others were treated by the late Dr. Samuel Alexander of New York, Dr. James Ewing of Cornell, Dr. F. R. Bailey of Columbia University, Dr. William T. Cladek of Rahway, N. J., Dr. Baneroff of Orange and Dr. Charles L. Ill, of Newark. Some of the fluid was also used by Dr. Eugene Hodenpyl's assistants at Roosevelt Hospital, New York.

We wish to thank Dr. Ewing for the very great interest he took in the fluid and for its experimental use.

Dr. Samuel Alexander kindly consented to use the serum on six of his patients for inoperable cancer of the bladder and prostate. All of his patients knew the character of their disease. In none of these cases was the growth arrested. In two of the bladder cases there was marked local reaction, pain and hemorrhage with a discharge of cancerous material in the urine. They all claimed to have received benefit immediately following the injections; that is, they had less pain and less frequency in urinating. Dr. Alexander says in his letter of Oct. 30, 1910, "I am convinced that except for the moral effect of the treatment, I have seen no improvement." In an earlier letter, however, dated June 11, 1910, he says, "I cannot report any cures, but I can certainly interest you in telling of the improvement which has occurred in these cases of cancer of the bladder."

The patient from whom we obtained the fluid died suddenly on July 12, 1910.

An autopsy five hours after death showed that the peritoneal cavity contained 12 liters of the milky fluid already described. The peritoneum was everywhere much thickened. The intestines were studded with small yellowish-white bodies raised from the surface and ