberland, physician, teacher, student and diagnostic genius, carried on a series of observations for years before he found that tuberculosis was often at the root of the disease which now bears his name. Addison's disease is generally caused by tuberculosis of those little organs which lie just above the kidneys, is marked by extreme prostration, bloodlessness, a marked bronzing of the skin, and death. There may be other symptoms but the weakness, anæmia and skin pigmentation are the most prominent.

The dogged determination which marked Addison's attempt to track a

disease to its original source is the ruling spirit of 20th century medicine. No half-discovered fact will satisfy the modern investigator. The ultimate object is sought in its entirety by an industry of search, a correlation of scientifically deducted facts and a concentration of effort. Addison was born in April, 1793, and died of brain disease, June 29, 1860.

At Tremeloo, Belgium, 75 years ago, Joseph DeVeuster, better known as Father Damien, was born. He was educated for a business career, but when he was eighteen years old he entered holy orders, and fifteen years later, in October, 1863, went to Honolulu as a missionary in the stead of his brother. In 1864 he was ordained a priest, and during the nine years that followed he was frequently struck in his parochial work with the pitiful condition of the Hawaiian lepers. In 1873, he volunteered to take up his residence on the Island of Molokai, to which at that time all lepers were deported, and there he remained until his death on April 15, 1889. He gave evidence in 1885 of having contracted lepresy from the unfortunates committed to his care, but he continued his labors.

Leprosy is a contagious, infectious disease, which is believed to be directly communicable from one person to another person. It is believed to be caused by a microscopic vegetable parasite shaped somewhat like a small curved This bacillus was discovered by stick. Hansen in 1874. In man the disease appears in several different forms, attacking almost any organ in the body, destroying any or all of the senses, and finally producing death. There is a disease among rats which closely simulates human leprosy, and the bacillus which causes it resembles that found in human leprosy.

It is not definitely known just how the leprosy bacillus enters the body. It may be through wounds of the skin or the lining membrane of the nose and throat, and possibly it may be taken into the body with food. It is pretty definitely proven that no particular article of diet, such as fish, causes the disease. It has been thought that some insect may act as the agent which transfers the germs

from sick people to well people. This is not proven.

Whatever the exact mechanism in the transference of the leprosy bacillus, practical evidence shows that the disease is spread mainly by direct contact, and is more prevalent where people are dirty and overcrowded. There is no evidence that leproses is hardlitary.

that leprosy is hereditary.

Practical experience has shown that segregation is the only practicable means of controlling the disease. A bill appropriating \$250,000 for the purpose of establishing a national home for lepers passed the House of Representatives on May 4, 1916, and was passed by the Senate on January 25, 1917. This provides a national institution for the care and treatment of the unfortunates afflicted with this gruesome disease and solves the problem of preventing its spread in the United States.

## REVOLUTION IN DWELLING HOUSE PLANS.

New York, April 2.—"A revolution in the architecture of modern dwellinghouses has been effected by the popular demand for open air sleeping quarters," says Dr. Philip P. Jacobs, Assistant Secretary of the National Association for the Study and Prevention of Tuberculosis, which has just published a new pamphlet for popular distribution on "Sleeping and Sitting in the Open Air." "This change in sentiment has been brought about largely by the campaign for the prevention of tuberculosis," he went on. "Real estate men tell me that a sleeping porch is now one of their chief talking points. Even apartment houses are being thus equipped."

For tuberculosis sufferers, who most need fresh air sleeping accommodations and who frequently have to live in quarters where they are not available, this pamphlet aims to show them how, for a very little expense, they can attach a perfectly satisfactory sleeping porch to any

dwelling.

The booklet contains drawings of many fresh suggestions for inexpensive sleeping porches, so explained that they may be easily used as plans for amateur carpenters. Suggestions are given for detachable balconies that can be adjusted

to any window, and can be moved if the family changes quarters. These can be made or purchased at prices ranging from five dollars to less than one hundred dollars. The simplest form merely calls for a small platform and awning so that the bed can be projected through a window.

For tenement dwellers an inexpensive roof shack of light wood or sheet iron is shown. Cheaper yet is a simple wall tent for a projecting roof. Fire escapes are also utilized. Still less expensive is the wndow tent, home made or purchased ready made for five dollars and upwards. A detached cottage with an ordinary porch may be made effective with only a cheap curtain.

The pamphlet makes many suggestions for making outdoor sleepers comfortable, such as providing hoods, paper blankets, fly screens and sleeping bags.

A well known authority is quoted as saying that a man out of doors is exposed to 100 times more fresh air than can be obtained in the best ventilated room. According to the experts, any sufferer from tuberculosis who cannot find room in the overtaxed sanatoria, may take advantage of this knowledge of open air treatment in his own home with good chance for recovery.

This pamphlet may be secured free by addressing the National Association for the Study and Prevention of Tuberculosis, 105 East Twenty-second Street, New York City, or from local or State anti-tuberculosis societies and boards of health.

### Miscellaneous Announcements and Communications

PSYCHOLOGICAL DEPTHS

Editor Journal:

It is impossible for me to fathom the psychological depths of Dr. Hardy's article in last month's Journal. I shall not attempt to analyse it, but would ask all fair minded men to re-read it and form their own judgment.

Firstly: He says, "I am in favor of cancelling the membership in our societies of every physician and surgeon who can so stultify his conscience as to do contract practice."

Nextly: "There is absolutely no phase or form of contract practice that is right."

This would make a big hole in our society. It would oust our president, for he has contracts with several life insurance companies to do their examining at specified rates. It would knock out our secretary, for he has been working for the Morgantown & Kingwood Railroad Company for fifteen years. It would compel our treasurer to resign, for he attends those who get sick in jail. It would put a quietus on the activities of the United States Pension Examiners, the Civil Service Examiners, the National Guard Inspectors, the School Inspectors, the City and County Health Officers, the doctor for the poor, forms of life insurance, and in fact, it would give a terrible swipe on cheek and jowl of almost the whole medical profession in our midst.

It surely would give a solar plexus blow to Lieut. Irwin Hardy, M. D., of the Reserve Medical Corps of the United States Army and member of the American College of Surgeons. For has he not a pass over the Baltimore & Ohio Railroad and is under contract to do their work? And does he not hold a pass over the Morgantown & Kingwood Railroad and is under contract to attend the injured people if the demand is made! And further, has he not a contract with the American Sheet & Tin Plate Company to do the emergency work for their men? He holds this contract because he owns a fine hospital, bought with money unearned while he was Selkirking at Davis, doing work "classified with the saloonkeeper and other undesirables."

Further more he has a contract with the West Virginia University to lecture on surgery at so much per year. With all of this contract work on his hands it looks as if he could let us little folks have a little pleasure out of our little contracts. L. W. Cobun.

Editor Journal:

The timely arrival of Dr. Hatfield to defend contract work is hardly worthy of note since he confesses his practice is limited and is of the kind to be com-

mended if such is at all commendable. It is rather the panel form of work, and while he has no doubt learned the contract menu, calomel, CPC, sodium salicyl, acetanlid co. and the pine cough syrup and the work may justify the 10M and five gal. pkg., but the doctor hardly knows what contract practice is and unless he gets popular like Smith-Jones and gets a population of 2000 to 6000 and hires it done by serf-men at \$75 to \$125 per month and "menu" furnished, he is not in the class to which I allude. I am not after the man who takes a pay roll of \$200 to \$250 per month and looks after it himself, but that means 600 or more to look after, so ursus horribilis would get that class.

I am after some of the popular Smith-Jones' who work every known pull, scheme and avenue to rake in the gold dollars regardless of the life blood they extract and the homes the funeral cortege visits, who never think of the immortal part of the tabernacle they barter in, who are so damnably wrapped in the lust for wealth that the method and means of getting it are inconsiderable, men who prostitute the state license which should make them professional, because the law or state board don't prevent it and whose common decency and justice have been smothered and subdued by the ungratified and insatiate appetite for wealth and control, moral imbecils.

No, Brother Hatfield, I have never been an aspirant for the Smith-Jones class of work, have had it offered many times, when I really needed it but I refused. Many of the members can tell you I have refused to aspire for the "noble" calling of contract commercial propagation.

I want some of these Smith-Jones to get on the defensive and then have some interesting provable facts to produce. The challenge is open to any contract-serf-hiring commercial prostitutor.

J. E. McDonald.

April 16, 1917.

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

Dear Doctor:--

I did not get to quite finish up things

when I wrote you Saturday. I have had some correspondence concerning the Medical Reserve Corps and I have had several statements from physicians that I think are quite pertinent. If you care to put some of the remarks in in connection with our Auxiliary Medical Committee list I will be glad for you to do so.

A prominent Fayette County physician said, "I consider it a great honor to

be able to serve my country."

Another prominent physician said, "I am ready to go on a day's notice."

A third said, "I do not want to go, but I feel that Uncle Sam needs me and I am going to offer my services."

In the scheme of life the individual has a specific duty to the state. When we shirk this duty the price will have to be paid some time and in some way. In joining the Medical Reserve the chance at least is taken of making considerable personal and material sacrifices but these same sacrifices are made for the common good. We are each but a small part of the whole, to quote a little Latin, quorum para pars fuerunt. It should be a keen satisfaction to think that we have each contributed even a little to the common good. No man can live for himself alone selfishly and without thought of his fellow.

Dr. F. F. Simpson of Pittsburgh, is chief of the Medical Section of the Council of National Defense. He is assisted by a National Medical Committee of which Dr. Franklin H. Martin is chairman and the following are members:

Wm. C. Gorgas, Surgeon General of

the United States Army.

Wm. C. Braisted, Surgeon General of the United States Navy.

Rupert Blue, Surgeon General of the United States Public Health Service.

Col. Jefferson R. Kean, Director General of Military Relief of the American Red Cross.

Dr. Wm. H. Welch, member of the National Council of Research.

Dr. Wm. J. Mayo, chairman of the Committee of American Physicians for Medical Preparedness.

Dr. Frank F. Simpson, Chief of the Medical Section of the Council of National Defense, and Secretary of the Committee of American Physicians for Medical Preparedness.

This National Committee selected committees for each state, the list for West Virginia, with Dr. J. E. Cannaday of Charleston as chairman, is as follows:

Dr. Frank LeMoyne Hupp, Wheeling, W. Va.; Dr. W. W. Golden, Elkins, W. Va.; Dr. A. P. Butt, Davis, W. Va.; Dr. W. H. St. Clair, Bluefield, W. Va.; Dr. J. Howard Anderson, Marytown, W. Va.; Dr. J. E. Rader, Huntington, W. Va.; Dr. C. S. Hoffman, Keyser, W. Va.; Dr. H. D. Hatfield, Huntington, W. Va.

The following Auxiliary Medical Defense Committees have been organized in this state. It is hoped that committees in all of the leading counties will be

organized.

Cabell County—Dr. J. Ross Hunter, Dr. R. J. Wilkinson, Dr. W. E. Vest, Dr. R. M. Bobbitt, Dr. J. H. Steen-

bergen, of Huntington.

Kanawha County—Dr. H. G. Nicholson, chairman; Dr. G. H. Barksdale, Dr. J. E. Robins, Dr. W. S. Robertson, Dr. R. T. Davis, Dr. R. A. Ireland, Dr. W. A. McMillan, Dr. H. D. Hively, Dr. O. L. Aultz, Dr. S. L. Jepson, Dr. J. E. Cannaday, Charleston.

Ohio County—Dr. Frank LeMoyne Hupp, chairman; Dr. Jos. R. Caldwell, Dr. Wm. H. McLain, Dr. Harry M. Hall, Dr. D. A. MacGregor, all of Wheeling.

Marion County—Dr. W. H. Sands, chairman; Dr. H. II. Carr, Dr. J. E. Offner, Dr. C. W. Waddell, Dr. H. R. Johnson, Dr. C. S. Fleining, Dr. H. S. Keister, Dr. E. W. Howard, Dr. C. O. Henry, all of Fairmont.

Monongalia County — Dr. John N. Simpson, chairman; Dr. Harvey Powell, Dr. B. B. Cox, Dr. Irvin Hardy, Dr. R. H. Edmonson, Dr. W. C. Moser, Dr. E. R. Taylor, all of Morgantown.

Hancock County—Dr. G. W. Wentz, Chester, chairman; Dr. G. E. Lewis, Chester; Dr. H. A. Turk, Newell; Dr. C. A. Clemer, Weirton; Dr. G. A. Davis, Weirton.

Harrison County—Dr. S. M. Mason, Clarksburg, chairman; Dr. B. F. Shuttleworth, Dr. S. L. Cherry, Dr. O. S. Gribble, all of Clarksburg.

Berkeley County—Dr. T. K. Oates, chairman; Dr. H. G. Tonkin, Dr. N. M. Canter, Dr. D. T. Williams, Dr. C. H.

Thomas, all of Martinsburg.

Wood County—Dr. G. D. Jeffers, chairman; Dr. M. R. Stone, Dr. O. D. Barker, Dr. Wm. Richardson, Dr. C. E. Park, all of Parkersburg.

McDowell County—Dr. J. Howard Anderson, Marytown, chairman; Dr. Chas. F. Hicks, Welch; Dr. E. F. Peters, Switchback; Dr. L. H. Clark, Kyle; Dr. R. V. Shanklin, Gary; Dr. D. D. Hatfield, Yukon; Dr. H. G. Camper, Welch.

Boone County—Dr. H. L. Carter, chairman; Dr. D. F. Pauley, Jeffrey; Dr. D. Abshire, Madison; Dr. S. C. Austin, Peytona; Dr. C. A. Flegler, Seth.

Mercer County—Dr. H. G. Steele, Bluefield, chairman; Dr. E. F. Gott, Bluefield; Dr. W. C. Slusher, Bluefield; Dr. J. A. McGuire, Princeton; Dr. G. L. Todd, Princeton; Dr. W. H. St. Clair, Bluefield.

Barbour County—Dr. E. L. Hamilton, Belington, chairman; Dr. C. B. Williams, Philippi; Dr. F. B. Murphy, Philippi; Dr. W. S. Smith, Philippi; Dr. A. A. Woodford, Belington.

Randolph County—Dr. W. W. Golden, chairman; Dr. H. K. Owens, Dr. S. G. Moore, Dr. A. M. Fredlock, Dr. C. H. Hall, Dr. R. H. Powell, all of Elkins.

Raleigh County — Dr. E. S. Depuy, Beckley, chairman; Dr. J. E. Coleman, Beckley; Dr. Robt. Wriston, Beckley; Dr. K. M. Jarrell, Beckley; Dr. Adrian H. Grigg, Eccles; Dr. McRae Banks, Raleigh; Dr. J. E. Barker, Raleigh.

Greenbrier and Monroe Counties — Dr. E. H. Campbell, Alderson, chairman; Dr. W. P. Fawcett, Alderson; Dr. J. A. Jackson, Ronceverte; Dr. H. W. Parker, Lewisburg; Dr. H. L. Beard, Lewisburg; Dr. G. A. Gilchrist, Lewisburg; Dr. C. Ira Wall, Rainelle.

Marion County has done herself proud, twenty-eight physicians and five dentists have agreed to join the Medical Reserve Corps. Let us hope that the other counties of this state will do as well in the presence of this great national emergency.

ADDITIONAL LIST

Braxton County—Dr. J. W. Kidd, Burnsville, chairman; Dr. Norman Goad, Strange Creek; Dr. E. P. Roop, Servia; Dr. C. C. Rusmisell, Gassaway; Dr. J. C. Carper, Exchange; Dr. G. G. Lovett, Bulltown; Dr. L. L. McKinney, Burns-

ville; Dr. M. T. Morrison.

Jackson County—Dr. V. L. Casto, Ripley, chairman; Dr. Geo. Simmons, Kenna; Dr. B. E. Harrison, Cottageville; Dr. H. W. Casto, Ravenswood; Dr. J. E. Barrows, Ravenswood; Dr. D. Casto, Ripley.

Ritchie County—Dr. L. P. Jones, Pennsboro, chairman; Dr. E. A. Corbin, Ellenboro; Dr. W. E. Whiteside, Hassisville; Dr. A. P. Jones, Pennsboro.

Auxiliary Medical Defense Committee of Fayette County—Dr. II. L. Goodman, McKendree, chairman; Dr. J. A. Riffe, Thayer; Dr. B. W. Eakin, Carlisle; Dr. J. H. Baber, Rush Run; Dr. A. W. Crews, Thurmond; Dr. Gory Hogg, Harvey; Dr. Wm. V. Dunlap, Sun; Dr. G. F. Grisinger, Gamoca, Pres. Co. Soc.; Dr. H. C. Skaggs, Montgomery, Secy. Co. Soc.; Dr. E. J. Gross, Fayetteville, Co. Health Officer.

Auxiliary Medical Defense Committee of Brooke County—Dr. J. R. Arnold, Wellsburg, chairman; Dr. F. T. Dare, Wellsburg; Dr. C. R. Megahan, Follansbee; Dr. W. T. Booher, Bethany; Dr. R.

L. Forcer, Colliers.

Auxiliary Medical Defense Committee of Clay County—Dr. R. H. Eanes, Widen, chairman; Dr. O. H. Bobbitt, Widen; Dr. R. A. Hambrick, Clay; Dr. Stevens, Ivydale; Dr. T. D. Nutter, Ivydale.

Auxiliary Medical Defense Committee of Lincoln County—Dr. A. W. Adkins, Griffithsville, chairman; Dr. D. Jarrell, Woodville; Dr. E. A. Winters, Griffithsville; Dr. J. H. Walden, Griffithsville; Dr. S. L. Cline, Hamlin; Dr. J. Brice

Taylor, Branchland.

Auxiliary Medical Defense Committee of Mingo County—Dr. Tunis Nunemaker, Williamson, chairman; Dr. W. H. Triplett, Matewan, Pres. Co. Soc.; Dr. G. B. Irvine, Williamson, Secy. Co. Soc.; Dr. A. G. Rutherford, Thacker, Co. Health Officer; Dr. W. H. Price, Chattaroy; Dr. O. H. Jennings, Naugatuck; Dr. Thos. Slayden, Williamson.

J. E. CANNADAY.

Dear Dr. Bloss:-

The State Board of Examination for Graduate Nurses will be held in Huntington, W. Va., May 14, 1917, in Carnegie Hall, commencing at 9:30 a.m., and continuing through the day and longer if necessary. It is important to file your papers before this date as it will greatly facilitate matters. If impossible to file them before this date, they may be filed at 8:30 a.m., on date of examination at hall.

Only Graduate Nurses can take this examination. At the present time West Virginia does not reciprocate with any other state. The fee for this examination is \$5. You are requested to pay this fee at time of filing papers, and you will receive a receipt therefor which will admit you to the examination room.

Fraternally, Chas. M. Scott, Secy.

Seventy-third annual meeting of the American Medico-Psychological Association, May 29, 30, 31, June 1, 1917, Hotel Astor, New York City. Officers: Chas. G. Wagner, M. D., President, Binghampton, N. Y.; James V. Anglin, M. D., Vice-President, St. John, N. B.; Henry C. Eyman, M. D., Secy.-Treas., Massillon, O.

American Proctologic Society, nineteenth annual meeting, New York City, June 4 and 5, 1917. Headquarters and place of meeting, Hotel Astor. The profession is cordially invited to attend all

meetings.

Officers: Alfred J. Zobel, M. D., President, San Francisco, Cal.; Granville S. Hanes, M. D., vice-president, Louisville, Ky.; Collier F. Martin, Secy.-Treas., Philadelphia, Pa. Executive Council: T. Crittenden Hill, M. D., chairman, Boston, Mass.; Alfred J. Zobel, M. D., San Francisco, Cal.; Wm. M. Beach, M. D., Pittsburgh, Pa.; Collier F. Martin, M. D., Philadelphia, Pa.

The annual meeting of Alienists and Neurologists will be held Monday, July 9 to Thursday, July 12, 1917, in the Red Room, LaSalle Hotel, Chicago, under the anspices of the Chicago Medical Society. Dr. George A. Zeller will act as chairman. The program will be mailed June 28, with abstract of each paper. Contributors to the program are solicited. This is a society without a membership fee. Address Secretary A. & N.,

Room 1218, 30 N. Michigan Ave., Chicago.

Forty-fourth annual National Conference of Charities and Correction, Pittsburgh, Pa., June 6 to 13, 1917. Frederick Almy, president; Joseph Lee, first vicepresident; Julia C. Lathrop, second vice-president; Rabbi Emil W. Leipziger, third vice-president; Wm. T. Cross, general secretary and treasurer.

Concerning program and general affairs of the conference, address the permanent office, 315 Plymouth Court, Chi-

cago, Ill.

Concerning local arrangements and accommodations, address the Pittsburgh Committee, 535 Fulton Building, Pittsburgh, Pa.

A. M. A. NEWS

The sixty-eighth annual meeting of the American Medical Association will meet in New York City, June 4-8, with general headquarters at Hotel Astor, Times Square.

SECOND HEADQUARTERS

Baltimore-Madison Avenue and Firty-third. Practice of Medicine, Preventive Medicine and Public Health.

Waldorf-Astoria—Fifth Avenue and Thirty-fourth. Surgery, General and Abdominal, Obstetrics, Gynecology, Genito-Urinary Diseases and Orthopedic Surgery.

McAlpin - Broadway and Thirtyfourth. Diseases of Children, Nervous and Mental Diseases, Pathology and Physiology, Enterology and Proctology.

Manhattan — Madison Avenue and Forty-second. Pharmacology, Therapeutics and Dermatology.

Astor—Ophthalmology, Laryngology, Otology, Rhinology and Stomatology.

#### HOTEL RATES

The hotel rates as announced by the Committee on Arrangements, through the Sub-Committee on Hotels, of which Dr. Reginald H. Sayre, 17 West Fortythird street, is chairman, will be reasonable, ranging from \$2 to \$8 per day for two in room, according to kind of accommodations and those wishing reservations should write early to chairman of Hotel Committee, the hotel of their choice, or the undersigned.

J. W. Cokenower, Chr. Trans. Com.

Gentlemen:-

A man of good address, representing himself as J. M. Hart, of the Hart Bros. Purchasing Agency of Chicago, is calling on the physicians in this state selling their service for a period of two years for \$15, agreeing to sell auto tires and all accessories at cost and quoting very low prices on these things. He is an absolute fake. Warn the physicians of your state to beware of him and have him arrested if he approaches them.

> Yours truly, J. M. KING, M. D., Wellsville, O.

Secretary Columbiana Co. Med. Soc.

### Society Proceedings

BARBOUR-RANDOLPH-TUCKER Dartmoor, W. Va., Apr. 13, 1917. Ed. W. Va. Med. Jour.

The Barbour-Randolph-Tucker County Medical Society held its regular meeting in the Y. M. C. A. building, Elkins, W. Va., on Wednesday, April 11, 1 p. m. The following members were present: Drs. Hamilton, Butt, Bosworth (A. S.), Wilson, Irons, Moore (S. G.), Talbott, Gray, Hall and McIntosh.

Minutes of previous meeting read and approved. Unfinished business was postponed, so that members having papers

to read could leave on trains.

Under suspension of rules Dr. J. T. Redwine of Davis, Dr. D. L. Farber of Prince and Dr. T. L. Gray of Coalton, were elected members of the society.

Communications were read. One inviting members of the society to attend a dermitological meeting in Cincinnati in May next; one from Dr. J. R. Bloss, requesting suitable papers from members for the Medical Journal, and one from Dr. W. W. Golden, proposing that in the event any of the members of the society should be called to the service of the country, that as far as he was able, barring obstetrical and venereal diseases, he would attend all such physicians' practice and turn the proceeds

over to the family, excepting actual expenses; and further that on his return he'd use his best efforts in restoring said practice to the one returning from government service.

Dr. Butt read his paper on "Notes by the Way." Dr. Butt has been spending some time visiting the hospital clinics in Baltimore, Philadelphia and New York, and he evidently kept his eyes open to get all the good points, which he commends, and to small and questionable methods, which he was equally ready to condemn. He gave a description of the technique of several of the noted surgeons and specialists, and remarked upon the small quantity of medicine used in many instances—those in charge seeming to prefer sunlight and pure air to medication.

Dr. Hamilton read a paper on "Itch," which he said was quite prevalent in many localities. He gave the symptoms and manifestations as well as the treatment, but made special mention of the fact that there was often such a divergence in manifestation that the physician was puzzled to positively diagnose the case. Often, too, those having the discase resented the thought that they had itch, because they lacked the pustules, scabs, sores, etc., commonly to be seen in cases where there is lack of cleanliness.

Dr. E. R. McIntosh then appeared before the society to answer the charge against him in violating the ethics of his profession, in becoming an incorporator of the Ramberg Medicine Co., which company claims to manufacture medicines that cure rheumatism, croup, diphtheria, ctc. Dr. McIntosh said he had no interest whatever in the company that he was misled in signing as an incorporator, in fact, was informed it was to be a real estate incorporation, and he had thoughtlessly signed as an accommodation, and that when he learned the nature of the company, he had protested and sought to withdraw, but was informed he could not do so, till the company was dissolved.

It was moved that if Dr. McIntosh will renounce his membership in said company, and the medicines manufactured, and publish said announcement in

the papers of the city of Elkins, then the proceedings against him by this so-

ciety will be dropped.

Dr. Hall was then heard on charge of violating a rule of the society in the examinations for beneficial orders. After hearing his statements and various comments, on motion, Dr. Hall was exhonorated from the charge, with the proviso that he tries to comply with the requirements of society in future. Dr. Hall stating that he had no intention to, nor did he think he had violated the rules of the society.

The rule fixing minimum fees for examinations for life insurance companies and beneficial orders, not being in force in but few component societies, and being the cause of so much wrangling among the members, and impossible to strictly enforce, on motion the rule requiring \$5 as minimum fee for life insurance companies and \$2 for mutual benefit orders, in which a urinalysis is required, be and hereby is rescinded. Passed.

The July meeting will be held in Tucker County at the place selected by the members from that county.

J. C. IRONS, Secy.

CABELL COUNTY Huntington, W. Va., April 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 March 22, 1917, room 227 at the

Frederick Hotel.

The members present were: Drs. Watts, A. K. Kessler, Yost, Bloss, E. B. Gerlach, Cronin, II. P. Gerlach, Pickering and Pepper.

Dr. Rowsey, the president, being absent, Dr. II. P. Gerlach was elected chair-

man pro tem.

Dr. Bloss presented an interesting clinical case and also he read a report of the case of a sexual pervert, who became a murderer. The case was very unusual and brought up quite an interesting discussion.

Dr. Yost reported a chronic case of bone injury of the middle third of the tibia in which the periosteum was separated from the bone. This was stitched together and the wound closed.

The Secretary read a communication from the Dermatological Society which will convene in Cincinnati in May, 1917, inviting the Cabell County Medical Society to be present at this meeting. On the motion of Dr. Kessler, the secretary was instructed to thank the Dermatological Society for the kind invitation and that the society would attend if possible.

The committee to present or report clinical cases for the next meeting were Drs. A. K. Kessler, E. B. Gerlach, Pickering and I. C. Hicks. On motion the society adjourned.

R. H. Pepper, Secy.

The Cabell County Medical Society met on April 5, 1917, at the Hotel Frederick.

The minutes of the last meeting were read and approved. The members present were: Drs. E. B. Gerlach, Yost, Watts, H. P. Gerlach, A. K. Kessler, Rowsey and Pepper.

In as much as Dr. Vinson was appointed a committee to employ counsel for the Cabell County Medical Society, it was moved by Dr. E. B. Gerlach and seconded by Dr. Watts that an order for \$100 be given to Dr. Vinson to pay said counsel for work done. Carried.

The following committee was appointed to present or report clinical cases for the next meeting: Drs. Pickering, Hicks, Watts and Rowsey.

The secretary read a letter from Frederick R. Green, Secretary Council on Health and Public Instruction, American Medical Association, in regard to second Baby Week campaign and the society requested its secretary to write for circulars and bulletins on Baby Week campaign.

On motion the society adjourned.

Fraternally yours,

R. H. PEPPER, Secy.

EASTERN PANHANDLE SOCIETY Editor of Journal:—

A regular meeting of the Tri-County Medical Society was held at the Hotel Berkeley, Martinsburg on March 7, 1917. The meeting was called to order by the president. Roll was called of the 1916 members. Members and visitors present, 19. The following program was rendered:

1. Address by the president, Dr. W. W. Brown, Shenandoah Junction.

2. Paper, subject, "Sacro-Cervical Suspension for Prolapsus Uteri," Dr. A. H. Hawkins, Cumberland, Md.

3. Discussion of Dr. Hawkins' paper, Dr. R. E. Venning, Charles Town, W. Va.

4. Dinner.

5. Lecture on manufacture of serums and bacterius demonstrated with lantern and slides, Parke, Davis & Co., Baltimore, Md.

The program was well rendered and much interest shown in this meeting. The next meeting will be in Harper's Ferry on the first Wednesday in June.

C. C. Johnson, Secy.

#### HARRISON COUNTY SOCIETY

Moved that the members of the Harrison County Medical Society make all their charges in proportion to the service rendered, but that the customary fee for a visit in Clarksburg after April 1, 1917, shall be two dollars.

We also agree it shall be the custom that when advice warranting a charge is given by telephone a charge of one dollar be made.

Motion passed March 29, 1917. S. L. Cherry, Secy.

To the Members of the Harrison County Medical Society.

At the March meeting of the Harrison County Medical Society the following motion was adopted:

Moved that the members of the Harrison County Medical Society make all their charges in proportion to the service rendered, but that the customary fee for a visit in Clarksburg be two dollars after April 1, 1917. It was also agreed that when advice warranting a charge is given by telephone a charge of one dollar be made.

It is understood that observance of this motion is not obligatory.

S. L. CHERRY, Secy.

#### TRIBUTE PAID DR. MORGAN BY HIS FELLOWS.

The Harrison County Medical Society has adopted the following resolutions in memory of Dr. D. P. Morgan, who was

a member of that organization:

With the death of Dr. D. P. Morgan, the oldest and most highly honored member of the Harrison County Medical Society, his fellow members join with all who knew him in appreciation of his character, attainments and service in his pro-

After attending one course of lectures in the Starling Medical College in 1870 he practiced four years in Marion County, and then going to Jefferson Medical College at Philadelphia, was graduated from that institution in 1875, at which time he located in Clarksburg, where he continued the active practice of his profession until his death, March 10, 1917.

During much of this time he and his partner, Dr. Fleming Howell, were in every sense the leaders in the profession in this county. No one could have enjoyed more fully the confidence of both patients and

physicians.

In organizing and supporting through many trials the Harrison County Medical Society, in consistently upholding the highest ethical and professional ideas, in aiding and encouraging many struggling young practitioners his influence became predominant and for many years will continue to be felt.

He was also a member of the Association; State Medical American Medical Association and for several years a member of the state board of health, of which he was president. The physicians of the state honored him with the presidency of the state association in 1893. For many years he was a Baltimore and Ohio railroad surgeon. In the professional as in all sides, his life was characterized by manly bearing, straight forwardness, frankness and incorruptible. Quick of decision, firm of conviction pure and upright in his impulses, he had many of the attributes of the ideal physician.

Therefore, be it resolved, that in the death of Dr. Morgan the Harrison County Medical Society has lost a worthy member, a friend to whose life and high ideals we as men and physicians are especially indebted, and in time of sorrow our sympathy be extended to the family of our deceased associate in the great loss they have sustained.

> Clarksburg, W. Va., June 20, 1877.

Dear Doctor:-

All regular physicians in this and adjoining counties are requested to meet at Dr. Morgan's office, Main Street, Clarksburg, June 30, at 1 o'clock p. m. Object to organize a local Medical Society.

Your presence is desired.

D. PORTER MORGAN, M. D. ALLEN GITTINGS, M. D. J. W. Ramsay, M. D. J. M. Bowcock, M. D.

#### MERCER COUNTY SOCIETY

The Mercer County Medical Society met in the Chamber of Commerce, Bluefield, W. Va., March 22, 1917. President Dr. H. G. Steele presiding.

The minutes of the last meeting were

read and adopted.

Under clinical cases, Dr. W. H. St. Clair reported two sisters having an unusual congenital condition with absence of the vagina, uterus and ovaries. Dr. H. C. Hays reported a similar case with the absence of the breast. The next on the program was a paper by Dr. Southgate Leigh of Norfolk, Va., which was enjoyed by every one present. Dr. Leigh urged that our society meet oftener than once a month, and he also spoke of Nitrous Oxide as the best anæsthesia for surgical work. There were so many good suggestions in his paper that it was impossible for the secretary to mention all of them as he did not get Dr. Leigh's paper. He has promised me a copy of it for the State Journal later on. The next on the program was a paper by Dr. Hoge, but as the hour was growing late and the Prws. suggested that the paper be read at the banquet, but Dr. Hoge was called away and did not get to read it.

Dr. S. R. Hoyroyd committeeman from the Board of Trade of Athens, invited the society to meet with them in Athens in May as guests of the Board of Trade. It was moved and seconded to thank them for the invitation and to meet with them in May. The meeting then adjourned and we retired to the Busy Bee Restaurant, where a banquet was served and enjoyed by all present. It was decided to hold the next meeting on April 19 at Princeton, W. Va.

E. H. THOMPSON, Secy.

The Mercer Medical Society met April 19 at 8 p. m., in the Court House at Princeton, W. Va. The meeting was called to order by the president, Dr. II. G. Steele.

The first in order was the reading of the minutes of the previous meeting,

which were adopted as read.

Under elinical cases Dr. O. S. Hare reported a case of epidemic meningitis in which he used Flexner's Serum, giving 30 CC's at a dose in which he noticed for the first thirty-six hours a decided improvement, but the patient later died. On first going to see this case he thought he was treating a case of ptomaine poison.

Dr. H. G. Steele reported a case of Amoebic Dysentery in which the patient had had from nine to eleven actions a day for nine years. He gave as his treatment beginning with half grain of Emetine and increasing to 1 grain a day. Action now reduced to three a day. He also reported two obstetrical cases which he had observed while at the Magee Hospital in Pittsburgh. Giving their technique and observing and taking a complete history of their cases.

Under papers, Dr. B. W. Bird read a very interesting paper on Imunology, which was discussed by Dr. T. E. Vass, Hare and Kirk and Peters. Dr. Kirk was present to read his paper, but it was moved and seconded that it be postponed until the May meeting at Athens.

The president appointed Dr. C. C. Peters temporary censor after which he

and Dr. Hare reported favorably on the application of Dr. E. Fred Gott of Bluefield, who was elected a member of this society.

The motion made and seconded to adjourn to meet in Athens the third Thursday in May as guests of the Board of Trade. After adjournment we were served with lunch by the ladies which was well prepared and enjoyed very much.

E. H. THOMPSON, Secy.

MINGO COUNTY SOCIETY

Matewan, W. Va.,
April 18, 1917.

Dr. James R. Bloss,
Huntington, W. Va.
Dear Doctor:—

I am pleased to advise you that the Mingo County Medical Society has been revived after some months of inactivity. At our meeting yesterday the following officers were elected for the ensuing year:

Dr. A. S. Richardson, president, O'Keefe; Dr. Jas. Turner, first vice-president, Borderland; Dr. H. M. Coleman, second vice-president, Matewan; Dr. W. H. Triplett, secretary and treasurer, Matewan; Dr. R. A. Salton, censor, Williamson; Dr. G. T. Conley, delegate, Williamson; Dr. Tunis Nunemaker, alternate, Williamson.

Members present were: Drs. Richardson, Heatherman, Coleman, Nunemaker, Parker, Salton, Conley, Yumer, Irvine and Triplett. Several clinical cases were discussed and a real "old time talk fest" indulged in regarding the good of the society. I think I can assure you of more activity in the future. Watch Mingo and I'll try to give you a note of our proceedings each month.

Yours very truly, W. H. TRIPLETT, Sec.

#### RALEIGH COUNTY SOCIETY

The Raleigh County Medical Society met in special session March 30, 1917, and the meeting was presided over by Dr. E. S. Dupuy.

The following officers were elected for the ensuing year: Dr. W. W. Hume, president; Dr. Ira Fisher, first vicepresident; Dr. M. C. Banks, second vicepresident; Dr. K. M. Jarrell, secretary and treasurer.

Dr. Robert Wriston, Dr. E. S. Dupuy, and Dr. U. G. Cook were nominated Red Cross aids to cooperate with the Red Cross Medical Society in any emergency where their services may be needed.

The society dues were changed from

\$4 to \$5 per annum.

This change will give the county society \$2 and the state society \$3, which includes the defense fund.

K. M. Jarrell, Secy.

## OHIO COUNTY SOCIETY Wheeling, W. Va., Dec. 1, 1916.

The regular meeting of the Ohio County Medical Society was held in the First Branch Council Room, City Building, with Dr. Caldwell presiding.

The meeting was called to order at

8:30 p. m.

Minutes of last meeting read and approved. No report from Board of Cen-

No clinical specimens presented.

The paper of the evening read by Dr. John T. Thornton, subject, "Starvation Treatment of Diabetes." Dr. Thornton defines diabetes as a specific deficiency in the power of assimilating foods. He first took up the study of the chemistry of the carbohydrates, which he divided into three classes; (a) Mono-saccharids, (b) Di-saccharids, (c) Poly-saccharids; 2nd. Digestion of Carbohydrates, (a) Salivary digestion, (b) Intestinal digest-3rd. Metabolism of Carbo-hyion. (a) Absorption form, (b) circulation form, (c) metabolism.

By means and use of the steoropticon machine he was able to present a number of diagramatical pictures and charts in the study of this condition. The first picture shown was of the liver. Showing its cellular construction and the circulation as it enters and leaves the liver. The next showed the diagramatical picture of normal carbo-hydrate metabolism. The next picture showed the theory of non-rendition of Glycogen in the liver. The next picture showed nonutilization of sugar in diabetes. He here defined Allen's Paradoxical Law.

In a normal animal the utilization of carbo-hydrates is unlimited while in a diabetic animal the utilization of carbohydrates is diminished.

Acidosis: Its meaning, that the blood is alkaline, therefore it means a diminished alkalinity.

He next considered the salts of the blood, which are four, namely: Na H C O 3; (b) Na2 H P 04; (c) Na H2 P 04; (d) C 02 (H2C02).

The formation of ammonia in the blood is a means of lessening its acidity. The next picture was one showing the reaction of plasma stating that the blood contains two acids, namely: Volatile and non-volatile.

Treatment of Diabetes. First it is best to have patient in the hospital, but may be treated at home if directions can be carefully carried out. For two days give a general mxed diet for purpose of study. Make a careful physical examination of

the patient.

Collect a 24-hour specimen,  ${f Urine:}$ examine for the amount of sugar eliminated in 24 hours. The per cent of ammonia should also be found out. Also test for Acetone. In testing for diacetic acid have a fresh specimen of urine. Take specific gravity. Have patient weighed daily. We now have some general conclusions. Next is the fasting period. Give water freely. Tea or meat broths, whiskey or alcohol if any at all should be given in small amounts. The same also is true of sodium bicarbonate, which should be given only in definite indications as acidosis. In from 4 to 5 days the patient usually becomes sugar free. Now to keep him free from sugar and prevent acidosis. Feeding screme: first give 5 grams carbo-hydrates daily in green vegetables, beginning with the vegetables containing 5 per cent carbohydrates. 2nd. Give an increase of 5 grams every day for four days, then 5 grams increase every second or third day. Keep up this increase until he is taking about 100 grams of carbo-hydrates or until the sugar appears in the urine. After the first 4 or 5 days give 15 grams of proteid and increase daily until one gram of proteid is given for one kilogram of body weight, which is about two pounds. As to fats. Egg equals gram 6 of fat. Fats given: If proteids are given up to above one gram per one kilogram of weight, fat tends to produce acidosis. Make a qualitative sugar test daily. Also a daily test for CO2 tension test and for ammonia. Next train the patient to test his urine for sugar. Benedict's solution is best, and take 5 CC of this solution in test tube and add 8 to 10 drops of urine. Boil over a flame or put the test tube in a tin cup of water and boil for 5 minutes. Sugar shows red precipitate or turbidity. Have him test his urine every day. Benedict's solution or test, is claimed to be better than Fehling's. Weight of food is very necessary, not to exceed 100 grams.

If sugar should reappear, fast for two or three days and then increase only one-half as fast as first time. The week-

ly fast day is very necessary.

Calculation of diets in food values. Locke's is the best, published by Leonard

of Washington.

Following his excellent paper he very ably demonstrated the apparatus and methods used in making the test. Used in the treatment of diabetes.

Discussion by Dr. J. J. Osburn and R. U. Drinkard, Dr. F. LeMoyne Hupp asks the question, when to operate in diabetic gangrene? Dr. Drinkard asked how long fasting is kept up after sugar

disappears in the urine.

Dr. Thornton closes discussion. In answer to Dr. Drinkard's question he states, fasting should be kept up for one or two days more. Limited active exercise increase carbohydrate tolerance when sugar is free and acidosis free. In answer to Dr. Hupp eliminate acidosis and sugar and then operate with comparative safety.

Dr. Reed asked that a vote of thanks be tendered Dr. Thornton for his excellent post-graduate letter and made this in the form of a motion, seconded by Dr.

Schwinn. Motion carried.

The following committee on Red Cross Medical Work was appointed by Dr. Caldwell, president: Dr. James Schwinn, Dr. C. A. Wingerter, Dr. Chas. H. Keesor, Dr. R. U. Drinkard, Dr. F. LeMoyne Hupp.

Dr. Schwinn presented an interesting specimen of Poly-cystic kidney removed from a woman thirty-five years of age. He states they are most always congenital and bilateral and death often very sudden by uremia. The theory of the origin of this condition is that it is formed during foetal life. He illustrated this by diagrammatic demonstration. He reports the case operated improving nicely. Previous to this he has seen three similar cases at post-mortem.

Dr. Ackerman reported a similar case in which both kidneys were involved and

unusually large.

Dr. Caldwell announced the coming of Dr. Wm. A. White, of Washington, D. C., on December 8, 1916.

Meeting adjourned. Twenty-seven

members present.

Chas. H. Keesor, M. D., Secy. ...

Wheeling, W. Va., Dec. 8, 1916.

The regular meeting of the Ohio County Medical Society was held in the First Branch Council Room, City Building, with Dr. Caldwell presiding.

The meeting was called to order at 8:30 p. m. Minutes of last meeting read and approved. No report from Board of

Censors.

No clinical specimens presented.

Dr. Caldwell introduced Dr. Wm. A. White, superintendent St. Elizabeth Hospital of Washington, D. C., who read the paper of the evening; subject, "The Growing Importance of the Psychological in Medicine."

In beginning his paper he spoke of certain nervous conditions in early childhood; for example, stammering and then told how this might be overcome by teaching and showing the child both by suggestion and example. He next took up the subject of Hysteria and mentioned several cases; for example railroad accident cases, public service compensation cases, chronic urethritis, stating that in these cases suggestion plays a very important part. In describing certain conditions he cites individual cases to illustrate and explain the points to be brought out. First case: A young man comes to the hospital paralyzed in left leg; examined surgically; no organic lesions found, but he insisted on having the leg amputated; surgeons refused and sent him to Psychological Ward; here he was told after examination that he had no paralysis, but was a masturbator and if that be so, and he admitted it, that

his leg would get well. This he did and was able to get up and walk and has had no recurrence of paralysis since that time.

Second Case: Is of a woman having had four laparotomies performed and none of them necessary; it having been a plain case of hysteria, but in this case the surgeons had to do something as they thought to get at her trouble.

This subject of "suggestion" has been taken up as a method of treatment but in these days it is no longer spoken of as formerly, when it was believed to be a word which we could ofttimes hide behind for want of something better to say. The word now used is "transfer," by which we mean the patient confides in the physician and trusts him as a child does its parents. He next cites a case of a woman on whom a laminectomy had been performed and who got well and in which the operation performed was entirely unnecessary. In this case she was suffering with a moral difficulty and should have been made to face this moral conflict whether she wanted to or not, and she would have gotten well.

Next case cited was one of a young woman suffering with dysmenorrhoea and she had been operated upon several times. She was a very neurotic individual and should have been properly instructed by her mother. She had a very child-like attitude. Neurotics as a class are generally infantile because they struggle with great energy against their highest development. When Dr. White called to see her she had him to sit in a certain position and said that she would sit in her little chair; thus showing the child-like nature and actions. He now returned to the case of the young man with paralysis of the left leg. In this case we first noticed that it was the man's left leg that was paralyzed. We often find that many neurotics believe the right side of the body or right limbs to be right, while the left side if oft believed to be wrong. He spoke of certain railroad signals and colors as typifying danger, blood, sin, etc.

Primitive men and women fought with their hands and muscular strength, while today we fight with our minds and brain. He states that the leg is a fallic symbol. Cites the manner in which primitive man got rid of his sins: e. g., by placing of hands on a young bullock and casting their sins on it and then it was killed. He thus believes that by having the leg cut off he would atone for his sin. He next cited a case of "sexual childish curiosity," in which a child was told by its mother that if it continued and insisted on watching her as she dressed and undressed it would go blind. Later on during school life the child went blind. The next case cited was one where a boy and girl as children were continually exposing themselves.

In the study of this kind we speak of conditioning a reflex. He cites the example for experiment by Pavloff in his work on the secretion of gastric juice in dogs by showing them a piece of meat and ringing a bell at the same time. Later on if this is kept up we find that the dog will secrete gastric juice when the bell rings even though meat is not put before him. He states that the brain, liver, adrenal, thyroids and muscles are called "The Kinetic System." He refers to the work by Alfred Adler entitled Organic Inferiority, in which he claims a cell must first look out for itself and secondly it must look out for the body as a whole. The same is true of an individual in his relation to society; thus if each cell is not properly integrated there is a weakness and the trouble will start in this defective organ or poorly integrated cell or organ. He cited the case of Demosthenes, who in early life was a stammerer, but who later became the greatest orator of Greece. Helen Keller also cited as a similar example and even more wonderful.

Summary: The function of every cell or organ is represented eventually in the psyche, refers to Perkins Tractors, Mesmerism, Hypnotism, etc.

He says we must differentiate those cases in which "Psyche" is beneficial and those in which medicine and sugi-

cal interference are indicated.

Discussion opened by Dr. C. A. Wingerter. He congratulates this community on having a man who is a past master in the work of Psychology as applied to medicine to come before us and read such an excellent paper. Psychology must

have its proper place in the treatment of disease or in the practice of medicine. Dr. White has presented his paper to us by mental pictures or history of cases. He also cites some cases similar to those cited by Dr. White.

Dr. Diller of Pittsburgh, in his discussion states that this is a large subject and but little can be said in a few minutes. He states that a cure may be gotten from an incorrect explanation. He cites the ease of the man with the paralysis of the left leg and masturbator. He there is a mental phase to everything in surgery as well as in medicine. seated ideas coupled with emotion and expressions are easily gotten rid of when they want to feel the ideas are so and so and you can agree with them. states we should all be much interested in the case of children, for example: Early training as to leading normal lives, ctc., teaching obedience, self-restraint, and in avoiding indulgence in every moving faney, etc., e. g., certain classes of moving pietures. He states that play is very necessary and should be divided into two classes: First, active, physical excreises and the like. Second, passive, as theaters, moving pietures, etc. Many people suffer with loneliness.

Dr. White elosed the discussion.

An entertainment committee to arrange for annual Ohio County Medical Society banquet, was appointed by Dr. Caldwell as follows: Dr. Drinkard, Dr. Staats, Dr. J. C. Hupp, Dr. Williams and Dr. Wiehe.

A motion by Dr. Wingerter that the society extend a vote of thanks to Dr. White for his excellent paper and also that he be made an honorary member of the Ohio County Medical Society. Seconded by Dr. Kelly. Motion carried.

Adjourned.

Forty-four members present; four nurses from the O. V. G. Hospital; four nurses from the North Wheeling Hospital.

Eleven visiting physicians present: Dr. Wm. White, Washington, D. C.; Dr. Theodore Diller, Pittsburgh, Pa.; Dr. Fortney, Hundred, W. Va.; Drs. Boone, Wright and McClelland of Bellaire, O.; Drs. N. P. Sammons and R. W. Schulenberg, Bridgeport, O.; Drs. Knox and

Stewart of the O. V. G. H. and Dr. F. L. Dougall.

Chas. H. Keesor, M. D., Secy.

Wheeling, W. Va., Dec. 15, 1916.
Regular meeting of the Ohio County
Medical Society held in First Branch
Council Chamber, City Building; Dr.
Caldwell, presiding. Meeting called to
order 8:30 p. m. Minutes of last meeting read and approved. No report from
Board of Censors. No clinical cases exhibited.

Paper, "Human Voice and Speech," by Dr. Charles A. Wingerter. Mentioned organs used in voice and speech. Language consists of two distinct processes. First, word production; second, tone production. Best form of speech is labial. Enumerated the vowel residences in the different languages as follows: American, German, French, 17; English; Italian 7.

He also illustrated the sounds of certain letters when deformities in the nose and throat or air passages exist, thus showing the impossibility of speaking under those conditions.

### DISCUSSION

Dr. Ackerman quotes Dr. Wingerter as stating that all animals have voice. Disagrees with him in regard to certain reptiles and amphibias. He also disagrees with him in regard to the tongue as being the organ of speech. Dr. Ackerman says it is the larynx. Cites the case of a man from whom he removed the tongue and he still had voice and sound. He states that the voice is the best musical instrument and compares it with a pipe organ. He claims that the vocal chords sets the air in motion in both the nose and mouth.

Dr. Howells cites a case where Dr. Crile removed a carcinoma of the larynx and the man still spoke but in a rather stridulous voice. Asks explanation why one person has a tenor, another soprano, and another a bass voice, etc., and why women have such high pitched soprano voices.

Dr. Schwinn speaks of defective speech being easily remedied. For example, foreign body in the nose, adenoids and enlarged tonsils. Have them removed. Cites a case of a boy with very large tonsils who spoke very indistinctly and after removing tonsils and adenoids his speech and voice became practically normal.

Dr. F. L. Hupp asks for explanation why parrots can be taught to speak and yet certain apes and animals with vocal mechanism can not talk. Cites a case where Dr. Leicht in Germany had removed the larynx in one case and in another case tongue and larynx both were removed. These men had an artificial larynx and by means of their lips they were able to make themselves heard distinctly over a large hall.

Dr. Kelly cites the case of a man with papilloma of the larynx. He could only whisper. Tumor removed. By an expiration of air he found out he could make a loud sound. He also emphasizes the part played by the ear in voice and speech as in the case of Helen Keller. Cites a case of a ventriloquist who with his mouth and lips closed or a part use of the larynx and control his voice across

a large hall.

Dr. Megrail discusses a paper and refers to the strong voice of many of our

singers.

Dr. Caldwell cites a case of a man who had larynx removed and trachea transplanted with opening in front. Explanation of voice in this case was by keeping his stomach full of air.

Dr. Wingerter closes discussion.

As to bass and tenor singers depend on the shape and formation of the individual's vocal chords and chest. No answer for Dr. Hupp as to birds, etc. Does not understand ventriloquists method. In answer to the case of the man that had tongue removed and also in the case that the larynx removed, he still retained the power of voice and speech to a certain degree by the process known as substitution and accommodation.

As to French and Italian singers the Italian language is peculiarly adapted because of the open vowels in their lan-

guage.

No cases reported. Announcements: Dr. Keesor, secretary, stated that the following men have been elected to membership in the Ohio County Medical Society, they having received the necessary three-fourths vote of the members of the

society: Dr. G. W. Abersold, Dr. Emerson McGrail, H. B. Copeland, Chas. J. Ryan, L. S. Goin, E. M. Phillips, J. C. Hupp, F. W. Wiehe, Dr. John Fox of West Liberty, W. Va.; also admitted to membership by transfer from Jefferson County, Pa.

Meeting adjourned. Twenty-one mem-

bers present.

Chas. H. Keesor, M. D., Secy.

Wheeling, W. Va., Dcc. 22, 1916.
Regular meeting of the Ohio County
Medical Society held in the First Branch
Council Chamber. Meeting called to order at 8:30 p. m. Dr. Caldwell presiding. Minutes of last meeting read and

approved.

Report of Board of Censors favorable to Dr. A. A. Coyle and Dr. W. T. Morris.

Paper by Dr. D. A. McGregor. Subject, "Symposium on Nitrous Oxide Anesthesia."

The anesthetic to use is not the one easiest to give, but the one best adapted for the patient. Ether is the anesthetic of choice, especially in alcoholics and in nose and throat work. In cases where the surgeon is not acquainted with nitrous oxide anesthesia, therefore ether is the safest anesthetic.

Local anesthesia has also its field in certain cases especially in our own profession

NITROUS OXIDE GAS—COST AND PRODUCTION

Ammonium nitrate when heated gives off nitrous oxide N 2 O equals nitric oxide and is the most common adulterant used in the commercial world. pressure N2 O is in liquid state and is produced as a liquid. In some hospitals N2 O is prepared for immediate use. As prepared by Dr. A. Warner it is manufactured by means of the acid bath. It gives off brown fumes. St. Lukes and Lake Side Hospitals in Cleveland manufacture their own gas. Cost is about  $2\frac{1}{2}$ cents per gallon. A satisfactory anesthesia will cost about five dollars per hour. In hospitals where it is prepared it costs about \$1.88 per hour. Cost not to be considered when patients condition demands it.

Properties: Odorless, sweetish taste non-irritating, non-inflammable, noncombustible and will not support life.

Eighty per cent N2 O and 20% O may be administered with safety over a period of from 6 to 8 hours. It produces anelgesia in four breaths. Used largely by dentists and in obstetrics.

If N2 O is given fifty-fifty or fortysixty anelgesia may be kept up indefinitely. If given 80% N2 O and 20% O anesthesia is complete in three to five minutes.

What Patient Appreciates: Going to sleep and waking up quickly, very little nausea in only a very small per cent of cases. In a large per cent of cases by ether.

What Operator Appreciates: Hasty anesthetic, easily removed, from operating room and can see patient in a short time; also absence of irritating effects on throat, lungs, etc., no effect on heart or kidneys; less shock, less effect on brain tissues and cells: greater ability of patient to withstand shock in long operations.

Administration: As formerly given we had nitrous oxide asphyxia anesthesia in minor cases. The danger point is reached when the per cent of nitrous oxide is given above 80 and oxygen 20.

Relaxation: In about 50% of cases gas alone will not produce complete re-Preliminary preparation give morphia sulphate grain 1/2 and scopolamine Hbr. grain 1-150 to 1-200 one hour before operation. The unintelligent take gas anesthesia badly. When gas does not produce complete relaxation ether should be given and thus given it stimulates respiration as well as increasing the anesthesia.

Other factors which must be considered in gas anesthesia as regards the surgeon. The surgeon and anesthetist must work together doing team work. know each other's methods and know the amount of trauma and so forth to expect. The less trauma in handling the viscera the better.

Local Anesthesia: Use Novocain 1-500, Quin. Urea Hel. 1-500, Novocain used in the skin and in the sub-cutaneous tissues. Urea Hcl. Quin. used in the deeper tissues. Is more irritating than Novocain. Oft times patient can not where incision is at.

Safety of Anesthetic: As to gas a

variety of opinion. Dr. Crile of Cleveland reports 15,000 cases without a death. .Dr. McGregor never saw death from a Reports death in three cases in Columbus, Ohio, not nitrous oxide anesthesia but nitrous oxide asphyxia. N2 O has its limitations. It is a safe anesthetic in good technique and in conscientious hands. Any anesthetic is comparatively safe under these same conditions.

Ether Anesthesia: Paper read by Dr. J. A. Campbell. Each case for anesthesia is a factor in itself as to the kind of anesthetic which is best to be used; e. g., as regards physical condition of the patient, operator, operation to be per-

formed, etc.

Dr. Campbell classes anesthetics light and deep and states it is a very hard question to determine the border line between these two lines of anesthe-He again divided anesthesias into general, local, spinal and colonic. As to safety: All general anesthesias are comparatively safe in the hands of an efficient anesthetist. The simplicity of the general anesthetic is much better than that of giving gas anesthesia. As to the after effects we may have some nausea or vomiting but this too depends somewhat on the preparation of the patient If the anesthesia is properly given the danger of the complications are not The mortality from ether anesthesia is placed at from one to 5,000 to 1-10.000. In chloroform anesthesia the mortality is estimated at from 1 to 3,000 to 1-10,000. As to the efficiency it is an anesthetic that can be given most any where and in any climate and its administration does not require any large apparatus; thus making it by far the anesthetic of choice. As to control; it may be stopped at any moment or when the danger signals arise and in most cases by means of artificial respiration we are able to keep our patient well under our control. As to vomiting: This occurs in probably ten to fifteen per cent of the cases. Usually when a small amount of ether is given.

Pneumonia occurs in most cases where the surgeon gets in a hurry and wishes to crowd the anesthetic or it is due to streptococcus infection.

As to the preliminary preparation or

medication if properly given is very beneficial in most cases. Ether, like all other anesthetics, has its place. He also says that the surgeon should always let the anesthetist alone and in closing states that the anesthetizer should give his entire time and attention to the anesthetic during its administration.

Dr. Keesor briefly discussed the papers read and congratulated Drs. Mc-Gregor and Campbell on the excellent manner in which they presented their papers, stating that in his experience with ether anesthesia he had never had

a death from anesthesia.

Dr. Sehwinn speaks of colonic anesthesia. He describes it as follows: One ounce of ether and two ounces of olive oil to each twenty pounds of body weight is given per rectum twenty minutes before operation and given in the patient's room. If the anesthesia is too deep it may be relieved by removing part of the solution by the reetal tube. Patients may sleep a little longer after using this method, but we may wash out rectum when the operation is over. As to local anesthesia, here we use three factors. First, Anemia of the part; seeond, cold; third, anesthetic. Anemia may be produced by Esmarch's bandage in a given case; in others by adrenalin chloride and novocain. By cold: Inject the deeper tissues first, next the more superficial tissues and lastly the skin. Wait about twenty minutes for anesthesia of the parts. "Do not be in a hurry."

Dr. Hupp discusses papers. As to advantages of nitrous oxide over ether in obstetrics; also inquiries as to the use of twilight sleep; as to acidosis; as to chloroform poisoning and how these things can be avoided and how acidosis develops. He also speaks very favorably as to the use of normal saline preliminary to operations; also as to the use of 5% solution of glucose as a preliminary measure in lessening the possibility of acidosis. He refers to Crile's paper on sleep, etc., as read at our last state meeting. He next describes a method of anesthesia by means of the ether spray in the nostril and nasopharynx, the ether being vaporized over

water.

Dr. MacGregor closes discussion. As to twilight sleep. It is being given more attention intelligently by the better class of obstetricians. As to N2 O gas in obstetric cases anelgesia is used and not anesthesia; four breaths are needed when she feels a pain coming and she will bear down as well as without gas. He next gives a resume outline by Dr. Steel of Cleveland as regards the use of and benefits from ether, morphine and scopolamine and N2 O gas as anesthetic agents for the relief of pain in the first and second stages of labor and as to the relaxation of the rigid os and the preservation of the perineum and as to respiration of the baby.

N2 O is very satisfactory in obstetrics when we have an lgesia alone. As to acidosis; increased ancesthesia tends to increase the possibility of acidosis. As to shock; we try to lessen the alkalinity by giving soda in solution. As to postoperative gas pains in N2 O anesthesia,

that occurs more or less.

Discussion closed. Meeting adjourned. Twenty-one members present.

Chas. H. Keesor, M. D., Secy.

## State News

Dr. C. C. Hogg of Huntington, a major in the medical corps of the Second West Virginia infantry, who for the past year has been on the supernumerary list, has been reinstated and assigned to duty with staff headquarters, according to an order issued by Adjutant General John C. Bond.

An interesting address was delivered in Huntington April 9, by Dr. W. A. Humphrey, a member of the faculty of the medical department of the Ohio State University, Columbus, Ohio. Dr. Humphrey took for the subject of his lecture, "The Moral Aspect of the War."

Dr. J. H. McCulloch of Charleston, was a recent visitor in Huntington, called here by the illness of his mother.

At the February meeting of the Federation of State Medical Boards held in Chicago, Dr. Wm. W. Golden of Elkins,

was elected vice-president of that National organization.

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Dr. A. P. Butt of Davis, W. Va., former president of the West Virginia State Medical Association, attended the New York Clinics during the month of March.

Dr. Wm. O'Neil Sherman of Pittsburgh, Pa., delivered an address before the Ohio County Medical Society April 20, on the "Carrel Method of Wound Sterilization, Its Use in Military, Industrial and Civil Practice." Demonstrated Lumier Slides and motion picture.

Gov. John Cornwell has designated and set apart the week of May 1 to 6, 1917, as children's welfare or "baby week" and asks for the proper observance of it as such. This movement and date were designated by the Children's Bureau at Washington.

Dr. S. J. Jepson, of the State Health Commission of Charleston, has urged that the observance of Baby Week in West Virginia extend through the months of May and June.

Dr. J. H. Wetzel of Ravenswood, died April 10 in the Ohio Valley General Hospital at Wheeling, where he had been ill for some time. He was sixty-six years old. In late years he had not practised medicine, but given his time to the duties of secretary of the Jackson County Building and Loan Association.

Dr. E. M. Spangler of Norfolk, Va., was a recent visitor in Huntington.

The Beckley Hospital at Beckley, W. Va., Dr. J. E. Coleman, surgeon-incharge, has added an up-to-date laboratory, which is in charge of Dr. H. A. Brady.

The following items of interesting news were received from the secretary of the Barbour-Randolph-Tucker County Medical Society.

Dr. H. A. Giltner of the Parkersburg Naval Recruiting station was in Huntington several days in April on business

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incident to his work as examining officer for naval recruits, entering the hospital corps.

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Dr. J. T. Redwine of Missouri, has located in Davis. He is assisting Dr. Butt in his large general practice, as well as in the hospital.

Dr. Joe Lyons of Charleston, was a recent visitor in Huntington.

Dr. D. L. Fraber of Baltimore, has located at Pierce, W. Va., doing the mine practice for the Davis Coal and Coke Company. Dr. Farber is a congenial gentleman, and comes highly recommended as a physician.

Dr. P. L. Grady, formerly of Weston has located at Coalton, where he has the mine practice of the Davis Collier Company. Dr. Gray is a son of Senator Gray of West Virginia.

The City Hospital of Elkins has purchased property west of the railroad, near Davis Memorial Hospital and has moved into same. We learn the purpose is to enlarge the building, so as to make it suitable for hospital use.

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Dr. O. L. Perry of Elkins spent a few weeks in Florida looking for Indians, alligators and fish, but when he heard war was about to be declared against Germany, he hurried back to the mountains of West Virginia. He was evidently afraid of the submarines and says if you go fishing, "keep away from the water."

Dr. C. M. Birdsell of Westernport, Md., has accepted a position at Weaver and will locate there as soon as his wife, who recently underwent a very serious operation in the Keyser Hospital, is able to be moved.

Since the war is a fact, they say "Uncle Tom Wilson," M. D. of Davis Memorial Hospital is redoubling his efforts to get married. He must have good prospects as we saw him armed with a garden-rake, promenading the streets of Elkins.

Dr. C. T. Taylor of Huntington spent sometime recently in Kentucky looking after business interests.

Dr. F. A. Fitch of Huntington attended the meeting of the Royal Arcanum in Parkersburg in April.

Dr. George A. MacQueen of Charleston was elected mayor of that city in the recent election.

Former Governor H. D. Hatfield and Mrs. Hatfield of Huntington are spending several weeks in New York City.

Dr. J. R. Caldwell of Wheeling, president of the Ohio County Medical Society has tendered through Congressman Neely the services of that society for such use as the government may require of them.

Dr. and Mrs. M. Mendeloff of Charleston have returned from New York, where they spent their honeymoon.

Dr. J. H. McCulloch of Charleston has resigned his position as Chief Medical Examiner for the West Virginia Compensation Commission. Dr. M. V. Godbey of Charleston has been appointed to fill the vacancy. Dr. McCulloch expects to reside in Welch.

Quite a few of Charleston's physicians have expressed themselves as expecting to join the Medical Reserve Corps.

Dr. Robert Wriston of Beckley spent the winter in New Orleans, La., where he took a special course in medicine.

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Dr. B. L. Pettry of Dorothy has joined the Reserve Medical Corps and has reported for duty. We shall miss him, but feel honored that one of our boys has responded to the call of his country.

Dr. Brady of Danville, Va., is associated with Dr. J. E. Coleman in the Beckley Hospital as interne and pathologist.

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Dr. B. B. Richmond of Skelton, who was operated on at the Beckley Hospital

is making a nice recovery, and will be able to return home soon.

Dr. C. M. Hawes of Huntington has recently been appointed specialist eye, ear, nose and throat for the C. & O. Hospital Association to take the place of Dr. T. W. Moore, resigned.

## Medicine

COLD AIR TREATMENT

A long chapter might be written on the treatment of pneumonia, but, aside from the treatment of complications, what is really of value can be summed up very briefly. Ever since the advocacy by Northrup of the cold air treatment of pneumonia, some ten years ago, this method has been gaining in favor. one who has seen the almost miraculous improvement manifested by such patients, when the windows are thrown wide open on a wintry day, or, better still, when they are moved out of doors, can fail to be impressed with the value of the treatment. In asthenic and especially in the afebrile cases, common in the aged and in alcoholics, the method may need to be used with caution, and it may be that the same is true of children. Even in the latter, however, recent opinion favors the cold air treatment. Freeman, in his recent presidential address before the American Pediatric Society said: "In all the acute infectious diseases I think there is now a general acceptance of the advantage of fresh air, excepting perhaps in measles and scarlet fever. In tuberculosis there is now no question of its advantage. In pneumonia the results from this treatment have exceeded those from any other method of treatment, including specific treatment with serums and vaccines." Morse and Hassmann have studied the effect of cold outdoor air on children sick of pneumonia at the Children's Hospital in Boston. They were not able to confirm the previous observations of Howland and Hoobler in 1912, of the constant stimulating effect of cold air on blood pressure in this disease, but were definitely impressed by the general subjective and objective improvement in the patient's condition when placed out of doors.

## AUTOLYSED PENUMOCOCCUS EXTRACT

Rosenow has noted for some years the apparent beneficial effect from the early subcutaneous injection of large doses of partially autolyzed pneumococci in the treatment of lobar pneumonia, and Rosenow and Hektoen have lowered the mortality rate in cases of lobar pneumonia in Cook County Hospital, Chicago, for three consecutive years by the administration of partially autolyzed pneumococci to alternate patients. In a recent communication Rosenow and Falls report further results with this treatment in the same hospital. There was no selection of cases, every patient being injected as soon as the diagnosis of lobar pneumonia could be made clinically. The injection was occasionally followed by a chill, and usually by a temporary rise of temperature. The latter then fell from 2 to 6 degrees. and though it subsequently rose again, the temperature usually continued somewhat lower than before the injection. Of all 35 cases studied, only six died. these, five had used alcohol to excess and the one nonalcoholic had a streptococcus mucosus pneumonia. The method is obviously not ripe for general use, but promises much for the future.—Abstract from Interstate Med., Jan. 3, 1917.

## TERMS USED IN ENDOCRINOLOGY Endocrinology: A study of the inter-

nal secretions.

Hormone Therapy: Treatment with hormones.

Hormone: A substance formed in one organ of the body acting as a courier travels to another organ of the same body through the blood and thus forms a correlation between the first and second organs. Example: The hormone of the pituitary gland goes through the blood and inhibits the ovarian secretion. Likewise the adrenals inhibit the pancreas.

Homadenology: A study of the blood glands, same as endocrinology.

Chromaffin: Staining with chromic acid, i. e., the adrenal system.

Estrus: The period of sexual activity in animals, the "heat" or "rut."

Enzyme or Zymase: Soluble ferment. Zymogen: The product produced in the gland just before the ferment, a proferment, i. e., trypsinogen, pepsinogen.

Opotherapy means organotherapy, This is sometimes called sequardothera-

py or animal therapy.

Lipoids are extracts of cells which like fats are soluble in ether and chloroform and act like many of the hormones. They cannot be saponified as fats.

Gonads, the sex glands, male and fe-

male.

Chalone, an hormone that restricts another hormone from action. An antihormone. As the hormones of the pancreas restricts the adrenals.

Enzymes, or Zymogens, are soluble ani-

mal ferments.

Epiphysis is the pineal gland. Hypophysis is the pituitary gland.

DERMATOLOGICAL DIETETICS Ernest Dwight Chipman (Journal A. M. A., December 2, 1916) groups skin diseases into three classes according to their relation to diet. The first comprises those which are directly dependent upon diet; the second those which may not be directly dependent upon diet, but in which diet is of great importance; and those in which diet may be regarded as only an indirect element. Pellagra belongs to the first group, being due to a deficiency in certain vitamines, and its treatment by diet is obvious. Urticaria also belongs to the first group, as it results from hypersensitiveness to some protein which should be eleminated from the diet. Toxic erythemas are similar to urticaria in this respect. As illustrations of the second group, eczema, psoriasis, and rosacea are well known. group the action of the foods may occur: 1. Reflexly from gastrointestinal irritation; 2, indirectly from indigestion and by the skin of certain substances; 4,

toxemia; 3, directly from the elimination by the skin of certain substances; 4, through the lack of certain of the accessory foodstuffs; 5, through excess in certain foods, such as carbohydrates which may cause hyperglycemia, and proteins which may cause a positive nitrogen balance; 6, as a result of hypersensitiveness.

In infantile eczemas restriction of starches or fats will cure or greatly improve

a large proportion of cases, while in the adult forms the protein usually has to be restricted. In psoriasis the general indication is for a reduction in the protein intake by placing the patient on a modifled lactovegetarian diet for a considerable time and then gradually restoring the proteins to a point however below that usual for normal persons. The same plan gives good results in eczema. Rosacea cannot be definitely associated with any one dietetic error and the best results seem to be secured by a general reduction in the amount of food taken. which in these cases is usually considerably in excess of the bodily needs. Acne is a typical example of a disease belonging to the third class, and reduction of the intake of carbohydrates is usually followed by marked relief. In the matter of the dietetic care of patients with one or another of the dermatoses it must be regarded as essential that the physician have not only a clear idea of the relation of the diet to the disease, but also a good understanding of the fundamental principles of nutrition and dietetics. He must be sure to fulfill each of the following conditions: Maintenance of nitrogenous balance; the provision of sufficient energy bearing foods to meet the caloric requirements; provision of certain fresh or uncooked foods; provision of a certain proportion of vegetable fibre; a proper supply of inorganic salts; stimulation of the gastric secretion by a certain proportion of extractives; and, lastly, he must meet certain demands of the patient's taste and desire for bulk in the food.

# CONCLUSIONS IN REGARD TO INTRAVENOUS INDICATION.

In concluding, it is realized that the average American medical man will consider this method a dangerous therapeutic innovation and regard it with suspicion. I am very sure, however, by reason of close observation and considerable experience, that this form of medication deserves the very serious attention of the American medical profession.

The physician who makes use of it will soon learn that the intravenous route is decidedly advantageous to the patient, since the medicament is not subjected to influences that may reduce its potency or interfere with its physiological action. Certainty and directness of action are secured by this method of application.

Intravenous injection should be employed without hesitation when the case is urgent or the tissues edematous, or the circulation is so feeble that absorption is slow.

When a drug suitable for the purpose is injected its physiologic and therapeutic effects are produced in the fullest degree in the shortest time and in the most characteristic form. Just as the subcutaneous administration of solutions in many instances is superior to their administration by mouth, so the intravenous injection is better than the subcutaneous. Some of the advantages of intravenous medication may be stated as follows:

The dose is usually smaller (a fraction) one-half, or even less) than the amount necessary to produce an equivalent effect by the oral route.

The effect is prompt, sometimes immediate and usually may be accurately estimated.

The patient is spared the disagreeable taste, gastric distress, and psychic effects of drugs given by the mouth, and likewise the local reaction, swelling, induration, and pain incidental to hypodermic injections are not seen after properly made intravenous injections.—Abstract from reprint in *Therap. Gazette*,... 10-15-16.

### PITUITARY GLAND.

This gland has been studied very much in the past few years. It certainly is made up of two parts as far as its therapeutic value is concerned. Anatomically it is made up of two lobes and an "isthmus" or "pars intermedia" or "pars nervous." The anterior lobe is larger than the posterior, is made up of epithelial cells, and acts somewhat like the thyroid. Some writers think it is a part of the thyroid which has broken off in the process of development.

The posterior lobe is much smaller, looks somethink like the adrenal medulla. This lobe embryologically is developed from nerve tissue, the neural canal, while the anterior portion, as stated, is developed from the roof of the mouth.

The pars intermedia has a canal run-

ning through it which connects the other two parts. The main structure here is nerve fibers. All kinds of wonderful claims have been made for this "organ

enigmatique."

The author is quite positive that the posterior lobe contracts unstripped muscular fibers by its hormones. For this its use in obstetrics is well known. In the cases where a little extra push will drive the head through the birth canal it often works like magic. It will not replace ergots as a hæmostatic for these organs. Ergot does not seem to wear off so quickly as this hormone. Ergot acts principally upon the center, while this. hormone goes through the blood and acts directly on the musculature. In the same way it causes unstripped muscle fibers all through the body to contract. In the blood vessels this causes the blood pressure to rise. Hence it should not be given in confinement cases where there is a high blood pressure for fear of apoplexy. For similar reasons vegetarians on the valves of the heart or degenerated arteries are absolute contraindications for this remedy.

Although so much like the adrenals the author has seen a case of Addison's disease where this gland had no effect in three months treatment. A solution of this gland does not blanche mucous membranes and make bloodless operations possible as the adrenals. In cases where it is desired to raise the blood pressure it acts much longer than adrenaline.

The anterior lobe has to do with physical development very much like the thyroid. Tumors of this lobe produce giantism or acro megally. Removal of a portion of this gland is done most frequently for this condition by way of the glabella going above the cribiform plate of the ethmoid. The one case the writer has seen attempted died two days after the operation from shock.—Abstract from N. Y. State Jour. of Med., March 1917.

TREATMENT OF INFLUENZA.

W. A. Onderdonk (American Medicine, Jan., 1917) gives hot malted milk or hot lemonade to counteract the initial chill. In addition, the patient should be kept warm with blankets and hot

water bottles. If prostration is not too marked, a hot bath is indicated. If coughing and chest oppression are present, ammonium carbonate grains 5 to 10 in milk should be given. If this is not well borne, strychnine may be substituted. If there is marked depression, strychnine or musk is indicated. In the gastrointestinal type calomel should be given in small and repeated doses. In the neuromuscular cases gelsemium has been given. If the pain is limited to the lumbar muscles external applications may add to the patient's comfort.

# CHILD WEIGHING 25 POUNDS AT BIRTH.

Dr. D. P. Belchar, Salt City, Ga., reports the following case in the A. M. A. Journal.

Mrs, R. W. C., aged 35, height 5 feet 7 inches, weight 220 pounds; circumference at hips 50 inches multipara, delivered February 22, 1916, has had eight normal children, including a twin birth. These children have averaged from 7 to 9 pounds in weight. She had three miscarriages. April 15, 1915, she aborted after about a six weeks' gestation. Soon after she became pregnant again. Early nausea and vomiting were more marked than in previous pregnancies. began February 11, 1916. Vaginal examination at 8 p. m., during the first stage showed left occipito-anterior presentation. The os was patulous, and permitted the introduction of three fingers. The labor pains were of normal frequency but short. After an hour, the os admitted four fingers, and the pains were still short. The patient was given 5 minims of pituitary extract; the pains became more severe, but had little effect on the passage of the head. In two hours the 5 minims of pituitary extract were repeated; the pains now became strong. The os was normally dilated, but there was still slight progress of the head. At 2 a. m., after a consultation with Dr. A. S. Hargrove, the patient received a third dose of pituitary extract of 15 minims. At 3:30 a.m., the head was born. The posterior shoulder was delivered with great difficulty. Much greater difficulty, however, was experienced in delivering the anterior shoul-

der; but with the added assistance of Dr. A. T. Stevens, this was finally rotated posteriorly, and accomplished. It required the combined efforts of three physicians to deliver the remainder of the body. The child was a weighing 25 pounds; it measured inches across the shoulders, 28 inches in length and was perfectly formed. was born dead. On examination of the mother, the perineum was found slightly lacerated. This was completely repaired by three sutures. Chloroform anesthesia was used. She made an uneventful recovery.

(Comment: This case is remarkable as it was a girl child and the maternal measurements, as given, taken after delivery, were not abnormal save for circumference at the hips, which is rather large. The author states that the baby was perfectly formed; therefore, we may assume its head was relatively large; yet it was born without mechanical assistance and caused but slight perineal laceration.—Jour. Med. Soc. N. Y.

## Surgery

SPINAL ANAESTHESIA; ANALYSIS OF TWO HUNDRED AND EIGHTY CASES. L. L. Stanley. J. A. M. A., 1916, lxvi, 1090.

In the 280 cases in which spinal anæsthesia has been used on the immates at the San Quentin, Cal., prison, tropacocaine in 1.5 gr. doses has been the

agent employed.

In ordinary operations, excepting those in which the abdominal viscera are handled, no hypnotic is given the patient before the operation. The patient walks to the operating room and mounts the table. Within one minute he feels that his feet are becoming warm, and he may even feel a tingling sensation in his Within two minutes sensation is lost about the anus and, as a rule, within about four minutes the loss of sensation is so great that operations for hernia may be done without pain. For operations above the umbilicus, the patient is allowed to stay in the Trendelenburg position for six or seven minutes, for apparently it takes that long for the tropacocaine to gravitate cephalad to bathe

the nerves which supply these segments. For operations about the anus, the average Trendelenburg position has been 1.7 minutes; for operations on varicose veins 2:5 minutes; for operations on the scrotum 2.4 minutes; for hernia 3.1 minutes; and for gastro-enterostomy 4.2 minutes.

The conclusions are as follows:

1. In this series of 280 cases there has been no fatalty.

2. There has been comparatively lit-

tle shock.

3. There has been headache in only 8 per cent. of eases.

4. There has been no pucumonia following the operation.

5. There have been very few postoperative complications.

6. There have been no permanent paralysis following the anæsthetic.

7. The period of convalescence has been shortened.

8. With the relaxed muscles, closing of the abdomen is greatly facilitated.

9. The blood-pressure has fallen in most cases, but in the average case not to a dangerous degree.

10. The height to which the anæsthetic is effective is influenced by the length of time the patient is in the Trendelenburg position.

11. The pulse-rate is not influenced to any marked degree by tropacocaine intraspinally administered.

Pseudo-Appendicitis. F. G. Connell, Oshkosh. *Jour. A. M. A.*, July 29, 1916.

Connell says that the question of acute appendicitis is settled, at least for the time being. The method and time of treatment and post-operative measures are practically uniform; delay in proper treatment is usually due to uncertainty in diagnosis and the inexcusable estimated general hospital mortality of 10 per cent. is due to the failure of some one to recognize the well accepted principles of surgical diagnosis or treatment. problem of chronic appendicitis calls for attention, not on account of high mortality rate, but of a more disconcerting morbidity rate—the post-operative persistence of symptoms. When a patient complains of the same symptoms after appendectomy as before operation we

may reasonably believe that they were not due to the appendix and that the diagnosis was incorrect. He divides these cases into two classes; those in which the proper diagnosis have been subsequently obtained and those in which the persistence of the symptoms has not been rationally explained, and which might be well called pseudo-appendicitis. Between January, 1909, and January, 1916, he has found eightyseven records in which the removal of the appendix or the interval operation for appendicitis has not been followed by relicf of symptoms; forty-eight of these were operations of his own. During the same time there were 212 patients operated on, all told, for chronic appendicitis. He gives a detailed review of these cases, not as case reports, but analyzed according to the histories and symptoms, the findings and results. In his conclusions, he says that after eliminating all demonstrable pathologic conditions that might possibly be confused with chronic appendicitis, there remains in certain cases some cause for pain and in the right iliac fossa other than the appendix, the exact nature of which is not definitely known. Such cases are frequently associated with visceral ptosis, constipation and neurasthenia. Appendicitis, either acute or chronic or when there has been an unquestioned inflammation, calls for surgery, pseudo-appendicitis, on the other hand, is an non-surgical condition, hence the need of a differentiation between these conditions. Every case of so-called chronic appendicitis that is associated enteroptosis, constipation symptoms of nervous instability should be looked on as pseudo-appendicitis, until careful and painstaking study of the history and clinical findings prove it otherwise. The advisability of seeing the patient in one of these attacks is pointed out. While an entirely satisfactory explanation of this type has not yet been found, study suggests that a lack of balance between the vagus and sympathetic divisions of the autonomic nervous system may be an ctiologic factor, and this in turn may be due to an abnormal function of some of the endocrine glands.

Glycerin and Ichthyol in Septic Wounds Thomas W. A. Daman (British Med. Jour., Nov. 11, 1916) reports that in septic wounds in which the circulation has been much impaired or in which there has been much hard crusting healing progresses very slowly under the usual measures. This can be overcome by the application of solutions of ichthyol and glycerin of varying strengths. This combination provides an effective antiseptic which also softens the tissues, stimulates the circulation, and, through its hygroscopic properties, stimulates the exudation of serum rich in antibodies. It also diminishes the tendency to excessive scar formation, and accelerates the processes of granulation and epithelialization. The dressings should be applied night and morning, or often only once daily. Effects nearly as good can also be obtained from solutions of magnesium sulphate in water and glycerin, but the presence of the water tends to diminish the osmotic action of this dressing.

Blood Clot Method of Treating Mastoiditis. W. R. Thompson (Texas State Journal of Medicine, February, 1917) brings together the cdges of the skin over a clot of blood with draw string or interrupted sutures. A small opening at the lower end of the incision is left in which a catgut drain is inserted. A loose gauze dressing, which is changed daily, is applied over this. If the infection is not great the wound unites, the clot becomes organized, and the patient is well in two weeks. If the infection is too great a breaking down takes place and the pus is drained off below. Under these circumstances the patient does not get well as quickly. From experience he concludes that at least seventy-five per cent of all patients get well with blood clot in ten to fourteen days, the remaining twenty-five per cent get well in less than half the time required by the cases treated by the old method. The aftertreatment is painless to the patient and very little trouble to the surgeon. This is especially attractive to children. There is a small percentage of deformity and if present it is very slight. It saves the surgeon's dressing and time-also time and suffering on the part of patient.

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## "THAT VACATION"

Hugh G. Nicholson, Charleston, W. Va.

I was disappointed in the May number of our Journal. I had expected to read at least twenty-five interesting articles about mountain climbing, fishing, hunting and other means of relaxation and there was only three. Why was this? There are some 900 local readers of the Journal and only two of us besides the Editor wrote on this line. Personally I intended to write my little bit but I was so much in need of a rest that I procrastinated, and thought that the other fellows would do it. They did not. It means that we are all tired, and need a change. None of us know how to play, and if any one needs to know how, it is a doctor. Every year I go fishing some-If I should go to the Mayo Clinics at Rochester I always take my rods with me. I attended the clinics until dinner, and in the afternoons go cither up or down the Zumbro River and get some bass. There are also some trout within five miles of the town. Next time you go out there take your rods and recls along, and get some real fun along with the other.

A real vacation though is very different even from this. At least once a year we should get away for two weeks or longer and do nothing in the nature of work. For several years I have gone to

Burt Lake, Mich. There you have an excellent hotel managed by the Sager Brothers. Post office address after June 15, Alanson, Mich. This point can be reached either over the Michigan Central, getting your ticket to Indian River, Mich., or over the Grand Rapids and Indiana to Alanson. A motor boat will meet you at either point, and take you to the hotel.

You can get fish, and many kinds. There are in the lake proper pickerel, bass, wall-eyed pike, perch and rainbow trout. Near the hotel are some real streams that you can fish and catch brook trout. Do you realize how good fishing that is? How easy it is to get to; and lastly, it will not break you up to go. Steal from your little bank account four labor cases or one laparotomy fee and that will cover your total expense; railroad fare, hotel, guides, laundry, etc. for two weeks. That is cheap when you consider what you gain. I have no doubt that two weeks spent in this way each year will add ten years to any doctor's period of life, provided he lives right the rest of the time.

Last year I had my friend Covington along with me. He landed a six-pound rainbow on a split bamboo casting rod. This was out in the open lake. It was a pretty fight, and for ten minutes no one knew who would win out. Whipping first this way, then that. Out of the water two feet, and then hum would go

the reel with fifty feet of line to be wound up again. The moutned fish is over Covington's desk, so you don't have to take my word for it. He sees it every day, and says he can't afford to go this year; but when June 15 comes around I know of two return trip tickets that will be bought for Indian River. That being the case it will not be safe for any boy with a green-apple pain to send for me after June 1. I am afraid I might make a positive diagnosis without even a white count. Now you are the man who said this was appendicitis; I didn't.

The open season does not begin until June 15, so don't go before then; but this year go to Burt Lake and learn how to play onec again. There is a telephone but it will not take you long to learn that it is not for you. You will meet many men that it will be a pleasure for you to know; and it makes me hungry now to think of those fried fish dinners out on the shore of the lake. Am I going? Well, I rather think I am. Come on.

# THORIUM—A NEW AGENT FOR PYELOGRAPHY

By J. Edward Burns, M. D., Baltimore, Md.

From the James Buchanan Brady Urological Institute, Johns Hopkins Hospital, Baltimore, Md.

Read at State Association Meeting, Wheeling, W. Va., May, 1916.

Pyelography, or the outlining of the renal pelvis and ureter by injection with some solution which is opaque to the Roentgen-ray was first successfully accomplished by Voelker and Von Lichtenberg in 1906. (1. Voelker and Von Lichtenberg. "Pzelographic (Roentgenographic des nierenbeekens made Koleargolfullung.") Munchen Med. Wechn, 1906, LIII., 105-107.

Collargol, the medium used by them for injection, notwithstanding the various attempts to replace it by other solutions, has remained the pyelographic agent of choice up to the present time. Colloidal solutions of salts of the heavy metals, such as silver, iron, bismuth, cop-

per, lead and mercury have been tried as substitutes, as have suspensions of the salts of bismuth, calcium and magnesium. These solutions sediment on standing and although quite opaque to the Roentgen-ray for the most part are viscuous and some of them are quite toxic and irritating.

The chief objection to collargol is its irritant action when it escapes into the tissue and as a matter of fact some deaths have been reported following its usc. On account of its viscosity, its elimination from the urinary tract is rather prolonged. It stains everything with which it comes in contact, making its use rather objectionable. It is quite expensive and for this reason cannot ordinarily be used for cystograms and large hydronephroses.

The qualifications of an ideal solution for use in pyelography are that it should be non-toxic (within the ordinary limits of usage) non-irritating, quite opaque to the Roentgen-ray, giving not only a good shadow but one of clear delineation, possess a marked degree of fluidity, permitting its ready escape from the urinary tract, and be inexpensive so as to be generally used.

The opacity of a substance to the Roentgen-ray depends upon its atomic weight; for this reason Thorium, being next to the heaviest known element, is quite ideal theoretically and seemed worthy of careful investigation.

The nitrate and chloride of thorium are quite readily soluble in water, giving a clear, markedly acid and astringent solution. These solutions precipitate insoluble salts in the urine and are quite irritating. These characteristics render them unfit for clinical use, but they have been found to be of great advantage in the injection of pathological specimens for tracing out the finest hair-line vessels and ducts when the specimens so injected are exposed to the Rocutgen-ray.

Although the solutions of these salts were unsuitable for clinical use, it was quite evident that thorium in some form would be ideal for use in pyelography. On this account, a careful study of the various salts of thorium and the combinations into which they may enter, was undertaken. As a result of this investi-

gation it was found that a solution containing the double citrate of sodium and thorium, together with an excess of sodium citrate and some sodium nitrate, was found to possess all the qualities above enumerated as being necessary for an ideal pyelographic medium.

The solutions used contain 10 per cent and 15 per cent thorium nitrate and are

made in the following way:

To make 100 c.c. of a 10 per cent solution, 10 gm. of thorium nitrate are dissolved in as little distilled water as possible; to this solution kept hot on a water or steam bath, are added 30 c.c. of a 50 per cent solution of sodium nitrate, the additions being made in small quantities and care being taken to shake the solution thoroughly after each addition. At first after the addition of the citrate solution, a white gummy precipitate is formed which later becomes granular, and finally dissolves on the addition of all the citrate solution. This solution is then made neutral to litmus by the careful addition of a normal solution of sodium hydroxid, and made up to the required volume of 100 c.c. with distilled water. On filtration, a clear, limpid solution is obtained, which, when sterilized, either by boiling or steam under pressure, is ready for use. The stability of the solution is not affected in the least by sterilization.

The 10 per cent solution is used for injections of the bladder and the 15 per cent solution for injections of the renal pelvis and ureter. These injections are done by the gravity method, the injection being continued until the patient has a sensation of fullness either in the bladder region or in the region of either kidney. For injection of the renal pelvis a burette with rubber tubing connection and properly fitting nozzle for the end of the ureteral catheter is used, the burette being held slightly above the level of the patient. This method is recognized by urologists at the present time as being the least dangerous and most successful for the complete distension of the kidney pelvis. Injection by means of the syringe has fallen into disuse because of the great danger of over-distension of the renal pelvis and the forcing of the solution into the renal parenchyma or into the perirenal tissues. Practically all the cases of death reported due to the use of collargol have been those in which this latter procedure was employed.

This thorium solution gives not only a splendid shadow of the renal pelvis and ureter but the outlines of the renal pelvis, ureter and calices are of markedly clear delineation.

In addition to its great opacity to the Roentgen-ray, the solution, either by its adhesive properties, by its capability of being absorbed by calculi or by means of its comparative density, accentuates the shadows of calculi in the urinary tract when they are not ordinarily seen in plain Roentgenograms.

The great fluidity of the solution is of special advantage because it so rapidly escapes from the renal pelvis, ureter and bladder that a plate made a few minutes after the injection has been discontinued, gives no suggestion of a shadow, showing that the solution has been completely removed from the urinary tract.

The solution is not irritating to the mucous membrane of the bladder, ureters and pelves of the kidneys. This has been shown by the fact that no urinary symptoms have occurred in cases in which it has been used. Cystoscopic examinations made after the injection have shown no evidence of any inflammation of the vesical mucous membrane. In the cases which have come to operation in a short while after its use no evidence of any irritative action has been seen in the bladder, urcters or kidneys. When the solution has been introduced into the peritoneal cavity of animals, it has been completely absorbed in most instances and at autopsy there has been no sign of peritonitis. The careful neutralization of the solution has been emphasized previously and it is due to this fact that no irritating action has been observed.

The solution is not bactericidal although it inhibits the growth of the ordinary bacteria. Moulds grow in it upon standing; therefore it must be sterilized and kept sterile while being used.

As regards the use of the solution in bladder and kidney injections, no evidence of toxicity has been observed. Since the introduction of the solution in this clinic nine months ago it has been used in one hundred and thirty eases; for pyelograms from three to one hundred and fifty cubic centimeters of the fifteen per eent solution have been used and for eystograms from thirty to nine hundred and thirty enbie eentimeters of the ten per eent solution. The largest amount used in a single case at one time was six hundred cubic centimeters of a ten per cent solution introduced into the bladder, ureter and renal pelvis of a boy twelve years of age. The Roentgenogram, in this instance showed a dilated and trabeculated bladder, a dilatation of the internal vesical sphineter, double hydroureters and hydronephroses due to congenital obstruction in the postcrior urethra. This patient showed no change in the phenol-sulphonephthalein output nor blood urea content after the injection nor has there been any impairment of kidney function in any of the eases in which it has been used as demonstrated by these two methods of investigation.

The pharmacologie action of the solution has been studied experimentally in animals. In small doses subcutancously, intra-muscularly, intraperitoneally and intra-venously there has been no effect. Larger doses have produced practically no symptoms whatsoever. Still larger doses in a few instances have caused death. These fatal doses, of course, were far above the ordinary limits of clinical usage, being ten times as great in amount ordinarily used in a simple pyelogram, and undoubtedly hundreds of times greater than any small amount which might be absorbed during the procedure.

The solution is clear, therefore perfectly elean, and in this particular possesses a very marked advantage over any other solution employed for this purpose.

It is comparatively inexpensive, its cost being about one-third that of collargol.

### CONCLUSIONS

(1) Thorium solution fulfills all the conditions necessary for an ideal pyelographic medium.

(2) There has been no evidence whatsoever of any irritative or toxic action in a series of one hundred and thirty cases. This alone is proof of its nontoxicity.

(3) The pyelograms and cystograms made with this solution show a splendid shadow which possesses an unusual clearness and delineation.

(4) The solution is clear and watery, therefore it possesses a great degree of fluidity, permitting its readily elimina-

tion from the urinary tract.

(5) It is perfectly clean and does not stain the linen. In this particular it possesses a marked advantage over solutions of the silver salts.

(6) It is inexpensive, being one-third

as costly as collargol.

### AMERICAN PROCTOLOGY SOCIETY

Notes and abstracts on the eighteenth annual meeting, held at Detroit, Mich.

The President, T. Chittenden Hill, M. D., Boston, Mass., in the chair. Officers elected for the ensuing year: President, Alfred J. Zobel, M. D., San Francisco, Cal.; Vice-President, Granville S. Hanes, M. D., Louisville, Ky.; Secretary-Treasurer, Collier F. Martin, M. D., Philadelphia, Pa.

Executive Council: T. Chittenden Hill, M. D., Boston, Mass.; Alfred J. Zobel, M. D., San Francisco, Cal.; Wm. M. Beach, M. D., Pittsburg, Pa.; Collier F. Martin, M. D., Philadelphia, Pa.

The place of meeting for 1917 will be New York, N. Y. Exact date and head-

quarters will be announced later.

The following were elected associate fellows of the society: W. Oakley Hermance, M. D., 2040 Pine St., Philadelphia, Pa.; Geo. B. Morcland, M. D., F. A. C. S., 303 Second Nat. Bank Bldg., Pittsburgh, Pa.

# WHY PROCTOLOGY HAS BEEN MADE A SPECIALTY.

By T. CHITTENDEN HILL, M. D., Boston, Mass.

In this address Dr. Hill calls particular attention to the inadequate treatment that rectal fistula receives at the hands of the general surgeon. He claims that the general surgeon "has never taken the pains to learn the underlying

principles of a fistula operation, nor has he the requisite skill, experience or inclination to carry out the necessary steps in the post-operative treatment of these cases, to bring them to a successful conclusion."

While in London there are two hospitals devoted to the exclusive treatment of disease of the rectum, Hill feels that better results can be obtained by establishing special departments in our large general hospitals. He urges that proctologists be appointed to all general hospitals. The many advantages of staff association, consultations, etc., in which proctology touches on the work of men in other fields, would prove of mutual benefit.

He believes that in the near future a fifth year will be added to the present four-year medical course. This fifth year will probably be devoted to the medical specialties and proctology should be included among them. The undergraduate certainly should have the chance to acquire reasonable proficiency in the newer methods of examination and treatment of rectal disease.

Dr. Hill also presents a formal paper for the consideration of the members of the society under the title of

### PROLAPSUS ANI IN ADULTS

By T. CHITTENDEN HILL, M. D., Boston, Mass.

The theory is advanced that all eases of procidentia recti are the result of neglect or improper treatment of what was in the beginning a simple form of mucous membrane prolapse. Correction of the condition early may prevent serious infirmity later in life.

He describes at length an operation modified after that of the late Mr. Good-

sall, of London, England.

In this operation he employs a multiple suture. He advises removing the excess of tissue distal to the ligature.

The operation is performed under local anesthesia and is advised for patients of all ages. It is particularly suitable for use in prolapse of the age.

The author claims that the operation is painless, short and easily performed. There is absence of hemorrhage and the end results are satisfactory.

## THE POST-OPERATIVE TREATMENT IN RECTAL SURGERY.

By W. H. Stauffer, M. D., St. Louis, Mo.

This paper is based upon a review of over 25,000 rectal cases treated, of which 1,500 were operative. Four hundred of these cases had been operated upon previously by approved method by other surgeons.

There are two reasons for these 400 secondary operations. First: Not selecting the operation indicated by the pathology. Second: Improved post-operative attention.

In selecting an operation of treatment the following requirements must be met. First: Complete restoration of functions. Second: Time required for cure. Third: Pain produced.

Unsatisfactory results—complete or partial incontinence often are caused by needless traumatism. He does not believe in divulsion. Division of nerves causes sensory disturbances.

Incontinence may be due to fistula operation. Believes that where the fistula opens more than two inches above the sphincter the two step operation is indicated.

In dealing with malignancy he mentions the operation of Evans as producing the least mutilation and disturbance of function in selected cases.

Operations should only be performed after a definite diagnosis has been made.

It is insisted that the best results are obtained by proper diagnosis, careful preparation, appropriate operation, and eareful after-treatment. The surgeon should always make the first dressing and should always inspect the operative field daily. The patient should be kept under observation until recovery is assured.

# PHOTOGRAPHY FOR RECORD AND TEACHING

By Collier F. Martin, M. D., Philadelphia, Pa.

Martin draws attention to the fact that students may be better interested in a leeture if their attention be fastened by an appropriate picture or illustration. After experimenting with photographs or drawings, passed among his class, and also with charts hing on the wall, he found that he could better interest the students with lantern slides thrown upon a screen. The darkness of the room tends to lessen the distraction and to encourage concentration. By having photographs of actual cases, as well as of the different steps in an operation, it was easy to interest the class and to explain far better than could be done even in a clinical leeture.

The equipment is briefly described and suggestions are given as to proper rendering of color values by the use of light-filters.

Attention is called to the necessity of proper exposure and lighting to give negatives with sufficient detail to properly show pathologic conditions. Such negatives only are useful for illustrations, record or lantern slides.

Many case histories are incomplete without a photograph to clarify the description.

Hints are given for copying, making line drawings, diagrams and classifications to produce lantern slides suitable for teaching.

It is suggested that every hospital have a department devoted to photography. This could easily be operated in conjunction with the X-ray department.

### ABSTRACT

SOME IMPORTANT PATHOLOGI-CAL CONDITIONS ABOUT THE RECTAL OUTLET: LANTERN SLIDE DEMONSTRATIONS.

By Granville S. Hanes, M. D., F. A. C. S., Louisville, Kv.

Tubercular ulcerations do not occur as frequently in the mucosa of the rectum

and sigmoid as is generally believed. Amebic and various types of bacterial ulceration produce dysenteric symptoms that often lead to emaciation and ex-Active tubercular ulceration haustion. is always accompanied by a decided increase in the temperature and pulse rate. These are not characteristies in other types of ulceration. In tubercular ulceration there is a history of constant and progressive symptoms while in amebic there is usually a history of improvement and relapses. Tubercular ulceration involving the rectum and sigmoid seldom yield to treatment. Amebic ulceration in this climate ean be cured by one method or another.

Bacterial types of illeration are usually very difficult to treat. Within the last two years I have found eauterization with the high tension electric spark to be a most valuable means of treatment.

Tuberchlar abscesses often occur about the rectum when patients otherwise show no evidence of tuberculosis. The abseesses and subsequent fistulae are characteristic in that there is a great tendency to undermining of the skin. The external openings are, therefore, large with a livid appearance of the surrounding cutaneous structures. They point to impending trouble which may be precipitated months or years hence. This being true it is of great importance that we direct the habits, hygiene, etc., of individuals thus afflicted.

Fistula of long standing with one or more very small external openings with a history of an extensive abscess are very difficult to cure. From external evidences they appear to be very simple. Unusually the finger when introduced well into the rectum will be able to detect by careful palpation the hard indurated sinuses which often extend surprisingly high up by the rectum.

Internal fistulous openings rarely, if ever, perforate the rectal wall unless there is some pathology primarily in the rectal mucosa whereby its resistance is impaired. The internal openings of the fistulae are usually in the anal canal. The anal tissues are most always diseased before the abscess is formed, therefore, it is reasonable to suppose that the

infection passes out through the diseased anal structures and is responsible for the abscess.

There are occasional fistulous tracts that extend up by the rectum to considerable heights and are very tortuous. It is difficult to follow these sinuses to their terminations when operating. When the wound heals and a small opening remains we may feel fairly certain that some part of the original fistula was not reached. It is then advisable to inject bismuth paste which will often effect a cure.

Pruritus ani is undoubtedly a local infection. The focus of the disease is below the pectinate line and at the anal margin. It has been my practice to remove the diseased tissues at the margin of the anis and from the emulsion of these diseased structures bacteria are cultivated and an autogenous vaccine administered to the patient. The operation with autogenous vaccine obtained in this manner give decidedly the best results.

## ABSTRACT OF PAPER

PRELIMINARY REPORT: ANATOMICAL AND BACTERIOLOGICAL FINDINGS OF THE ANORECTAL REGION

Dr. J. Rawson Pennington, Chicago: This preliminary report is submitted in lieu of my paper on "Indications for Making a Rectal Examination."

Today the question of "focal infection" is uppermost in the minds of the medical profession. Much consideration has been given to practically every point in the body from which focal infections may emanate except that of the anorectal

region.

Experimental investigations show that not only Crypts of Morgani, but what appears to be diverticuli are found also in this region. The Medical Research Laboratory of Chicago, to whom specimens were submitted for examination, reports that these diverticuli are lined with stratified squamous epithelium. Also that streptococci, staphylococci, colon bacilli, and other bacteria were found in their tunics and saes.

We have observed that local and constitutional diseases may be produced by injecting the various bacteria obtained from these diverticuli into animals.

I am investigating the value of these diverticuli as points of focal infection and their role as causative factors in hemorrhoids, fistula, constipation, arthritis, endocarditis and other acute, and chronic and local and constitutional infections.

### SOME OBSERVATIONS ON HERNIA IN RELATION TO INTESTINAL STASIS.

By WM. M. BEACH, M. D., Pittsburgh, Pa.

After reviewing the theories of Keith relative to nodal zones situated at different levels in the intestinal musculature the author says that:

1. We have tried to define intestinal stasis to be a physiologico-anatomic disturbance of peristalsis by an inhibiting influence through nodal zones of the myenterium, located in the aesophagogastric junction, the duodeno-jejunal area, ileocaecal region and in the rectum. This demonstrated in the laboratory must be verified clinically.

2. Anatomic distortions, as kinks, adlesions, ptoses, etc., lead to stasis by disturbing the ganglia controlling peristal-

sis.

3. Hernia is a frequent manifestation of viscera displacement concomitant with stasis.

4. Long truss wearing with great pressure tends to rectal disease.

# ABSTRACT INTESTINAL SYMPTOMS DUE TO ACHYLIA GASTRICA.

By Alois B. Graham, A. M., M. D., F. A. C. S., Clinical Prof. of Proctology, Indiana University School of Medicine, Indianapolis, Ind.

In 5758 patients presenting gastrointestinal symptoms, and in every one of whom repeated gastric analyses were made, a diagnosis of Achylia Gastrica was made in 378. This is about 6.5 per cent, or a ratio of 1 to 5. One hundred were males and 278 females. The youngest was 17 years, the oldest 73 years, Sixty per cent were between the ages of 40 and 60 years. In 90 per cent the subjective symptoms were chiefly intestinal in character. The bowels were reported regular in 38; constipated in 112; loose (diarrhoea) in 142; irregular in 86. Diarrhoea was the most frequent symptom and was present in 37.5 per cent of the cases. Description of three groups of cases. Description of the stools which were at times quite characteristic. Rectal symptoms rarely ported. Internal hemorrhoids found in every case. Rectal examination of no value, except that of exclusion, in determining the cause of the intestinal symptoms. In cases where constipation was chief symptom, there was not anything of special interest.

There was no return of the gastric secretion in any of the cases. The course of Achylia Gastrica is a protracted one. Under proper therapy the prognosis, as to fairly good health, is excellent.

Diet alone in the severe cases of diarrhoea was not successful. Astringents and intestinal irrigations were unsuccessful. Hydrochloric acid and pepsin in sufficient dosage is rational therapy and the only one which gave anything like satisfactory results. In some cases diet and hydrochloric acid failed. In these cases a nervous element was present as the administration of bromides in suitable dosage produced most excellent results.

Patients are comfortable as long as they continue treatment. If discontinued even for a brief period, there is a recurrence of the diarrhoea. These patients should be correctly informed as to the prognosis; namely, that as long as there is evidence of an abscess of the gastric secretion, just so long must they adhere to a rigid diet and take hydrochloric acid and pepsin.

# OBSERVATION ON FISSURE IN ANO.

ROLLIN H. BARNES, M. D., Ed. of *Proctologist and Gastroenterologist*, St. Louis, Mo.

The author considers fissure as an ulcer and believes that traumatic causes are not true etiological factors in the production of this trouble, but that it is necessary that the tissues become inflamed and hence friale and easily torn in order that fissure be formed. He believes that catarrhal inflammatory conditions are frequently the result of an excessive carbohydrate diet and sometimes an excessive fat diet.

In the treatment of fissure he recommends palative treatment by correcting the diet with reference to the excesses of carbohydrates and fats and placing the patient on a proteid diet for a time. When operation is necessary he believes that the object should be drainage rather than paralyzing the muscular fibers. He also advocates the use of a small enema before defecation in order to avoid irritation from the stool. It is very important to keep the wound clean by hot sitz baths and the hot enema, in order that any foreign substance may not remain in the wound.

# ABSTRACT MALIGNANT TRANSFORMATION OF BENIGN GROWTHS.

By Frank C. Yeomans, A. B., M. D., F. A. C. S. Adjunct Professor of Proctology, N. Y. Polyclinic Med. School and Hospital, New York City.

The benign tumors of the colon and rectum considered were of the polypoid type, solitary polyp, multiple polyposis, multiple adenomata and villous tumor. All originate from the intestinal mucosa, are of the same histologic structure but differ in number, size, form and the relative amounts of glandular and fibrous tissue present.

The writer cites the theories of origin of multiple adenomata as advanced by Meyer, Liebert and Schwab and G. Hauser and H. C. Ross' views on the formation of benign growths. Yeomans thinks these tumors inflammatory in character and notes the frequent history of colitis or dysentery in these cases, intestinal parasites as causal in others and the positive evidence of the role of irritation as furnished by therapy,—colonic lavage, or colostomy and irrigation benefitting some patients and curing others.

He reports a case of multiple adenomata in a man, aged 30, colostomized in 1913, with marked benefit. Many tumors have disappeared, the remainder have retrogressed and the patient is working regularly. There is no evidence of malig-

nant change.

That benign growth become malignant is beyond cavil but its cause involves the same enigma as the cause of cancer itself. The writer cites the work of neoplasms of Waldeyer, Adami, Cathcart, and others, as well modern research on the transplantation of tumors and the parasitic theory of their origin. He concludes: "All that can be stated positively is that cancer begins as a small local process; that it excites no reaction in the blood whereby a diagnosis can be made; that the individual cancer cell is the parasite of cancer, and whatever eventually explains the origin of cancer will also explain the transformation of a benign into a malignant growth.

Yeomans reports the transformation of a simple adenoma into an adenocarcinamo, in a man aged 76, who had rectal bleeding for eight years duration, progressive constipation and a tumor that in recent years could not be reduced within the rectum. The tumor, three and one-half by two inches, was attached just within the anal verge. It was removed under local anesthesia and both clinically and histologically was adeno-

carcinoma.

Villous tumor or adenoma tends to recur in malignant form so should be extirpated early, thoroughly and radically.

Multiple adenomata are the most important and serious type of benign growth of the intestine. Their usual site is the lower colon and rectum. Clinically they are malignant from diarrhoea, hemorrhage, etc., and if neglected over forty per cent become actually malignant. Improper local treatment, as snaring, curettage and cauterization is followed by malignant recurrence in a large proportion of cases.

The curative, operative procedure indicated is enterotomy, either in the colon above the growths, or in the terminal ileum when the entire colon is affected. If the tumors disappear, the enterotomy may be closed. If they persist, after

prolonged irrigation and the patient's general condition warrants it, partial or total colectomy is indicated with implantation of the ileum low down into the sigmoid, the operation being performed either in one or preferably in two stages.

### THE TREATMENT OF HEMORR-HOIDS BY A NEW METHOD.

### E. H. TERRELL, M. D., Richmond, Va.

The author presents a simple, safe and efficient method of curing selected cases of hemorrhoids by the injection of quinine and urea solution. During the past two years 127 patients have been treated by this method with only one recognized failure. Injection of quinine and urea in solutions of from 5% to 20% strength produces starvation and atrophy of the hemorrhoids. The series reported includes only uncomplicated internal hemorrhoids. The results of the treatment of 127 patients justify conclusion that the method is simple, safe and effective in properly selected cases.

## ABSTRACT ON THE ETIOLOGY OF VACCINT TREATMENT OF PRURITUS ANI.

Louis J. Hirschman, Detroit, Mich.

Hirschman presented a preliminary report of his work on the bacteriology of pruritus ani as based on the original work of Murray at Syracuse. The work of H. C. Ward, bacteriologist, in conjunction with Hirschman's work shows that the streptococcus faecalis was present in the twenty-five cases but the vaccine treatment in these cases, especially that of the autogenous vaccines, has resulted in important or systematic cure in but four cases, while the treatment of the surgical lesions present, or by dietary, or hygienic measures, has resulted in relief or cure of all the remaining cases.

ABSTRACT OF PAPER ENTITLED, FURTHER OBSERVATION ON PRURITUS ANI, ITS ETIOLOGY AND TREATMENT.

(A sixth report based on results of original research.)

Dr. Dwight H. Murray, of Syracuse, N. Y., read the sixth annual report of his original research work on Pruritus Ani and Vulvæ adding reports of 25 cases to the former series of cases, making 123, the bacteriology of which shows 95% of the cases a streptococcic infection as the etiology for these troublesome conditions. He stated that his claim, that the streptococcus faecalis is the etiology of Pruritus Ani, is now confirmed by many leading physicians, throughout the United States, who have been investigating the subject.

He finds from the experience of this past year that far better results are obtained by the use of autogenous vaccines with more than 1000 million dead germs to 1 C.C.

He states that not one of the cases of Pruritis Ani and Vulvae Pruritis Scroti in the 123 cases have had diabetes and, as a result of this, he questions very strongly whether diabetes is ever the cause of these conditions, unless as a complication, and under such condition there would be a general pruritic condition of the skin.

Last year, in his fifth report, he described cases of Pruritus Ani that did not show improvement under the administration of the autogenous, streptococcic vaccine. These cases were later found to have a staphyococcic infection as a complication and when an autogenous, streptococcic vaccine improvement resulted. He has found proof of this same condition during the past year and believes that these cases show a characteristic whitish appearance of the skin in spots, particularly around deep skin fissures.

He also found further proof of one of the conclusions, in a former paper, i. e., where there is a rectal pathology with Pruritus Ani, plus a skin infection, that an operation for relief of these conditions will cure the rectal pathology, but will not cure the Pruritus Ani. If the streptococcic skin infection does not exist the operation will be very sure to cure Pruritus Ani.

During the six years that Dr. Murray has been doing this work he has never had as prompt and satisfactory results from treatment as during the past year. In his report of the present condition of patients treated during the past five years, he shows that practically all of the patients have retained a part of the benefit originally received and a large majority of them consider themselves cured. Time will give the proof of this.

While some of the cases still have a little itching from time to time, they state that it is very easily controlled, by simple methods.

Dr. Murray is more firmly convinced than ever that operations for the cure of Pruritus Ani, such as Balls operation and modifications of it, are absolutely contradicted and should never be performed.

## "ANO-RECTAL INJURIES."

SAMUEL GOODWIN GANT, M. D., L.L. D.

The author stated that while the rectum is protected by the buttocks, and bony structures, it is frequently injured by external trauma, expulsion of hardened feces, and foreign bodies swallowed or introduced through the anus, such wounds being contused, lacerated, incised or perforated.

Laceration of one or all of the rectal coats, results from careless examinations, introduction of imperfect syringe nozzles, boughies, proctoscopes, or other instruments.

Perforating wounds are caused by bullets, knife thrusts, and pointed objects that have been swallowed, or introduced into the rectum, except when due to specific ulcers or cancer.

Recently many pneumatic rectal ruptures, the result of compressed air introduced through the anus, in a spirit of fun, have been reported.

The injection of carbolic acid, into hemorrhoids is responsible for extensive ano-rectal injuries.

Symptoms: The chief manifestations of superficial ano-rectal injuries, are

bleeding, sphincteralgia, frequent micturition, and painful defecation; symptoms that are exaggerated, when wounds are extensive.

Infected wounds are characterized by a chill, temperature, throbbing pain, swelling, and a thick yellow discharge.

In extensive injuries of the upper rectum, hemorrhage is profuse. There is shock, the patient collapses, and soon exhibits symptoms of peritonitis, when

the peritomeum is involved.

Diagnosis: The diagnosis of anorectal injuries, is easy, when the nature of the accident has been learned, the degree of hemorrhage, bruising and swelling have been noted, and the buttocks, anus, and rectum have been inspected, and digitally and proctoscopically examined.

Treatment: Minor injuries take care of themselves, while extensive injuries may require simple or complicated treatment.

Incised wounds are sutured, under

aseptic conditions.

Contused, lacerated and pneumatic injuries are drained at one or more points, following irrigation, and the removal of ragged edges and necrotic tissne. Subsequently they are treated by drainage and topical applications, as fistula wounds.

Injuries of the bladder and urethra are immediately closed when feasible, but if not, the bladder is drained, and the wounds here and in the rectum are permitted to heal by granulation.

Small recto-vesical rents are sutured, but where the rectum or Sigmoid is extensively injured, the bowel is resected, or an artificial anus is established.

Recto-vaginal tears, are repaired by suturing the vaginal before the rectal side of the wound is closed.

THE CONSIDERATION OF RECTAL AND COLONIC DISEASES IN LIFE INSURANCE EXAMINATIONS.

By Alfred J. Zobel, M. D.

Fellow of the American College of Surgeons; Chief of Department of Rectal Surgery, San Francisco Polyclinic and Post-Graduate School, San Francisco, Cal.

All important data concerning the vital organs is obtained by a medical life insurance examiner by direct examination and by precise methods. On the other hand life insurance companies evidently do not attach much importance to the condition of the rectum and colon —not to mention the rest of the alimentary canal—for they seem willing to assume that these organs are free from disease solely from the favorable answers given by the applicant to routine printed questions asked by the examiner. That this is a fallacy, inasmuch as it paves the way to the acceptance of poor risks, and oecasionally to the rejection of a good one, is shown in this paper.

Applicants almost invariably deny having or ever having rectal or colonic disease. The writer thinks that perhaps the main reason for this general denial is the ease with which these affections can be concealed from the examiner, un-

less he makes an examination.

The average individual knows little about his ano-rectal region, and unless there is severe pain or itching, alarming bleeding, or annoying dysentery, he thinks it of little importance and unworthy the attention of either himself or the examiner. The rectal surgeou often sees individuals who look and feel in the best of health, (outside of "a little attack of pile"), yet who are found victims of well advanced malignant disease of the rectum or colon. Unless a reetal examination be made such a person could easily pass a life insurance examination.

The examiner should look out for those little fistulous tracts which cause no pain and discharge, but little secretion, as they are frequently the primary manifestations of tuberculosis, and may appear in those who are otherwise apparently healthy. A severe stricture of the rectum may be present in a man outwardly perfectly healthy and insurable. If no history of his condition was volunteered such a person could pass an examination unless the rectum was examined.

If a history of hemorrhoids is secured

or if on examination, it should not be forgotten that although their existence does not constitute a good cause for rejection, they often accompany liver, spinal cord, genitourinary and uterine diseases.

In cases where a suspicious anemia is found to be due solely to bleeding from hemorrhoids, these individuals could be conserved to the life insurance business if put in the way of regaining their health so as to become insurable.

If a rectal examination is made the condition of the genito-urinary organs in the male can be investigated at the same time, while in the female accurate information can be obtained about their pelvic organs without subjecting them to a vaginal examination. At the present time insurance companies do not demand an examination of the female generative organs but accept their answers to the questions whether they ever had any uterine disorder, and if pregnancy now exists.

In conclusion, the suggestion is offered that medical examiners should lay more stress upon the questions regarding the condition of the bowel and rectum. They should inquire carefully whether there is or has ever been a sanguinous, purulent or mucous discharge from the rectum. A history of chronic constipation or of diarrhoea should be considered worthy of further investigation. A rectal examination, both digital and instrumental, should follow if there is need therefor, or whenever there is the slightest suspicion that by it something may be revealed.

That medical examiner is the most "efficient" who not only secures his company from poor risks, but also saves it business which otherwise would be lost. The utilization of rectal examination helps attain "efficiency."

# SPASMODIC STRICTURE OF THE RECTUM.

# By Louis J. Krouse, M. D., F. A. C. S., Cincinnati, O.

Dr. Krouse says that spasmodic stricture of the rectum was often called phantom stricture on account of its imagin-

ary existence.

He makes the statement that in the early part of the last century it was more frequently diagnosed than later on. At the present time, the opinion regarding the existence of such an affection is equally divided between those who are firm believers and those that doubt its existence.

After quoting the statements of various authors well versed in rectal pathology, he expresses his own opinion in its existence and reports several cases. He also makes the statement and agrees with a few writers who believe that spasmodic stricture is often the forerunner of the more serious disease of benign stricture of the rectum. He reports several cases.

He claims that spasmodic stricture is not a disease, but only a symptom of some other disease located in the rectum or in an adjoining organ.

His conclusions are:

First: That it is not a common affection.

Second: That it is easily detected on digital examination.

Third: That it often terminates in an annular fibrous stricture.

Fourth: That it involves the lower Houston valve.

Fifth: That a rectal ulcer is the most important etiological factor.

Sixth: Curing the ulcer in its early stage lessens the chances of the development of an annular fibrous stricture.

Syphilis regarded as a contagious disease as other exanthemata is characterized by its chronicity and virulency. The only exception to its point of inoculation being confined to tissues covered by squamous epithelim, is within the rectum.

Its frequency in the rectum and anus is not realized and, in consequence is not recognized by the profession. Its relationship to fistulæ and stricture is emphasized, and the importance of tuberculosis in these two conditions minimized. The successful treatment of fistulæ is proverbial. The possibility of stricture, resulting from secondaries later in life, suggested.

ABSTRACT

ACUTE ANGULATION AND FLEX-URE OF THE SIGMOID A CAUS-ATIVE FACTOR IN EPILEPSY.— REPORT OF NINE NEW CASES WITH FOUR RECOVERIES.

By W. H. Axtel, M. D., A. M., Bellingham, Wash.

Review: In December 1910, I published my first list of thirty-one cases—eight private and twenty-three asylum cases; in August 1911, a further report on ten private cases with three recoveries—this included three additional asylum and two private eases, making in all thirty-six cases. The three reported cured have remained so for a period now of over four years. One additional case (No. 4) of the original list of ten private cases has had no return of the convulsions since ceasing treating two years ago, treatment seemed at the time to increase the irritation as reported.

Additional Cases: Since last report 1 have had nine additional cases with four of them remaining free from seizures for from one year to two and a half years, making in all forty-five cases reported

with eight recoveries to date.

Observations: From my observations I am convinced that those who acquire epilepsy after the fifteenth year are more amenable to successful treatment than when commencing earlier in life. In my judgment surgery can give but little relief except where there is a definite history of inflammatory adhesions holding the angulations and flexures—in fact. the condition of fecal stasis precludes surgery of the colon until the condition is first relieved, which when so relieved a prime factor in the production of the trouble is eliminated. A new and undescribed cause of the intestinal ptosis which is so generally present in these cases is the separation of the Recti muscles, which are so essential to a thorough evacuation of the colon and for the support of the abdominal organs.

The essential failure of treatment of these conditions lies in the fact that so few recognize the true condition, and, if the condition is recognized, there is not sufficient persistence in relieving the condition, or an ignorance as to the amount of material the colon holds and as to when it is well emptied, that is the reason so many fail and as a result mutilating surgery is resorted to without getting results commensurate to the gravity of the surgery resorted to—the first intimation of the true condition is found upon opening the abdomen—then details are earried out which should have been used in the first instance, then surgery would be unnecessary.

THE RELATION OF THE ROENT-GENOLOGIST TO THE PROCTOLOGIST.

By Walter I. Lefevre, M. D., Cleveland, O.

This paper calls attention to the advancement made in Rochtgenology in recent years, and gives statistics as to the men devoting their entire time to the subject. He also mentions the increase of special literature upon the subject, as well as the immense manufacturing interests which have sprung up.

The conclusion is drawn that to the proctologist the X-ray is of value just in proportion as he is interested above the sigmoid flexure. Below this point the proctoscope gives direct information.

Because of the expense and the refinements of technic the writer feels that the proctologist should work in conjunction with his friend the Roentgenologist.

POSITION FOR SIGMOIDOSCOPIC WORK.

By Donly C. Hawley, A. B., M. D., Burlington, Vt.

A majority of writers express a preference for the knee-chest position, while a minority prefer some other, e. g., Hanes, Sims, or the exaggerated lithotomy position.

Before the days of the pneumatic sigmoidoscope the position was of necessity such as would admit of inflation by atmospheric pressure. Here the kneechest position was undoubtedly the most

satisfactory.

The knee-chest position is trying and disagreeable for the patient and not easy nor always convenient for the operator.

Its use is frequently attended with embarrassment and fear on the part of the patient.

With the pneumatic tube the older

method may be done away with.

Place patient in left lateral prone position with left arm drawn out behind back, the patient lying well over on left chest and stomach, the knees flexed, the right more than the left and placed above and well over and beyond the left on the table and with the back concaved as much as possible.

In this position the abdominal muscles are relaxed, while in the knee-chest position they are apt to be contracted.

In a majority of cases the instrument may be passed easily and quickly over the brim of the pelvis and into the sigmoid colon as far as required or to its full length.

This method not advocated exclusively but a more thorough trial is urged.

### TUBERCULOSIS CUTIS ANI.

By D. C. McKenney, M. D., F. A. C. S., Buffalo, N. Y.

An interesting case of tuberculosis of

the anal skin is reported.

From the clinical study of the case, Dr. McKenney infers that the injection started from the anal rather than in the skin around the anal orifice. An active respiratory infection, associated aphonia, seems strong evidence that the injection was carried in the feces to the anus. Two photographs of the local condition were presented.

## A BRIEF REPORT OF TWO CASES OF ANAL HERPES ZOSTER.

By LEWIS H. ADLER, JR., Philadelphia, Pa.

Dr. Lewis H. Adler, Jr., stated that cutaneous legions about the anal region are by no means unusual, and that the frequency of their occurrence is much less than one might reasonably expect from the function of the part—its more or less constant contact with germ-laden feces; the frequent congestion to which it is subjected and the attrition of the nates and adjacent structures induced

by walking, etc.

That in this connection a very unusual condition, so far as his experience went, was Anal Herpes Zoster, of which he had only seen two cases in his practise, both being in young women—one of whom throught she had contracted some veneral trouble from using towels in a public bathing establishment.

That in both instances, the eruption was preceded for several days by a mild febrile disturbance, with burning pains in the anal region; at times the sensations were neuralgic in character. That in both patients, the lesions were confined to a definite area, affecting only one side of the anal cutaneous surface; that the eruption in neither case was very extensive nor numerous and there was no history of previous attacks or of similar trouble elsewhere.

That the vesicles in both cases followed the usual course if Herpes Zoster occurring elsewhere—the liquid they contained was clear, translucent serum, at first; which gradually became cloudy and later puriform. That they never evinced any tendency to rupture and in the course of ten days or two weeks, they gradually dropped off—after which there was left a reddish spot, covered with the epidermis; and that these spots were very slow in disappearing.

That the local discomfort in both cases was not lessened on the appearance of the eruption; but more or less burning was experienced, until the eruption had practically disappeared and that in one case it continued for several weeks after-

ward.

That the pain was so severe, in one case, that family physician found it necessary, on several occasions to prescribe

an anodyne.

That the treatment in each case was similar—internally, liquor potassi arsenate, six drops was prescribed, locally, the parts were cleansed with a two per cent creoline solution and freely dusted over with borated talcum powder. Over this a wad of absorbent cotton was applied and kept in place by an appropriate bandage.

### ABSTRACT

Dr. William H. Kiger, Los Angeles, Cal., reports six cases of Pruritis Ani treated by the vaccine method as suggested by Murray. Cultures were taken from the skin at the anal junction. every instance Streptococcus Haemolyticus found. No local application of any kind was used. The results are attributed to vaccine treatment alone. Ile discredits the use of stock vaccines, and suggests the use of autogenous vaccine only. Considers the focal infection as a prime factor in an etiologic way. Also he reports three cases evidently due to an infection from abscecces at the roots of teeth. He says that all of the cases reported had Pyorrhea, and suggests a thorough examination of the teeth, together with an X-ray picture of the jaw. He believes that a re-infection often takes place.

SOME OBSERVATIONS IN PHYSICAL DIAGNOSIS AS APPLIED TO LIFE INSURANCE.

E. W. Stevenson, M. D., Pittsburgh, Pa.

Read at Annual Meeting, Wheeling, W. Va., May, 1916.

In the presentation of this paper, I well appreciate that you may look upon life insurance examinations as rather an unimportant phase of your work, yet many of you are called upon more or less frequently to make such an examination. This examination is different from that which you would make for the purpose of diagnosing a pathological condition. The applicant who presents himself is generally supposed to be in good health. However, he may know that he is not in good health, and will sometimes suppress information which would be of material benefit to you in arriving at a correct estimate of his physical condition.

The responsibility you assume is most important to the company which has engaged you to present to them a true picture on paper of the applicant. You should therefore discharge the duty to the best of your ability and the dictates of your conscience.

The purpose of this paper, then, will

be to briefly review some of the more essential points and show the necessity of requiring examinations to be made in a painstaking manner, yet practical, not requiring any skill beyond that of the average practitioner, (except in special cases), as I believe many of our errors are the sins of omission.

Your examination should be conducted in a quiet place, privately, the applicant comfortably seated in a warm room. I would suggest that you begin to ask questions in the manner as outlined in the blank, so that by the time you are ready for the physical examination, the applicant has become composed. He should then be requested to strip to the waist—this gives you an excellent opportunity of observing the shape of the chest, and any abnormal condition, a rash if present, or the well known mark of the hypodermic syringe.

### THE HEART

We will first consider the heart, and would suggest that you begin by notation of the apex, which is a point where the farthest and lowest impulse is felt, and not the point of greatest impulse. Reference should be made as to the relation it bears to the nipple line and the interspace. A further examination of the heart should be with the aid of a stethoscope.

Because of the limitations of this paper I will not make any reference to gross lesions, but merely some points which might be overlooked and which might lead to something important, such as noting if there is any accentuation or reduplication of the second pulmonic if present, the applicant should be exercised, then listen over the apex and if a mitral lesion exists, a murmur may be heard. The importance of this is, that a mitral lesion may exist without producing a murmur when the applicant is at rest, and can only be heard after exercise. We appreciate the accentuation and reduplication of the second pulmonic may be heard in health and is not pathogomonic, yet if heard with every beat of the heart, it confirms mitral stenosis.

Regarding the determination of the accentuation of the pulmonic or aortic

sound, this is not determined by relative comparison, but by what the normal should be at a given age; that is, in the young, the pulmonic should be louder than the aortic; a gradual change occurs with advancing age until in the aged, the aortic is louder than the pulmonic.

A murmur called the Cardio-respiratory is sometimes heard, and is undoubtedly in many cases reported as a heart murmur. This is not of any importance, but should be reported and properly classified. It is systolic in time and heard only during inspiration, and is to be differentiated from other systolic murmurs by having the applicant hold the breath and the murmur will disappear.

It has been further observed that a murmur may be detected with the applicant in a recumbent position that cannot be heard in the erect posture, but it is questionable whether it has any significance. The opinion at the present is that it does not mean heart disease.

### IRREGULARITY

Before leaving the heart, it would be well to consider briefly a few points on irregularity. For practical purposes, we have two. The first, absolute or perpetual arythmia due to auricular fibrillation, which is bad;—the second, premature contraction or extra systole, a type that skips a beat and is not always bad. If in doubt regarding which form exists, by exercising the applicant, if the serious type exists it will be made worse; if not, it will be better.

There is one other form—a common variety of sinus arythmia, which is sometimes, but incorrectly, called tobacco heart. This is a type that quickens with breathing and has no clinical significance.

An irregular heart, with no murmurs, valve sounds distinct and normal blood pressure, can often be pronounced as sound.

#### THE LUNGS

With reference to the lungs, it is utterly impossible in this brief paper to more than touch on a few of the most important points with reference to tuberculosis from an insurable standpoint.

We need to realize that dullness, bronchial breathing, increased fremitus and rales are not the earliest symptoms of pulmonary tuberculosis; but that it is very important to recognize disturbances of breathing. The earliest possible change to be detected in incipient tuberculosis is where you obtain a high pitched inspiratory sound, with the exception that this might be normal in the right apex, which may or may not be associated with prolonged expiration; rales may or may not be present—in most cases they are not, at this stage.

A temperature of 99 degrees plus, should necessitate postponement and further investigation. The same is true of a constantly subnormal temperature with rapid pulse, whether or not the lungs

show any abnormality.

To recapitulate then, a high pitched respiratory sound and temperature of 99 degrees plus, loss of weight and often dyspepsia are cardinal points that require postponement and careful investigation, and if in addition to these findings we are able to elicit any of the following histories—loss of weight without a known cause, loss of appetite without a known cause, dyspepsia without a known cause, (painful digestion, flatulence, etc., is always suspicious of tuberculosis unless a cause is known, such as alcohol), an unexplainable fever; cough that lasts more than a month, hoarseness unaccounted for is a sign of incipient as well as advanced tuberculosis—then I think the question is fully decided.

Dr. Elliott Washburn, superintendent of the Rutland Sanatorium of Massachusetts, where incipient cases are received, states that they rarely ever get a case where it has not passed the incipient stage, though it is sent in by the physic-

ian as incipient tuberculosis.

I especially wish to direct your attention to the type of cases in which lung infection is frequently overlooked;—that of the healthy athletic appearing individual. As an illustration, a man 35 years of age, 5 feet 9 inches tall, and weighed 180 pounds, with a healthy red color in his cheeks, skin clear, well nourished, eyes bright, well rounded athletic chest and shoulders, no clavicular depression or prominent scapula, muscles firm,

and yet active pulmonary tuberculosis has existed for many months, diagnosed by physical findings and positive sputum, and has been under treatment in a state sanitorium.

If space permitted, we could give you full histories of cases similar to the one outlined above, but as such does not come within the confines of this paper, I merely wish to emphasize the absolute necessity of stripping all applicants to the waist for examination, because it is one of the most important points in a physical examination, as you cannot diagnose incipient tuberculosis through clothing.

### .THE ABDOMEN

The abdomen should be gone over carefully, as it is sometimes surprising the serious trouble you will find, even though the applicant presents the appearance of health.

Tenderness over the epigastrium, enlarged liver, gall bladder trouble, chronic appendicitis, etc., especially note acuteness of the costal angle, the type in which we might expect to find visceroptosis.

### FIBROSIS

Next, I should like to briefly refer to fibrosis of the vessels, and call attention to the fact that even though you may not beable to find thickened vessels at the wrist or in the temples, fibrosis may exist and can be recognized in the brain, heart, and kidneys, but abdominal selerosis cannot. Where it exists in the brain, you must depend upon the applicant's statements, but we should endeavor to elicit a history of vertigo, temporary hemiplegia, temporary asphasia, temporary coma, or temporary mental power disturbance. In the coronary vessels we do not have any symptoms except angina but the history of an attack of acute indigestion should be carefully analyzed as it may be coronary sclerosis in disguise.

On the other hand, we do have arterio sclerosis with myocardial weakness, and in these you may not be able to hear heart sounds, and the less you hear, the more serious the lesion.

Arterio sclerosis in the kidney is one

of the causes of interstitial nephritis, and its symptoms are nocturnal nrination, without local causes; increased amount of urine in twenty-four hours with the most increase at night; low gravity; albumen variable; casts few and far between, but you get heart hypertrophy and high blood pressure.

Arterio selerosis is very often the cause of loss of weight which occurs suddenly, and after being reduced, may exist for

years stationary.

### BLOOD PRESSURE

This should be taken in every case. At first glance, it would seem that so much has been written upon this subject that little remains to be said, and yet blood pressure is really just beginning to take its proper place in medicine, and we are only beginning to realize its importance, not alone in insurance work, but in our everyday work as physicians.

We have eminent men in our profession who attach importance only to the systolic pressure. On the other side, we have equally as eminent men who maintain that the diastolic pressure is the most important, and we have a third class who contend that the relationship which the systolic pressure bears to the diastolic is of specific importance. shall refrain from any discussion on this point, other than to state that insurance companies as a rule require both the systolic and diastolic-arterial blood pressure, and in the course of a few years they will have accumulated data which will be of great benefit. In order that this information may be more accurate, it is important that every physician acquaint himself with the proper technique in the taking of blood pressure.

I think we all agree that the most convenient place to take the pressure is on the left arm, and by the auscultatory method. The applicant should be comfortably seated, and the pressure sleeve snugly applied to the bare left arm well above the elbow. The arm should rest on a desk or table at a convenient height and entirely relaxed. It is also well to note the pulse rate at this stage of the examination, as both the pulse rate and the blood pressure should be taken under

practically the same conditions.

The bell of the stethoscope is now placed at a point about one-half inch below the lower border of the sleeve, and between the internal border of the biceps and the internal condyle. You are now in position to obtain by auscultation both the systolic and diastolic pressure.

Soon after you begin inflation, and at the beginning of the compression of the artery, you will hear a sound. Continue inflation until all sound disappears to what is known as the obliteration point, and a few millimeters beyond. Now by reducing the pressure in the sleeve, the first appearance of a sound which is a clear, sharp tone, is the index of the systolic pressure. As you continue to release the air, you will next hear a murmur of variable duration; this is the second phase. The third phase is a clear tone, usually loud and snappy. Fourth, a transformation (usually sudden, but other times more gradual) of the clear sound into a dull one. Fifth, the disappearance of all sound.

Some physicians take the fourth phase of the sound as being the index of diastolic pressure. Others consider the diastolic pressure as being where the sound disappears. On this point, I will not express an opinion. However, because of personal equation and the modification of the tones of the different phases, there is a possibility of error in determining the fourth phase, so that most insurance companics require the reading of the diastolic pressure at the point of disappearance of sound. I would therefore suggest that in reporting the diastolic pressure, you note the point at which the diastolic index is taken—that is, whether or not it is the fourth phase of the sound, or the disappearance of all sound.

I think it is a good idea to release all the pressure in the cuff, then to again take the systolic pressure by palpation, so that you may compare the two readings. Under normal conditions, the systolic pressure by auscultation should be about six mm. higher than by palpation. If there is a greater variation, there has been some fault in the technique, or an abnormal cause in the individual. This will necessitate subsequent readings.

Occasionally we find it is impossible

to take a blood pressure reading by auscultation because of a constant murmur which exists in the artery. This has been observed in aortic regurgitation.

There are so many facts which enter into the subject of blood-pressure that an abnormal reading should not necessarily be regarded as pathological, unless obtained by repeated observations.

I should like at this point to mention a few of the pitfalls. Temporary high systolic pressure may be due to exertion, pain, emotion, intra-cranial lesions, etc. Hypo-tension may temporarily be due to the use of salts, diarrhæa, drugs, etc. Persistently high arterial tension may be considered significant of pathological changes in the heart, arteries, or kidneys. In this connection, it should be noted that general arterio sclerosis can cause an enlarged heart and raise blood pressure, but this is not constant, as you can have arterio sclerosis without high pressure. You may have an applicant with brachial and radial arteries like pipe stems, heart strength normal and associated with a low blood pressure. Other cases of similar condition of the arteries associated with a weak heart and high blood pressure; in fact, it may exist with failing heart, even when the pulse is so irregular and feeble that it can only be felt with certain beats.

Life insurance companies have discovered that persistent high arterial tension results in an excessive mortality, and as a rule they do not accept applicants past forty years of age who show a systolic pressure more than 150 mm., and some limit it to 145 mm. Nor do they consider a diastolic greater than 110 mm.

J. W. Fisher, medical director of the Northwestern Mutual Life Insurance Company, recently published a detailed report of experience in that company with respect to systolic blood pressure. Quoting in abstract, he states that "Prior to the year 1907, when we depended upon the digital determination of the arterial tension, only a fraction of one per cent of applicants were refused insurance for this cause alone. At the present time, about six and one-half per cent of all cases rejected are found to have a high arterial tension and in considerable more than half of those with a high

blood pressure, the examiner discovers no impairment which would account for the high arterial tension. This demonstrates, and the records of the company show, that many applicants who apply for insurance and who suppose they are in perfect health and normal in every respect, have a high blood pressure while presenting no symptoms or pathological changes discoverable by our present methods of diagnosis."

You will therefore note that this period of observation dates back to 1907, a

period of eight years.

Taking applicants from 40 to 60 years of age, average blood pressure of 170 mm. Hg., with no other impairments, a mortality of 250 41%

mortality of 250.41%.

Applicants of same age, with average blood pressure of 171 mm. Hg., having one or more impairments, a mortality of 302.16%.

Same age, average of 160 mm. Hg., no

other impairments, 220.11%.

Same age, average of 165 mm. Hg., one or more impairments, 263.76%.

Their experience from November 1911, to August 1915, from ages 16 to 39, showing a blood pressure of an average of 150 mm. Hg., no other impairments, a mortality of 142.61%. I wish to note that there were none of these cases accepted by the Northwestern Mutual, and this is the result of their investigation from cases rejected.

Our company recently had a striking case in which high blood pressure was the only abnormal factor presented, and upon which we declined to issue. The applicant, 31 years of age, average height and weight, good family history, a man of good habits, who reported never having had any illness, and was believed to be in excellent health. Our examiner reported a systolic pressure of 175, and confirmed this by a second reading; before the investigation of the case could be completed, the applicant had a cerebral hemorrhage and died within three hours.

Hypo-tension has shown a very favorable mortality, in fact slightly below normal.

Henry Sewall, of Denver, in an article published in April, calls attention to observations which he has been making of

patients, by comparing blood pressure in a recumbent position with that in the sitting posture. He states: "When I find the blood pressure, especially the maximal, higher in the recumbent than in the sitting posture, I conclude there is physiological weakness either of the splanchnic vasomotor system, of the abdominal wall, or both, and that potential cerebral anemia and vasomotor overstrain are consequences in the erect posture." This, to my mind, opens a large field of observation, and I contemplate making such observations upon applicants for insurance who are apparently in good health, but it is too soon as yet to make any report. I refer to this merely as one of the more recent steps in blood pressure observations, and his article should appeal to every physician.

I trust you will pardon the abrupt manner in which these subjects have been treated, but it scemed impossible to do otherwise considering the necessity of touching upon so many in such a brief time, yet I hope the outline when applied to your fuller knowledge of physical

diagnosis may act as a guide.

Before closing I beg to acknowledge by indebtedness to Dr. Richard C. Cabot for his kindly instruction and assistance in some of the observations which I have mentioned.

# SYMPTOMS AND DIAGNOSIS OF INCIPIENT TUBERCULOSIS.

By Everett E. Watson, M. D., Salem, Va.

Read at Annual Meeting, Wheeling, W. Va., May, 1916.

Incipient tuberculosis, as classified by the National Association for the Study and Prevention of Tuberculosis and the National Sanatorium Association, is defined as follows:

Slight, or no constitutional symptoms (including particularly gastric or intestinal disturbances or rapid loss of weight); slight, or no elevation of temperature or acceleration of pulse at any time during the twenty-four hours; expectoration usually small in amount, or absent, slight infiltration limited to the

apex of one or both lungs, or a small part of one lobe; no tuberculous complications.

No disease to which man is heir is more deserving of the best thought and efforts on the part of the medical profession than pulmonary tuberculosis often fittingly called the Great White Plague,—which exacts the highest toll in human life of any known malady. In the United States each year there are approximately 1,500,000 active cases, with a mortality of 150,000. In other words one out of every seven deaths is caused by tuberculosis and one out of every three deaths after the age of eighteen is the result of this dread disease. In the state of Virginia with a population of 2,000,000, there are over 20,000 active cases and 4,000 deaths annually from this scourge which is not only preventable, but the most curable chronic disease. That the responsibility for this unfortunate state of affairs rests largely upon delayed diagnosis is indisputable in face of the fact that statistics from the Adirondack Cottage Sanatorium at Saranac Lake-which is an index of the results obtained in other sanatoria throughout the country-show that of the incipient cases discharged from that institution during the past twenty-five years, 86% are living; of moderately advanced cases, 57%; and of the far advanced only 19%. The 19% living cases in the far advanced class undoubtedly is composed largely of those discharged during the last two years and who will have only a short time to live. Thus we see the curability of the disease in its incipiency compared with the hopelessness of the far advanced stage. A further stigma against the profession is the fact that the records of those sanatoria, supposed to treat only incipient cases, show that the majority of these were far advanced on admission. They rarely have over 20% incipients. Of the first two hundred cases admitted to Mount Regis Sanatorium 19.5% were incipient, 13% moderately advanced and 67.5% far advanced.

Every case of tuberculosis which advances beyond the incipient stage before obtaining a diagnosis, does so because of one of two things: (1) Failure of patient to seek medical aid in time, or (2)

Failure of the physician to recognize the disease in its incipiency.

The first, or failure of the patient to seek medical aid, can only be avoided by educating the public, which is a sociological problem, receiving in recent years considerable attention, but deserving more. In the near future I hope to see the Board of Health in every state, sending out public lecturers to schools, churches, factorics, civic leagues meetings and so forth, as well as having lectures and advertisements in the daily papers, explaining the importance of consulting the family physician on the appearance of certain symptoms, such as blood spitting, slight pleurisy, persistent cough, unexplained loss of weight and strength, etc., which symptoms the patient often ignores entirely because of the lack of this education.

The second and by far the more frequent cause of delayed diagnosis is the failure of the physician to recognize the disease in its incipiency. This can only be corrected by the institution of a separate chair for the sole study of tuberculosis in medical colleges, by a more careful study of the symptoms of the disease by the general practitioner, as well as his perfecting himself in the art of physical examination of the chest. In other words the physician must first appreciate the importance of an early diagnosis; he must become proficient in the early recognition of the disease; he must have the courage to perform the often thankless task of making an early diagnosis; he must teach the public that to have tuberculosis is no disgrace or stigma, and that the vast majority of incipient cases get well, if they will only accept his counsel while there is yet time.

The carly diagnosis of tuberculosis assumes a further role of far reaching importance as a prophylactic measure against the spread of the disease. Every untrained case allowed to become advanced, with cough, expectoration and positive sputum will most certainly infect one or more of those with whom he comes in intimate contact, especially if they be children. However, if the diagnosis be made while the sputum is yet negative, though he go on to the advanced stage later, by proper training he

is never a menace.

I will not attempt to take up in detail the various symptoms of tuberculosis, such as cough, expectoration, temperature curve, etc., but will describe briefly aeeording to Dr. L. Brown, the symptom complex which we meet most frequently in the beginning of activity, or as Dr. Brown calls it, the modes of onset. These are catarrhal, insidious, pleuritic, hemoptoic, nervous or neurasthenic, glandular, laryngeal, febrile, malarial, anemic and gastric.

The most frequent onset is the catarrhal. There is possibly a history of susceptibility to colds and coughs, especially in winter; finally, the patient takes what is apparently a severe cold or grippe, which does not alarm him or the physician until weeks pass and a slight cough persists, possibly with some expectoration; or there may only be an annoying clearing of the throat; he does not regain his usual vigor, is easily fatigued and the temperature may be slightly elevated in the afternoon or as frequently happens, sub-normal. Often the cough and expectoration begins insidiously, without cold, and is frequently called by smokers, a cigarette cough, by others a stomach cough, and still others merely "bronchial trouble."

Another frequent manner of onset is the insidious type. The patient gradually begins to feel below par, loses color; there is some loss of strength and weight; he is easily tired, awakes in the morning unrested; his appetite is poor; there may be a slightly elevated or subnormal temperature and his pulse becomes rapid on slight exertion; in other words the picture is that which is usually called "run down." A diagnosis may be obtained or the patient may be given a tonic and sent to the country where he improves only to have a more serious breakdown when he returns to his usuaf mode of living.

A not unusual mode of onset is the pleuritic type. Every case of so-called idiopathic pleurisy, especially with effusion should be considered tuberculosis. Often the patient considers himself perfectly well prior to the attack, but frequently we can obtain a history of being "run down" before this time. Un-

less treatment be promptly instituted, other classical symptoms of pthisis appear which reveal the cause of the pleurisy. Frequently patients go from six to eight or ten years before having a serious breakdown.

Very, very frequently the first manifestation of the disease is in the gastrointestinal tract. The patient loses his appetite, his tongue becomes coated, has frequent "bilious attacks" and indigestion; in other words, he has what we so frequently are satisfied to diagnose as dyspepsia. In Cabot's series of cases of those coming to him for dyspepsia, he found tuberculosis to be the etiologic factor twice as frequently as bile tract infection and appendicitis combined.

The hemoptoic onset is not rare and in this class, as in the pleuritic type, there is absolutely no excuse for failure to make a diagnosis. Every case of hemoptysis even to the slightest streak should be considered tuberculosis until proven otherwise, and in absence of renal or cardiac discase it is tuberculosis in 99% of cases. We are too prone, because the patient may be a big deepchested, strong-as-an-ox kind of a man, to pat him on the back and tell him that the blood ran down from his nose; is merely a ruptured capillary in the throat, a strain, and in the case of women, vicarious menstruation. The patient will frequently try to fool himself and the doctor into believing that it did not come from his lungs, but a careful study of the case will reveal tuberculosis.

That so-called neurasthenia is often only a manifestation of an unrecognized tuberculous process is unquestionably true. That even an extremely incipient lesion is capable of causing this symptom complex has been proven by Head, and should be diagnosed as tuberculosis instead of neurasthenia.

Tuberculosis ushered in with chills and fever often is mistaken for malaria even as the insidious type above described is frequently considered a "touch of malaria."

Occasionally a progressive anemia first causes the patient to seek medical advice; occasionally enlarged cervical glands, or again a persistent fever with few if any accompanying signs.

To make a diagnosis of incipient tuberculosis often requires from one to two weeks careful watching and frankness, cooperation, and confidence on the part of the patient are absolutely necessary. The tendency of tuberculous patients to minimize, and often lie to conceal their symptoms, frequently makes the diagnosis more difficult.

Assuming that we have a thorough knowledge of the foregoing symptoms, the first and most important step in the diagnosis of incipient tuberculosis is a careful, detailed history, the value of which is in direct proportion to our ability to interpret it properly. We should inquire carefully into the family history and early associations of the patient, as a history of exposure to open tuberculosis during infancy or childhood is very significant. Too, the past life should be taken up in detail, going carefully into the illnesses, home environments, occupations, etc. We should always look with suspicion upon a history of frequent colds, "bronchial trouble," "fever," persistent fatigue, capricious or poor appetite, indigestion, frequent bilious attacks, etc.

Next, I usually have a patient keep a two-hour temperature and pulse record for a week, noting particularly the effect of exercise on both, a rise of temperature or increased pulse rate following which, being very significant. the meantime the sputum should be examined repeatedly, if negative. I sometimes feel that it is unfortunate that we are able to examine the sputum at all, as a negative report is often the cause of the patient going to the advanced stage before obtaining a diagnosis. Ideally, every case should be discovered before the sputum becomes positive, since positive sputum usually means that the disease has progressed beyond incipiency with a far graver prognosis resulting. Of 39 incipient cases admitted to Mount Regis, two or 5.1% had positive sputum; of 26 moderately advanced, eight or 30.8%; and of 135 far advanced, one hundred and sixteen or 86% were positive.

The first step toward the diagnosis of incipient tuberculosis is to throw away the microscope and the stethoscope. I

say this because positive sputum as a rule means a moderately or far advanced process, and because the average physician can detect only a far advanced lesion by physical examination. This is not surprising in the face of the fact that some of our most skillful specialists must resort to the tuberculin test for assistance in making a diagnosis.

I will not go into details of the technique of making a complete physical examination of the chest, or take up the modifications of, or the abnormal breath sounds or the various adventitious sounds. These are sufficiently described in the standard text-books on physical diagnosis. However, I will take this opportunity of emphasizing the fact that every chest examination should be made with a stethoscope (not the ear) and with the patient stripped to the waist. Hard percussion is absolutely worthless; with the ear close to the patient the highest audible percussion note is of the most value in detecting a slight infiltration. A point which is so frequently overlooked and without which no chest examination is complete in the manner of eliciting the latent rale. We often examine early and occasionally even far advanced cases which show absolutely no sign of rales on the deepest inspiration. However, by having the patient exhale deeply, give a slight cough and inhale quickly, a shower of rales can be heard. The examiner should, using this technique, examine both lungs, front and back, from apex to base.

A routine examination of larynx should always be made. Enlarged arytenoids, thickened inter-arytenoid fold, pinked cords, pale and sometimes congested and thickened epiglottis, or overlapping false cords should be looked on

with suspicion.

If we are still in doubt, there is yet the tuberculin test to which we can resort. The most reliable is the subcutaneous test, using a fresh dilution of O. T. I usually give it every other night, starting with one-half milligram, then one, three, seven and lastly ten milligrams. A rise of temperature following any one of these doses accompanied by general malaise and headache constitutes a general reaction. This, if accompanied by

local and focal reaction—the latter being increased moisture over the suspected lesion—indicates active tuberculosis. A negative reaction, except in those dying of the disease, or immediately following measles means absolutely no activity.

The X-ray in the hands of an expert is of invaluable assistance in the diagno-

sis of carly tuberculosis.

We are never justified in the presence of symptoms in telling the patient he has not tuberculosis because we cannot find it. In the words of Dr. L. Brown, "symptoms without physical signs demand treatment while physical signs without symptoms demand only careful watching."

The following are the questions asked of the candidates for registration as registered nurses at the examination held in Huntington, May 14, 1917:

# EXAMINATION ANATOMY AND PHYSIOLOGY.

- J. E. Cannaday, M. D., Charleston, W. Va., Examiner, May 14, 1917.
  - 1. Describe the skull.
- 2. Describe the physiology of digestion and locate the stomach.
- 3. Name and locate four muscles of the body.
- 4. Describe the liver and tell the uses of bile.
- 5. What makes venous blood dark in color and arterial blood red?
- 6. What is the aorta, locate and describe it.
- 7. Tell what you know about the spleen.
  - 8. Describe the functions of the skin.
- 9. Tell what the effects of cold and heat are on the secretion of urine.
- 10. What causes the temperature of the body to rise in case of typhoid fever or other infections?

# MATERIA MEDICA, THERAPEUTICS AND SPECIAL NURSING.

- С. M. Scott, M. D., Examiner, Bluefield, W. Va.
  - 1. Mention the usual dose of each of

the following, also give me the common names for the last two drugs: Phenol salicylate; cocaine muriate; quiniæ sulphate; adrenalin chloride; bi-chloride mercury; mild chloride of mercury.

2. Composition of Dovers Powders. What is in the white paper, and what is in the red paper of a seidlitz powder?

3. Antidote for the following: Concentrated lye; household ammonia; car-

bolic acid, bi-chloride mercury.

4. Define the following terms: Anæsthetic; analgesic; hypnotic. Into what two classes are anæsthetics divided? Why is other used more frequently than chloroform? Mention the effect of chloroform upon the respiratory center.

5. Please name the one symptom which is an absolute indication to discontinue the use of urotropin, also salol. Name the disease in which both these drugs are most frequently used.

6. Chloral-hydrate and sodium bromide are most frequently given in liquid form. Why not prescribed in powders?

- 7. Define the following: Simple fracture; compound fracture; comminuted fracture.
- 8. What is Fowler's and Trendelberg's position, and the indications for the use of each?

9. How would you feed a child two years old who is intubated for Laryngeal

diphtheria?

10. What do you understand by the maximum dose of anti-diphtheritic serum? Mention briefly the danger of same, and how many ways may it be administered?

# OBSTETRICS, GYNECOLOGY AND CHILDREN.

# Dr. J. McKee Sites, Martinsburg, W. Va., May, 1917.

1. Name the pelvic bones.

2. Give a rule for computing the

probable time of labor.

3. Name some of the serious complications and accidents that may occur during pregnancy and labor.

4. What is ectopic gestation, and

what are its dangers?

5. How would you manage the third stage of labor?

What are the indications for forceps delivery, and how would you prepare the patient?

7. What precaution would you use in going from a septic to a labor case?

8. What serious complications often occur with scarlet fever in children?

9. What preventive measures would you use in scarlet fever, diphtheria and other contagious diseases of children?

10. What is the color, reaction and specific gravity of normal urine, about how much is voided in twenty-four hours?

### SPECIAL NURSING.

### Dr. A. K. Kessler, Examiner, Huntington, W. Va.

1. What are the most frequent sites of tuberculosis? (a) In children? (b) In adults?

2. What are the symptoms of hemorrhage in typhoid fever, and what would you do in absence of a physician?

3. What care would you give to patient's mouth and skin during the course of typhoid fever?

4. How would you disinfect patient and premises when discharging patient for scarlet fever?

5. What serious condition is likely to arise during an attack of eruptive fever, and why?

6. What causes paralysis, what complications may be avoided by careful nursing?

7. What are the initial symptoms of measles, and how soon after first symptoms does rash appear?

8. To what is cholera-morbus due; what are the symptoms; and in the absence of a physician what would you do to relieve patient?

9. What is auto-intoxication, and how

may it be prevented?

10. What is poliomyelitis? (a) What is the most frequent complication or sequella of this disease?

#### DIETETICS

1. How would you make coffee? What injurious principles may be produced in coffee if not properly made?

2. Where does the absorption of food

chiefly take place?

3. What is the composition of eggs? Name two methods of cooking most suitable for the sick.

4. What are the symptoms of Ptomain poison, and in what foods is it most like-

ly to be found?

5. Mention three or four articles you would use for liquid diet; soft diet; and

6. How would you prepare beef tea;

beef juice?

7. How would you prepare and serve oat meal, corn meal gruel, egg custard?

8. How would you prepare impure

water for drinking purposes?
9. What form of bread is most suitable for invalids, and why?

10. Why is saliva important in digestion?

### SURGERY AND ANATOMY.

### Dr. E. S. Bippus, Examiner, Wheeling, W. Va.

1. What is meant by pathogenic bac-Define sterilization, Describe the different methods.

2. What is meant by surgical shock? Give treatment for same. What are the symptoms of post-operative hemorrhage? How should it be treated?

3. Give in detail the preparations of a room in a private home for laparo-

tomy.

4. Describe the care of a patient before and after a general anæsthesia.

5. What is Fowler's position? Why used? What is meant by Trendelenberg position? Why used?

6. Give the number of bones in the human body. Name the bones of the

head from the first vertebræ up.

7. Describe the spinal column giving reasons for its being so constructed. Give three uses of the bones of the body.

8. Name the muscles that you would pass through in an appendicitis operation. Name the muscles that raise the arm.

Trace a drop of blood from the 9. great toe to the heart and back again.

10. Describe briefly the brain, giving the functions of each division.

PROCEEDINGS OF COUNCIL OF WEST VIRGINIA STATE MEDICAL ASSOCIATION.

### May 14, 1917.

In pursuance of a call issued by Chairman G. C. Jeffers through President J. E. Rader, the Council of West Virginia State Medical Association convened in the assembly room of the Kanawha Hotel, Charleston, W. Va., at 7:30 o'clock, Monday evening, May 14, the following members being present: Drs. Jeffers, chairman, Parkersburg; Haley, Charleston; Maxwell, Morgantown; Johnson, Fairmont; Oates, Martinsburg; Pepper, Huntington; Peters, Maybeury; Morrison, Sutton; and ex-officio members. President Rader. Huntington: Treasurer Nicholson, Charleston; and Secretary Anderson, Marytown.

The meeting having been called largely for the purpose of conferring with Gov. Cornwell and members of the Council of Defense of the State of West Virginia, relative to the part to be played in the present national crisis by the medical profession of the state, Gov. Cornwell was immediately introduced and addressed the assembly for over half an hour disclosing the real condition of affairs as they exist in Europe today as learned by him while attending the recent conference of President Wilson and the governors of the various states. He dwelt upon the responsibility of our commonwealth and the additional task resting upon him as state executive and asked the loyal support and council of the medical profession in his efforts to bring all the resources of The Mountain State to the aid of the nation at this hour of need. He pointed out that medical men would of necessity play an important part in the operation of the new conscript bill and that the fairness of its administration would largely rest in their hands. But he also pointed out that the physicians also exerted as powerful an influence in the various sections of the state and probably more so than any other class and he suggested many ways in which that influence could be exerted to the honor and good of the state and the nation.

After his address, which breathed the very air of patriotism, the governor spent a short time in greeting and talking personally with the various physicians present and then withdrew to attend other conferences.

Dr. Cannaday, of Charleston, chairman of the Auxiliary Medical Defense Committee of the State of West Virginia, being present, was then called upon by Chairman Jeffers. He responded, giving a vivid picture of the necessity of immediate action on the part of the medical men. England and France needs 5,000 doctors at once and will need a constant stream of about 200 a month. The present allotment for West Virginia is 200 and so far only about 100 have joined the Medical Reserve Corps. So our State has only, thus far, come up to fifty per eent. of their quota. Men 35 years of age or under are preferred, but any under 55 years of age are acceptable. The government does not want to send men over 51 years of age to field duty. Dr. Cannadty is now subject to call and has been asked by the Surgeon General to organize a hospital unit for service in France. Dr. Cannaday has been appointed examiner of applicants for commissions in the Medical Reserve Corps in West Virginia.

President Rader was then ealled upon and after expressing his confidence that West Virginia would soon fill opt their quota, suggested that the State Association should formulate some plan whereby the practice of those going into service should be cared for and a portion of the fees for the same could be turned over to said practitioner while he is in active service. He said this was being done in Maryland.

Every member was in turn called upon to report as to how many had already offered their services and the availability of men for service in their respective communities. Dr. Maxwell stated that 20 per cent. of the doctors of Morgantown were now awaiting their call and that the other physicians had arranged to look after their practice during their absence and turn the net proceeds over to the wives of these doctors. Dr. Rader reported eight men from Huntington either gone or going. Dr.

Jeffers reported two from Parkersburg and five from Elkins. Dr. Johnson reported two from Fairmont. Dr. Otis reported six from Martinsburg. Dr. Peters reported three from Bluefield and four from Princeton. Dr. Anderson reported one from Welch and one from Matewan.

At the suggestion of Drs. Peters and Johnson the question of some definite steps being taken to look after the families of those going into service. A motion was then made, seconded and carried instructing the chairman to appoint a committee of three to formulate some definite plan similar to that in operation in Canada at the present time and to report the same at a later date. Chairman Jeffers then appointed on this committee Drs. Nicholson, chairman; Dr. Pepper and Dr. Haley.

Dr. Rader then moved that a committee be appointed to draft resolution offering the governor of our State the services of the members of the State Medical Association in the examination of the conscripts as a free patriotic service. This was seconded by Dr. Morrison, and after remarks, was carried.

Dr. Rader was made chairman of this committee, the other members being Drs. Johnson, Peters and Anderson.

The secretary then brought up the advisability of paying lawyers fees in the damage suit cases of Dr. Scott and Dr. Samelh. After discussing the cases and referring the matter to the members of the Defence Fund Committee present, Dr. Oates made a motion, which was seconded by Dr. Pepper, that the fees in question be ordered paid out of the Defence Fund. This motion being carried, it was so ordered.

The secretary was also given authority to issue a new charter to Mercer County Society in lieu of the one lost or destroyed.

The fact that at our annual meeting in October the new Constitution and By-Laws recommended by the majority of the Revision Committee at our last meeting are to be acted upon, was discussed and that the same have to be published in The Journal again before the October meeting. In this connection a motion was made, seconded and carried, that

Editor Bloss be requested to publish the OLD and REVISED constitutions in parallel columns, even if in small type, so that comparison can be made by the readers.

Dr. Waddell, chairman of the Fairmont Arrangements Committee, being present, was called upon to address the meeting. He ably spoke of the effort the Fairmont doctors were making to make this anniversary meeting a truly great meeting. He asked concerning the details of the programme. The council left these matters in the hands of the Programme Committee to be worked out in conjunction with Dr. Waddell.

Dr. Peters then spoke of the regrets of Councillor W. H. St. Clair at not being able to be present at the meeting on account of lliness, and told of the serious time Dr. St. Clair has been having.

The council then extended greetings to Dr. St. Clair and wishes for an early and complete recovery.

Council then adjourned.

J. HOWARD ANDERSON, Sec'y.

# Book Reviews

CATARACT, senile, traumatic and congenital, by W. A. Fisher, M. D., Professor of Ophthalmology, Chicago, Eye, Ear, Nose and Throat College, Chicago. Published by Chicago Eye, Ear, Nose and Throat College, 1917.

This brochure is an exposition of the author's methods of intra-capsular extraction of senile cataract together with his treatment of the congenital and traumatic forms. His technique is clearly and concisely set forth and illustrated by numerous cuts.

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The Frank S. Betz Co., of Hammond, Ind., has just issued its 1917 catalogue of hospital equipment, including high pressure sterilizers, steel hospital furniture and therapeutic bath equipment. The reorganized company has put the business into ship-shape order so that orders are filled with promptness and exactness, and any complaint is given attention on the day it is received. A copy of the catalogue will be sent on request.

# 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., June, 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 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.

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

e 10th of each month.
All advertisements must conform to the 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 Jour-nal for publication. The author or communicant shall be held entirely responsible.

#### FOOD, BEVERAGES AND MILK PRODUCTS IN THE DIETARY.

The supply of sanitary food and milk products is a problem which is given scant attention in the usual medical training, and is a subject on which the general practitioner is usually not well informed.

He should be. "How to keep well," and the right use of foods for this purpose; the foods necessary to rebuild depleted conditions; those required for postoperative treatment, for nursing mothers, and for babies, are vital questions for every practicing physician.

Physicians should also be informed as to methods and foods which will help to solve the problem of

### 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.

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

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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 HIGH COST OF LIVING."

For example, it is known that oleomargarine is cheaper than butter; but is it generally known that oleomargarine and butter are essentially of equal digestibility? That some of the best oleomargarine contains 89 per cent. of fat and 9 per cent. of water, while butter has less fat-85 per cent.; and more water-11 per cent.? Oleomargarine is made in large quantities, under sanitary conditions and government inspection, from selected oelo oils and butter fats. It is colored with butter elor, or, if sold uncolored, is 10 cents less per pound. Oleomargarine remains firm at a higher temperature than butter, which is an item in its favor in warm climates and where ice is expensive. All these considerations should induce physicians to study the merits of oleomargarine as a food product.

Physicians should also be familiar

with

THE RELATIVE FOOD VALUES

Of wheat, corn, oats, barley and other breakfast foods; with rice, macaroni, and even bread. It is known that protein is the essential constituent of all meats, eggs, fish and milk; that protein is found in vegetable foods. It is known also that the carbohydrates, sugars and starches, are found in the great staple products, such as potatoes, beans, corn, But what are the proportions? Which foods are best adapted to particular conditions? Does the baby need protein or carbohydrates? What is known about the merits and uses of baking powdetrs, gelatine, grape juice, malted foods, malted milks, condensed milks and the dozens of other well known products that are advertised for the dietary?

It is with a view of bringing the sub-

ject of

FOOD AND MILK PRODUCTS

To the attention of readers that this article is published. Particular attention is called to such products as are advertised in this issue. Many of these announcements give specific information as to the nature of the products; tell how they are manufactured; give the protein and carbohydrate content; suggest conditions in which they are indicated, etc. They contain much valuable information for physicians.

In this issue the following will be

found:

Battle Creeek Sanitarium, Battle Creek, Mich; adv. page No. 2.

Pettijohns Bran Food, Chicago, adv.

page No. v.

Mead's Dextri-Maltrose, Evansville, Ind.; adv. page No. vii.

Quaker Oats, adv. page No. xiii. Bordens Condensed Milk Co., New York; adv. page No. xiv.

Horlicks Malted Milk Co., Racine, Wis.; adv. page No. xv.

Jiffy-Jell, adv. page No. xvii.

In the present crisis which is facing our country, there is a very great demand for the services of physicians. We understand that one of the first requests made by the British Commission was that physicians be sent to the Allies. It seems to the editor that they have not conserved the medical profession as they should, when it is taken into consideration that it takes four years to prepare a physician to even begin practice.

I feel very sure that no physician hesitates to give his services to his country; to give his life, if necessary. One State Medical Association has made an agreement that those men who go to the front may rest assured that their confreres, who look after their practice, will give one-third of all collections to the families left behind.

We must not feel that because a man has not joined the Medical Reserve Corps that he is a "slacker." Sometimes he has people dependent upon him, absolutely, and his affairs may be in such a shape that if he goes to the front they will be entirely dependent upon the charity of his professional brethren.

I know I will be of more use to my country in the medical department than in any other, although I would prefer aviation service. This war is not going to end in a few weeks, a few months, and, I doubt, in three years. We will all be there before it is over.

Your Editor has agreed to go the Maryland Faculty one better and will do anything he can to help any man who feels that he can go at present, and give one-half of all collections made from patients of these physicians, attended by the Editor, to the family of any physician who enters the service. Should this man be killed or be incapacitated, he will pay in to the physician's family 50 per cent, of collections made from the killed or incapacitated physician's patients until the time when your Editor goes himself into the service, or the war ends. How do the members of the State Association feel in this matter?

To continue our previous remarks, will say that the only way a physician can enter the service of the United States is through the Medical Reserve Corps. For us to say that we are willing to go or that we will serve with any unofficial organization, does not mean that we are

really serving the country.

To enter the service of the United States one must be enlisted, that is, commissioned in the Medical Reserve Corps. In order to do this it is necessary to fill out an application blank; in the second place, to have it certified before a notary public or other official entitled to take oaths; then this blank, in the third place, must be sent to the nearest Examining Board and finally one must pass the necessary examination as to his physical condition and professional attainments.

After this has been done, this blank must be forwaded to Washington, where a final decision as to the fitness of the applicant is made, and if accepted, a commission is forwarded to him, together with an Oath of Allegiance. This Oath of Allegiance he must sign, swear to and return to Washington. Only then is it possible for physicians to regard themselves as members of the Relief Corps of the Medical Corps of the Army.

We must face these facts and realize in the beginning just what we are going up against. I know the profession in West Virginia too well to doubt for a minute that any of them will fail.

# Health News

"HEALTH IS WEALTH."

Mr. Citizen, have you taken into consideration, in making plans for your material welfare during the coming summer and fall, that the health of yourself and your family may determine whether or not this is to be a successful year for you? If you are a merchant, have you stopped to reflect that a case of typhoid fever in your family will affect your assets in exactly the same way as the loss of a valuable shipment of merchandise? If you are a farmer, has it occurred to you that such an illness may offset the value of a bountiful crop on many acres of your land? If you are a wage earner, have you considered that illness of yourself or a member of your family will materially affect the plans you have made for the investment of your savings?

You have thought, of course, of how unfortunate it would be for such illness

to "happen" in your family. You have insured your merchandise against loss. You have insured your house and barn against fire. You have perhaps even taken out an insurance policy to provide for the necessities of life for your family in case you become ill. But have you given to the question of preventing such illness the thought and study that so important a matter deserves? And many of our most serious and costly diseases are entirely preventable.

The United States Public Health Service devotes much of its time and effort to the study of these preventable diseases, and has issued numerous publications containing the fundamental principles of disease prevention. The titles of a few of these publications are here given. Any or all of them will be sent to

you free of charge on request.

"Good Water for Farm Homes," Pub-

lie Health Bulletin No. 70.

"Typhoid Fever—Its Causation and Prevention," Public Health Bulletin No. 69.

"Prevention of Malaria," Reprint No. 170.

"The Prevention of Pellagra," Reprint No. 307.

"Tuberculosis—Its Predisposing Causes," Supplement No. 3.

"Hay Fever and Its Prevention," Reprint No. 349.

"Infantile Paralysis," Reprint No. 350.

"Malaria—Lessons on Its Cause and Prevention," Supplement No. 18. (For use in schools.)

"Fighting Trom—The Importance of Right Living," Supplement No. 5.

"What the Farmer Can Do to Prevent Malaria." Supplement No. 11.

Malaria," Supplement No. 11.
"The Care of the Baby," Supplement No. 10.

### DO YOU KNOW THAT

Under-paid fathers and over-worked mothers lose many children?

The U. S. Public Health Service issues free publications on the care of children?

The infant mortaliy rate is the most sensitive index of community intelligence?

Dirty milk kills babies?

One eighth of the children born in the United States die before they are a year old?

Removing the eause before it becomes a result is the best kind of public health work?

Babies have a right to an officially registered name?

The board bill for last year's babies was almost as great as the undertaker's bill for last year's babies?

Being healthy is the firts duty of a citizen?

Disease is the greatest foe to human progress?

It's the unused body that deteriorates quickest?

Fly destruction is its own reward?

A walk in the open is worth two in the house?

—o—
Personal hygiene is the first requisite for community health?

-0- A small mosquito is a dangerous thing ?

Most of the diseases from which man suffers are peculiar to man?

A good water supply in the spring may save an undertaker's bill in the fall?

It's the spring fly which makes the summer pest?

A mosquito breeding pool may mean malaria later on?

—0—
Spring gardening has lengthened many

Spring gardening has lengthened many lives?

Fresh air is the best tonic?

Today is the best time to begin to build for health?

### PURE FOOD REGULATIONS

Adopted By West Virginia Public Health Council May 10, 1917.

1. No person, firm or corporation shall manufacture, sell or offer or expose for sale, or have in possession for sale, or deliver to another any drink or food or food product containing any preservative of any kind or nature; except natural preservatives, salt, smoke, potable distilled liquors, eider or distilled vinegar, saltpeter and condiments, and except sodium benzoate which shall be permitted in quantities of not more than one-tenth of one per cent ((0.1%), and except sulphur which may be used only in foods containing aldehydes and sugars, to the extent of three hundred and fifty milligrames (350 mgms.), of which not more than seventy milligrames (70mgms.) shall be in the free state, per kilograms of product.

2. No person, firm or corporation shall manufacture, sell or offer or expose for sale, or have in possession for sale, or deliver or offer to deliver to another, any drink or food product which is artificially colored by any mineral coloring material, or colored by any analine or coal tar dye

except the following:

Red Shades:

56 Ponceau 3 R. also known as Cumidine Red or Cumidine Ponceau.

107 Amranth, also known as Fast Red. D.

517 Erythrosin.

Orange Shade:

85 Orange 1, also known as Naphthol Orange.

Yellow Shade:

4 Naphthol Yellow S., also known as Martius' Yellow S. and Acid Yellow S.

94Tartrazine.

Green Shade:

435 Light Green S. F. Yellowish, also called Acid Green.

Blue Shade:

692 Indigo Carmine, also known as Indigo Di-sulpho Acid.

(The numbers refer to the number of the dye in question as listed in A. G. Green's edition of Schultz-Julius Systematic Survey of the organic coloring matters, 1904.)

3. Every food or drink which is arti-

ficially colored or preserved must distinctly and conspicuously be labeled with the word "imitation" or the words "imitation color" or "artificially colored," or "artificially preserved with (or by)———," stating the name of the preservative and its composition, as the case may be,

4. No person, firm or corporation shall manufacture, sell or offer for sale, or have in possession for sale, or deliver or offer to deliver to another any oleomargarine which has been colored by any vegetable, mineral, analine or other coloring substance.

5. The use of mineral coatings on can-

dy or other food is prohibited.

6. The use of saccharin, or benzoyl sulphimid, in any food or confectionery or drink is prohibited except in medicine and in food specifically intended for the use of diabetic patients.

Cerebrospinal meningitis is one of the most dangerous and damaging diseases to gain a foothold in any military camp. This disease caused much illness and numerous deaths among the Canadian soldiers on both sides of the sea. The disease is frequently transmitted by carriers whose presence would not be suspected except that they are enlisted from localities known to be infected with one or more cases of the disease.

The United States Public Health Service has recently warned physicians, especially those who certify the men enlisting for service under the flag, to be particularly careful about passing anybody who has been exposed to epidemic cerebrospinal meningitis or who comes from an infected locality. It is safer to refuse to enlist for some weeks, if not months, such persons who are possible carriers, than to subject a military camp to an epidemic. Examining surgeons should be especially careful to inquire about the possible exposure and should consult with the local or state authorities in regard to what localities are foci of epidemic meningitis.

Reports on every case of epidemic cerebrospinal meningitis, with a careful differentiation of the etiologic causes of meningitis, are of great value to the community and country. In doubtful

cases showing meningitic symptoms lumbar puncture should be adopted. Every diagnosed case must be immediately reported to the local health officer who must at once report the case to the State Department of Health, giving the name, age, sex and exact address of each case, together with the date of beginning of illness.

Poliomyelitis for its control received a new ruling from the Public Health Council at its recent meeting. Isolation and quarantine of cases of poliomyelitis, which were herebefore six weeks, have been reduced but must be maintained three full weeks, and may then be discontinued, provided the fever and other acute symptoms have disappeared. The reduction in the time of quarantine was made by the unanimous vote of state and city health officials at their recent meeting at Washington. The wage earner of the family may continue his occupation provided he has nothing to do with food supplies or milk for sale, or does not come in contact with children of other households.

A new rule was passed by the State Public Health Council May 10th, in respect to the reporting of reportable diseases. All doctors muts report to the city health officer of every incorporated city every case of reportable disease which occurs within the city limits. The eity health officers are required to report to the State Health Department every week all diseases reported to them. All cases of reportable disease occurring outside of the city limits must be reported to the county health officer, who is required to report weekly to the State Department of Health. cards may be obtained from the health officers or from the State Health Department. All cases of reportable discases must be reported immediately after the diagnosis is made.

Health officers of all cities and counties are required to report to the State Department of Health immediately upon receiving their notification of all cases of cerebrospinal meningitis and

poliomyelitis,

All doctors are asked to use the new standard certificates for reporting all births and deaths, and to discontinue using the old forms. The new blank forms may be obtained from the county clerks or from the State Department of Health, Charleston. At the top of the certificates are two blank spaces designated as "Dist. No." and "Reg. No." These spaces are for use under the Model Registration Law. Physicans should not use those two spaces for numbering.

All births and deaths must be reported by physicians. Still-births must be reported as both births and deaths. In giving the cause of death a complete list of the diseases present must be given. If a child with measles develops bronchopneumonia and dies, measles must be recorded on the death certificate. In case of cancer the organ or part affected should be given. In deaths by accident or violence, the exact cause and means must be given. Births and deaths must be reported within 30 days, by law, under penalty of \$10.

# RESULTS OF HEALTH SURVEY IN WEST VIRGINIA.

ONE PERSON IN EVERY THIRTY FOUND TO BE SICK.

The Metropolitan Life Insurance Company has prepared a preliminary statement of the results of its health census taken in the State of West Virginia during the first two weeks of March, 1917. Agents of the company ascertained the state of health of nearly 46,000 persons in the leading cities of the state and found that 1,504 persons were sick in this group. This gives a sickness rate of 33 per 1,000, or one sick person in every thirty, of the population enumerated. Sickness rates prepared for other communities by the Metropolitan usually run from 20 to 25 per 1,000. More sickness was found among coal miners than among other persons interviewed.

The diseases and conditions enumerated by the agents taking the survey are of decided interest. Influenza was the leading disease enumerated, 226 cases, or 15.0% of all sicknesses, being so reported. Rheumatism was the disease next in importance, with 122 cases, or

8.1%. Whooping cough was found in 83 cases, or 5.5%. Diseases of the stomach were registered in 55 cases, or 3.7%; organic diseases of the heart in 50 cases, or 3.3%; tuberculosis of of the lungs in 48 cases, or 3.2%. The following table shows the main facts developed in the sickness survey of the State:

DISEASES AND CONDITIONS ENUMERATED IN SICKNESS SURVEY OF WEST VIRGINIA DURING WEEKS BEGINNING MARCH 5 AND MARCH 12, 1917.

Disease or Condition	No. of Cases	Pct. of LTotal
All diseases and conditions	1504	100.0
Typhoid fever		.9
Smallpox		.1
Measles		3.1
Whooping cough		5.5
Influenza		15.0
Tuberculosis of the lungs		3.2
Other forms of tuberculosis	. 11	.7
Cancers and tumors	. 15	1.0
		8.1
	. 122	0.1
Apoplexy, cerebral hemorrhage,	. 33	0.0
paralysis		2.2
Insanity	. 16	.7 1.1
Neuralgia and neuritis	. 10	1.1
nervous exhaustion	. 38	2.5
Other diseases of the nervous sys	. 00	2.0
tem	29	1.9
Organic diseases of the heart		3.3
		3.5
Colds, coryza and rhinitis Bronchitis		2.6
		4.0
Pneumonia		4.0
Pleurisy	. 28	1.9
Asthma Tonsilitis and other diseases of	. 28	1.9
the tonsils and pharnyx	. 44	3.0
Diseases of the stomach	. 55	3.7
Appendicities	28	1.9
Appendicitis	20	1.0
eases of the kidneys	35	2.4
Tumor and other diseases of the	. 50	2.1
uterus	. 26	1.7
Normal childbirth		1.7
Accidents and injuries	105	6.9
All other diseases and conditions	253	16.8
All other diseases and conditions	200	10.0
	_	

The Metropolitan Life Insurance Company proposes to publish later on a complete discussion of its findings in West Virginia, at which time the cities will be compared with each other and with the record for the entire State.

### Miscellaneous Announcements and Communications

Morgantown, W. Va., May 12, '17. Dr. James R. Bloss, Editor Journal,

Huntington, W. Va. Dear Dr. Bloss: 1 thought I had used enough of your valuable space, and had said enough on the subject of contract practice; but judging from some of the articles replying to my first letter, it appears I have not made my views plain enough that "the psychological depths" could be readily fathomed.

To begin with: I said in my previous article "I have done contract practice and know whereof I speak." Furthermore, some of the very best friends I have in the world are now doing contract practice. It is purely a matter of

principle and not men.

I repeat all I said against contract practice; but that does not necessarily mean that I would not do it again, if compelled by circumstances to do so. Never as a matter of choice—but of compulsion. I might employ half a dozen skilled men at a good salary, and do it, but would still realize that it was wrong.

Dr. Cobun cites salaried contracts wherein the amount of work to be done is known before hand and an adequate (?) salary paid therefor. This is not a parallel case, as I see it, and even if admitted, I would come under the law alike with all others; and "he should worry about me." I'd be entirely willing to sacrifice what "contract" work I may now have to the principle.

In any argument, supposedly for the benefit of all, one must be careful not to bring personal feeling into the matter, if he wants or expects his argument to be of any value. The fact is: there has never been any acceptance of Dr. Mc-Donald's original challenge to "come across" with facts. There has, so far, been no argument. McDonald still has the floor, and is likely to keep it.

If all saloons, and all intoxicating liquors are removed by effective laws, we will have no drunkards. If we have an effective law against contract practice, then we will have no opportunity to take an unfair advantage over our brother physician by "hogging" it all and leaving him out in the cold.

In closing, I might add that if I had as much money as Dr. Cobun is reputed to have made honestly, I would put in my time doing surgery for the poor, without any charges whatever.

IRVIN HARDY.

Nuttallburg, W. Va., May 8, 1917. Editor W. Va. Medical Journal:

The discussion of a division of the fees has gone the rounds of Journals and no voice has been raised in favor of it. It may be unethical, and yet it may be fair, just and right. Why should it not be? I have never received such a fee,

nor given one.

Medical Review of Reviews, I notice the following eulogy on the Internist, and it was written by a surgeon. The patient must be taught that the diagnosis of an acute gangrenous appendix by the family physician is as important to the patient as the operation for its removal. In the one instance it usually means a fee of \$2.00 to \$5.00, in the other a fee of \$100.00 to \$500.00 or more for twenty to thirty minutes work. The physician it means two or three visits, sometimes a mile's traveling. Can anyone deny the injustice of such an arrangement. It is certainly not equitable. It is a wrong standard created by the medical profession. The Internist has been sadly neglected. He is underpaid, and the surgeon is relatively overpaid. All will admit that it requires a greater amount of mental aptitude to be a competent physician than to be a competent surgeon.

> Yours very truly, L. B. Rupert.

> Charleston, W. Va.

Editor W. Va. Medical Journal:

The following is an additional list of doctors who have lately made application for membership in the Medical Officers' Reserve Corps:

Dr. L. C. Covington, Charleston, W. Va.

Dr. B. L. Pettry, Dorothy, W. Va.

Dr. Engene Davis, Charleston, W. Va. Dr. J. Ross Hunter, Huntington, W. Va.

Dr. C. S. Hoffman, Keyser, W. Va.

Dr. A. W. DeBell, Malden, W. Va.

Dr. J. S. Shaffer, Cannelton, W. Va. Dr. J. W. Moore, Charleston, W. Va.

Dr. A. Mendeloff, Charleston, W. Va.

Dr. A. E. Callaghan, Parkersburg, W. Va:.

Dr. A. C. Lambert, South Charleston, W. Va.

Dr. R. J. Wilkinson, Huntington, W. Va.

Dr. R. M. Bobbitt, Huntington, W. Va.

Dr. W. E. Vest, Huntington, W. Va.

Dr. D. B. Jarrell, Woodville, W. Va. Dr. R. H. Powell, Elkins, W. Va.

Dr. H. K. Owens, Elkins, W. Va. Dr. Atlee Mairs, Charleston, W. Va.

Dr. H. D. Hatfield, Huntington, W. Va.

Dr. C. W. Slusher, Bluefield, W. Va. Dr. J. F. Van Pelt, Huntington, W. Va.

Dr. R. L. Eltinge, Sterling, W. Va.

Dr. C. McVey Buckner, Huntington, W. Va.

Dr. J. R. Vermillion, Princeton, W. Va.

Dr. W. W. Golden, Elkins, W. Va.

Dr. B. L. Liggett, Mill Creek, W. Va.

Dr. H. W. Daniels, Elkins, W. Va.

Dr. Mark Sutphin, Seth, W. Va.

Dr. David Abshire, Madison, W. Va. Dr. F. J. Broschart, Marting, W. Va. Dr. C. F. Mahood, Alderson, W. Va.

Dr. E. B. Gerlach, Huntington, W. Va.

Dr. C. R. Weirich, Wellsburg, W. Va. Dr. C. E. Clay, Martinsburg, W. Va. Dr. T. L. Barber, Charleston, W. Va.

There are still a number of vacancies in the medical corps allotment for West Virginia and it is to be hoped that they will be filled at an early date.

The following Auxiliary Medical Defense Committees have been formed

since April's Journal:

Upshur County—Dr. L. H. Forman, Buckhannon, W. Va., chairman; Dr. C. E. White, Buckhannon, W. Va.; Dr. H. O. VanTromp, French Creek, W. Va.; Dr. L. W. Page, Buckhannon, W. Va.; Dr. J. B. Simon, Buckhannon, W. Va.; Dr. Karl Trippett, Buckhannon, W. Va.

Calhoun County—Dr. W. T. Dye, Grantsville, W. Va., chairman; Dr. J. A. Smith, Minnora, W. Va.; Dr. Guy Stalnaker, Arnoldsburg, W. Va.; Dr. J. A.

Morford, Grantsville, W. Va.

Summers County—Dr. J. E. Hubbard, Hinton, W. Va., chairman; Dr.

Tom Bess, Hinton, W. Va.; Dr. W. L. VanSant, Hinton, W. Va; Dr. J. E. Bigony, Hinton, W. Va.; Dr. W. A. Wykel, Hinton, W. Va.

Tucker County—Dr. A. P. Butt, Davis, W. Va., chairman; Dr. S. D. Few, Parsons, W. Va.; Dr. O. H. Hoffman, Thomas, W. Va.; Dr. J. L. Miller, Thomas, W. Va.; Dr. Ford W. Huff, Parsons, W. Va.

Webster County—Dr. J. B. Dodrill, Webster Springs, W. Va., chairman; Dr. S. P. Allen, Webster Springs, W. Va.; Dr. O. O. Bennette, Hacker Valley, W. Va.; Dr. C. G. Stroud, Erbacon, W. Va.;

Va.; Dr. C. G. Stroud, Erbacon, W. Va.; Dr. D. P. Kessler, Cowen, W. Va.; Dr. L. O. Hill, Lanes Bottom, W. Va.; Dr. M. T. Hoover, Webster Springs, W. Va.

M. T. Hoover, Webster Springs, W. Va. Jefferson County—Dr. W. W. Brown, Shenandoah Junction, chairman; Dr. F. M. Philips, Charles Town, W. Va.; Dr. R. E. Venning, Charles Town, W. Va.; Dr. N. Burwell, Shepherdstown, W. Va.; Dr. J. L. Meyers, Shepherdstown, W. Va.; Dr. C. C. Johnson, Shenandoah Junction, W. Va.

Mason County—Dr. H. A. Barbee, Pt. Pleasant, W. Va., chairman; Dr. C. W. Petty, Hartford, W. Va.; Dr. Lilly, Fraziers Bottom, W. Va.; Dr. C. T. Whiteside, Leon, W. Va.; Dr. Reece, Gallipolis Ferry, W. Va.; Dr. J. M. Fadeley, Pt. Pleasant, W. Va.

Pocahontas County—Dr. N. R. Price, Marlington, W. Va., chairman; Dr. H. W. Hull, Durbin, W. Va.; Dr. Wm. Mc-Cord, Marlington, W. Va.; Dr. T. Payne, Thornwood, W. Va.; Dr. J. W. Price, Marlington, W. Va.

Tyler County—Dr. R. F. Thaw, Sistersville, W. Va., chairman; Dr. M. M. Reppard, Middlebourne, W. Va.; Dr. O. S. Campbell, Middlebourne, W. Va.; Dr. P. Engle, Middlebourne, W. Va.; Dr. W. H. Young, Sistersville, W. Va.; Dr. V. H. Dye, Sistersville, W. Va.; Dr. R. H. Boice, Sistersville, W. Va.

Harrison County—Dr. J. F. Williams, Clarksburg, W. Va., chairman; Dr. H. V. Warner, Clarksburg, W. Va.; Dr. C. A. Willis, Clarksburg, W. Va.; Dr. J. W. Showalter, Clarksburg, W. Va.; Dr. W. T. Gocke, Clarksburg, W. Va.; Dr. J. W. Payne, Clarksburg, W. Va.; Dr. C. O. Post, Clarksburg, W. Va.

Mineral County-Dr. C. S. Hoffman,

Keyser, W. Va., chairman; Dr. W. M. Babb, Keyser, W. Va.; Dr. W. H. Walcott, Keyser, W. Va.; Dr. J. O. Lantz, Hartmansville, W. Va.; Dr. L. D. Wilson, Piedmont, W. Va.

J. E. CANNADAY.

### Society Proceedings CABELL COUNTY.

May 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 Frederick hotel in room No.

218, April 19, 1917.

The members present were: Drs. Yost, Mathews, Cronin, H. P. & E. B. Gerlach, Rowsey, Hicks, J. A. Guthrie, Morrison, Watts, Henley, Bloss Pepper.

The minutes of the last meeting were

read and approved.

Among the interesting clinical cases presented was one presented by Dr. Rowsey, a case of supra-condyloid fracture of humerus, and a case of extreme procidentia by Dr. Watts.

The committee to present or report clinical cases at the next meeting were appointed as follows: Drs. Yost, H. P.

Gerlach, Henley and Cronin.

On motion, the Society adjourned. R. H. Pepper, Sec'y.

The Cabell County Medical Society met May 3, 1917, at the Frederick hotel

in room No. 218. The following members were present: Drs. Morrison, Goff, Prichard, H. P. & E. B. Gerlach, Watts, Cummings, Yost,

Rowsey, Rife, Fitch and Pepper. The minutes of the last meeting were

read and aproved.

Dr. Goff, of Kenova, presented an in-

teresting clinical case.

Dr. H. P. Gerlach reported a case of breech which presentation, brought out an interesting discussion.

On motion, the Society adjourned. Fraternally yours.

R. H. Pepper, Sec'y.

FAYETTE COUNTY.

The Fayette County Medical Society held its regular monthly meeting in the town of Mount Hope, Tuesday, May 8, 1917, at 8:30 p. m. Due to the inclemency of the weather the meeting was not as well attended as we had expected, however there was quite a number present, attesting that Fayette is still in the progressive column. The meeting was called to order by President Grisinger. On motion the reading of the minutes of the last meeting was dispensed with. The members who had prepared papers for this meeting were unavoidably absent and the members present proceeded to the discussion of clinical cases.

The first cases reported were several of severe dermatitis among railroad scction employees, due to the handling of ties prepared in a creosote compound as a preservative. Drs. Eakin, Price and Hartley reported cases of this kind, which were discussed freely, as none of the members had previously seen any

cases of this kind.

Dr. Davis reported a case of atrophic cirrhosis in a boy four years of age, which was very interesting to all pres-The child had been given whiskey very freely for two or three years. Autopsy confirmed the diagnosis. Dr. Brown, of Mount Hope, reported some very interesting and puzzling cases, as did also each of the other members present. Medical defense and various other problems of importance to the patriotic physician were discussed at length and all the members present expressed their willingness to join the medical reserve corps or even go to the firing line in France with gun and sword, if necessary, in defense of American ideals.

Dr. G. S. Hartley, in a very patriotic and forceful speech, proved that there is no hyphen attached to his American-

ism.

Promptly at 10:00 p. m. the meeting adjourned and the members were given a surprise party by Dr. Brown, who had previously arranged for a sumptuous repast, which all very much enjoyed.

We hope to meet in the good doctor's

city again.

H. C. Skaggs, Scc'y.

### GRANT-HAMPSHIRE-HARDY-MINERAL.

The regular meeting of the Grant-

Hampshire - Hardy - Mineral Counties Medical Society was held at Piedmont on Feb. 28th.

The meeting was called to order by the president, Dr. W. M. Babb, at 2:30 p. m. The minutes of the preceding meeting were read, and, upon motion by Dr. Hoffman, corrected to include a vote of thanks extended Dr. Freeman at that meeting.

Dr. J. R. Agnew, of Keyser, was

elected to membership.

The president addressed the society in an interesting and entertaining manner.

Dr. M. H. Maxwell read a paper entitled "The Use of Boiled Milk in Infant Feeding," in which the modern views of the subject were well presented. All members present took part in the discussion which followed.

The committee appointed to draw resolutions on the death of Dr. Paul Rider, which occurred in January, 1916, re-

ported as follows:

Dr. Rider was born June 25, 1884, in Wheeling, where his father, the Rev. W. M. Rider, was pastor of the First Meth-

odist Episcopal Church.

After an academic degree from the West Virginia University he entered The College of Physicians and Surgeons tution he was graduated in 1911, retution he was graduated in 1977, receiving Third Gold Medal for Scholarship.

Then followed a year on the surgical staff of the Mercy Hospital, during which he evidently made the most of his

opportunities.

In July, 1912, he located at Wardensville, W. Va., where he continued in practice till his death from Myocarditis compli-Influenza in January, 1915, while visiting in Morgantown, W. Va.

Any of us who saw Dr. Rider at work must have recognized in him qualities which bade fair to place him above the ordinary man in the profession. His thoroughness and painstaking care made him an excellent diagnostician and his consideration for patient and public endeared him to all with whom he came in contact.

Therefore, Be It Resovled, That by his untimely death this society and the profession have lost a valued member; his community a skillful physician and a useful citizen.

W. H. WALCOTT, Sec'y.

### MERCER COUNTY.

The Mercer County Medical Society met at Athens in the Normal School building on May 17, at 8:30 p. m., the president presiding.

The minutes of the last meeting were

read and adopted.

The president called on Dr. S. R. Holroyd to introduce Mr. John B. Lilly, the president of the Board of Trade of Athens, who in a speech gave us a very hearty welcome.

Mr. Hill, principal of the State Normal School of Athens, was then called on, who also gave us a very royal welcome, and spoke of the relations between the school teachers and the medical profession. He dwelt on the importance of the compulsory medical inspection of the schools.

Dr. Steele asked Mr. Hill to put this talk in the form of a paper and mail it to the secretary, which he promised to do later on.

Under Clinical Cases, Dr. S. R. Holroyd reported the sudden death of Mr. John K. Peck, who had symptoms of acute indigestion with a normal pulse and temperature. A good many suggestions were made as to the probable cause of his death, but nothing definite was decided on.

Dr. McGuire reported a case of meningitis in which a lumbar puncture was donc, withdrawing from six to eight CC of spinal fluid, and then injected antistreptoccus serum, after which the convulsions ceased. The child got well, leaving it with a paralysis which gradually seems to be subsiding.

Dr. Vermillion reported a case of septic meningitis, which was due to a fractured skull, which was of a ten days duration. A lumbar puncture was done,

but the patient later died.

Dr. Steele reported a case of retro-flexion in which the patient had been neurasthentic for four years, which after an operation it cleared. He also reported a case of Winkles disease which was diagnosed on the fourth day and died on the ninth day.

Those who were appointed to read papers being absent, the meeting was then referred to business and under this head the president stated that he desired to see this Society take the same action that the Baltimore City Medical Society had taken in taking care of the doctors' patients who had volunteered their services for their country. Keeping an actual record of the money collected, and returning one-third of this amount to them on their return, and to turn their patients over to them on their return, and that no member of the Society was to see their patient for the period of one year, excepting in consultation. It was then suggested to him to put this in a form of a resolution. A motion was then made to have the President and the Secretary draft a resolution to this effect and present it at the next regular meeting. It was then moved and seconded that we adjourn to the dining room where the class of Domestic Science had prepared an elaborate feast for It was moved and seconded, after the lunch, that we extend a vote thanks to the Doctors, the Board Trade, Principal of the Normal School, and especially to the class in Domestic Science of Athens for the splendid reception and banquet they had given us.

We were then invited to the kitchen and various parts of the building, which was a rare treat to everyone. We adjourned to meet in Bluefield the third

Tuesday in June.

lett.

E. H. THOMPSON, Sec'y.

### MINGO COUNTY.

Matewan, W. Va., May 15, 1917. Dr. James R. Bloss, Huntington, W. Va. The Mingo County Dear Doctor: Medical Society had a meeting today in Williamson, which was attended by Drs. Richardson, President Turner, Irvine, Salton, Nuncmaker, Conley and Trip-

Although the attendance was rather small, the meeting was very enthusiastic. Some good cases were reported and thoroughly discussed, and Dr. maker and mysclf tried to present the subject of "Medical Preparedness" in an explanatory manner. As yet there has been no activity on the part of our

County Auxiliary Defense Committee, but a meeting is called for Saturday of this week and I'm confident something

will be developed.

We hope to have a bigger and better meeting next month and if we can build the attendance up to a justifiable point we will invite some of our neighbors in to read us a paper. I am enclosing copy of circular letter to our members which is designed to stimulate more interest and get a better attendance. If you could suggest something better, would appreciate it.

Yours very truly, W. H. TRIPLETT.

(The following letter is jublished, as it shows this local secretary means busi-EDITOR. ness.

Matewan, W. Va., May 14, 1917. Dear Doctor: It is interesting to note that in applying for service in the Army Medical Corps, even at this turbulent time, one of the requisites of the applicant is a membership in his local Medical Society. It is a matter of fact that licensing boards considering an application for reciprocity, absolutely require a membership card from the applicant's local Medical Society before granting a certificate.

I realize that you, doctor, may not be contemplating going to war nor changing locations, therefore the foregoing does not appeal to you, but would you object to getting in closer contact with your neighbor and see what he is doing? Would you not feel amply repaid for a half day spent in attending a meeting where a dozen of your fellow practitioners were assembled and take a voice in any and all the discussions?

If any of the foregoing appealts to you from a standpoint of "self improvement," the Mingo County Medical Society needs you badly, needs you to help put it where it belongs, "on the top rung of the ladder," and I feel sure that it will put you up a notch or two higher in your work.

You get out of a Medical Society just what you put into it, so please advise me by personal letter just what I may expect you to "inject into the veins" of our society this year.

I have been again selected secretary

and I want a good showing this year. If you will help as you should, we'll get it. Need I expect a reply as requested?

Yours for success,

W. H. TRIPLETT, Sec'y.

# State News

The State Council of Health held a two days conference in Charleston May 8th and 9th. Most of the county health officers from various parts of the state were in attendance. Polyiomeylitis and a number of other topics were discussed.

On May the 9th the venerable and distinguished neurologist, Dr. Charles K. Mills, of Philadelphia, made an address before the Kanawha Medical Society at Charleston. He indulged in much reminiscence about his acquaintance with Brown-Sequard and numerous other pioneers of modern neurology. The address was followed by a supper at the Kanawha.

Dr. W. F. Bruns, of Ceredo, has gone to Colorado for his health. He expects to be gone some time.

Dr. R. J. Wilkinson and Dr. J. Ross Hunter, of Huntingaon, were in Washington, D. C., in May on matters pertaining to the war situation.

Dr. C. C. Coleman and Miss Julia Cone, of Richmond, were married in May.

--0-

The engagement of Dr. A. U. Tieche, of Davy, West Virginia, to Miss Mary McCullough, of Huntington, was announced recently.

Dr. B. L. Hume, of Huntington, was a recent visitor in Richmond.

Dr. II. D. Hatfield, of Huntington, has purchased a half interest in the Kessler Hospital of that city. This hospital was owned by Dr. A. K. Kessler. Dr. Hatfield will confine his practice to surgery.

Dr. J. E. McDonald, of Logan, was in Huntington in May on his way to

Charleston to attend the Shriners meeting.

Dr. Harry W. Keatley, former senior assistant physician at the Huntington State Hospital, has been commissioned as first lieutenant in the medical corps of the federalized West Virginia national guard.

Dr. J. Howard Anderson, of Marytown, spent several hours in Huntington enroute to Charleston to attend the called meeting of the Council of the State Medical Association on May 15th.

One hundred and twenty-six nurses took the State Board examination held in Huntington on May 14th. A supplementary examination will be held in Fairmont in October, during the State Medical Association meeting. The board of examiners consists of Drs. C. M. Scott, Bluefield, Dr. J. McKee Sites, Martinsburg, Dr. E. S. Bippus, Wheeling, Dr. J. E. Cannaday, Charleston, and Dr. A. K. Kessler, of Huntington.

Dr. J. E. Rader, of Huntington, president of the State Medical Association, as a member of the State Council of Defense, attended the meeting called by Governor Cornwell in Charleston on May 15th.

At the called meeting of the Council of the State Medical Association, held in Charleston, the following resolutions were adopted:

Whereas: A state of war does now exist between the Imperial government of Germany and our great nation, the United States of America, and

Whereas: The American people in general and the various states of the nation have been called upon to mobilize from all the various walks of life so that the country may act vigorously and unitedly against our common foe;

Therefore be it Resolved, That we, the Council of the West Virginia State Medical Association, in special session assembled in the city of Charleston, West Virginia, on the 14th day of May, 1917, do hereby pledge our membership to uphold the hands of our hon-

orable and worthy chief, Governor John J. Cornwell, in mustering all the resources of our state that we stand ready individually and collectively to render any service within our power in the defense of our beloved country.

Be it further Resolved, That we offer freely and willingly our services in the examination of the West Virginia State Conscripts as a patriotic duty or any other services His Excellency may at any time request or demand, and

Be it further Resolved, That we will earnestly endeavor to provide the full puota of Medical men at the front demanded of our Commonwealth by the

National government.

J. E. Rader, Chairman. J. HOWARD ANDERSON, H. R. Johnson, E. L. Peters,

Committee.

---0---The new Chesapeake & Ohio Hospital at Clifton Forge, Va., was formally opened on April 2, 1917. The chief addresses were made by Mr. George W. Stevens, President of the C. & O. Railway, and Dr. W. T. Oppenhimer, Chief Surgeon. In the course of his remarks, Mr. Stevens announced that it was the intention of the railway company to construct a new hospital building at Huntington in the near future.

The staff of the Clifton Forge Hospital was announced as follows. Sur- his way to Charleston to geon and Chief of Staff, Dr. B. B. State Council for Defense. Wheeler; Eye, Ear, Nose and Throat, Dr. E. D. Wells; Internal Medicine, Dr. Jas. N. Williams; Considing Surgeon, Dr. Jno. C. Wysor; Superintend. ent, Miss Emily W. Bauer.

The West Virginia doctors present at the opening were: Dr. O. Ö. Cooper, Hinton; Drs. C. R. Enslow, W. E. Vest and R. J. Wilkinson, Huntington.

Dr. B. B. Wheeler, the present surgeon-in-charge, has been a member of the Council of the State Association for a number of years. Dr. Wheeler was born in Clay county, July 24, 1876; graduated from Louisville Medical Callege in 1904; following his graduation he practiced medicine in his home county for two years. In 1906 he was appointed by the late Governor Dawson as house surgeon to the Miners Hospital at McKendree, West Virginia. He served as house surgeon of this institution for two years and in 1908 was appointed to superintendent and surgeon-in-charge of the same. During Dr. Wheeler's incumbency many improvements were made at the institution and we have been informed that money collected from pay patients provided the means for practically all of these improvements.

The C. & O. Hospital Association, we feel, has been very fortunate in securing Dr. Wheeler as surgeon-in-charge of the new hospital at Clifton Forge.

--0--Dr. H. G. Middlekaust, junior resident physician of the C. & O. Hospital at Huntington, was married early in May to Miss Carolyn Sheetz, of Staunton, Virginia. Congratulations are extended to the doctor.

Dr. A. K. Kessler, of Huntington, was called to Nicholas county in May owing to the death of his mother.

--0---Major J. E. Cannaday, of Charleston, has been designated as examiner for applicants from West Virginia for commissious in the Medical Reserve Corps.

--0---

... Dr. C. R. Weirich, of Wellsburg, spent some time in Huntington when on his way to Charleston to attend the

Former Governor Tenry D. Hatfield has offered his services to the nation and may possibly go to France with the first detachment of American surgeons to be sent to Europe.

--0---It is rumored that the C. & O. Hospital at Huntington is to have an addition built at once. A three story ell will be built on the south extending from the rear of the present building. This addition will afford a new operating suite and twenty additional beds, making the institution a seventy-bed hospital. The grounds around the hospital have been improved lately; this adds very much to the appearance of the institution. A tennis court for the nurses has been

opened also. Miss Susie E. Knight has succeeded Miss Bauer as superintendent of nurses, the latter having been sent to the new hospital at Clifton Forge.

Dr. John Gibson, of Holden, visited in Huntington recently enroute to Washington, D. C.

Dr. H. R. Niehols, of Elksdale, and wife, spent some time in Huntington in May.

The reports reaching us from various points throughout the state indicate that great patriotic interest is being shown by eitizens of both sexes in organizing the Red Cross work, particularly the lectures upon First Aid. We wish that we could publish a list of all of the Red Cross surgeons throughout the state who are lecturing to classes along this particular line. If names are sent to us we will make an effort to publish a complete list.

Dr. T. K. Oates, of Martinsburg, spent a few hours in Huntington visiting old friends when on his way to Charleston to attend the called meeting of the Council.

Dr. J. R. Agnew, of Keyser, has been recommended for a commission as first lieutenant in the Medical Corps of the Army.

Dr. G. L. Howard, of Prestonsburg, Ky., was in Huntington recently on his way home from Baltimore, where he had been for an operation for appendicitis.

Dr. M. I. Mendeloff, of Charleston, has been commissioned a first licutenant in the Medical Reserve Corps and will assist in the examination of applicants for commissions in that branch of the service.

West Virginia physicians who have passed the examination after making formal application for commissions are as follows:

C. F. Mahood, Alderson, C. W. Slusher, Bluefield; J. S. Shaffer, Cannelton; T. L. Barber, L. C. Covington, E. B. Henson, A. C. Lambert, Atlee

Mairs, J. W. Moore, L. A. Petty, H. C. Sarver, Charleston; J. J. Goodwill, Coopers; B. L. Pettry, Dorothy; H. W. Daniels, W. W. Golden, H. K. Owens, R. H. Powell, Elkinns; H. R. Johnson, C. W. Waddell, Fairmont; R. G. Warren, Giatto; R. M. Bobbitt, C. MeVey, Buckner; H. L. Crarey, D. J. Cronin, H. D. Hatfield, J. Ross Hunter, J. C. Schultz, J. F. Van Pelt, W. E. Vest, R. J. Wilkinson, Huntington; C. B. Hoffman, Keyser; C. C. Willis, Kingston; Lavis Abshire, Madison; A. W. De Bell, Malden; F. J. Brosehard, Marting; C. E. Clay, W. T. Henshaw, Martinsburg; B. L. Liggett, Mill Creek; A. E. Callighan, Parkersburg; J. R. Vermillion, Princeton; Mark Sutphin, Seth; R. L. Eltinge, Sterling; C. R. Weirich, Wellsburg; D. B. Jarrell, Woodville.

Dr. T. L. Barber, of Charleston, has begun recruiting to make up West Virginia ambulance corps No. 22. There will be one captain and four lieutenants. A number of commissioned officers will be promoted from those who enlist. The privates will number 38.—Herald-Dispatch, May 20.

# DELIRIUM AND CONVULSIONS AFTER NEOSALVARSAN.

Langevin's patient had been given for four weeks an intravenous injection of a mercury salt five days of the week; the sixth day neosalvarsan was injected, the doses increasing from 0.15 to 0.6 gm. in the four doses that had been given. Convulsions, unconsciousness and delirium developed three days after the fourth dose. The clinical picture was exactly like that of the serous apoplexy which has been known to develop under salvarsan and to subside under epinephrin treatment. The delirium was of the delirium tremens type, coming on as the young man eame out from the coma, and keeping up for several days. Venesection was done at once after which there were no further convulsions. During the four days of coma a quart of boiled water was injected slowly into the intestine every hour, and the man recovered. The ease was published in the Bull, et mem. Soe. med. hop. de Paris, 1916, p. 647.—Jour. Med. Soc. N, Y.

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# **GOLDEN JUBILEE CELEBRATION**

OF THE

# Battle Creek Sanitarium

BATTLE CREEK, MICHIGAN

October 3, 4 and 5, 1916

Members of the A. M. A. cordially invited

Descriptive circular on request

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### THE WEST VIRGINIA =

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"Men talk of victory as of something Work is victory; wherever work is done, victory is obtained. There is no chance and no blanks."

---Emerson

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"Blessed is he who has found his work; let him ask no other blessedness."

---Carlyle.

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The man who is trying to do The best that he may is never Beset, when the day is through, By any troublesome doubt whatever; He is never inclined to sigh For the follies that are denied him, Nor at night does he fearfully eye
A phantom that hurries beside him.

-S. E. Kiser.

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Now we lift up our eyes and look hopefully at the distance! Rick, the world is before you; and it is most probable that as you enter it, so it will receive you. Trust in nothing but in Providence and your own efforts. Never separate the two like the heathen waggoner.

-Charles Dickens' "Black House."

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Could we judge all deeds by motives That surround each other's lives, See the naked heart and spirit, Know what spur the action gives, Often we would find it better Just to judge all actions good; We should love each other better If we only understood.

-Rudyard Kipling.

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"It ain't the guns nor armament, nor
the band that they can play,
But the close cooperation that makes
them win the day;
It ain't the individual, nor the army as
a whole,
But the everlasting team-work of every
bloomin' soul."

-Rudyard Kipling.

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—Carlyle.

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Germicidal Soap does not attack nickeled or steel instruments. It does not coagulate albumin.

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Contains I per cent. of mercuric iodide: large cakes, one in a carton; small cakes, five in a carton.

For other forms see our catalogue.

Home Offices and Laboratories.

Detroit, Michigan.

Parke, Davis & Co.

50 Years of Pharmaceutical Progress











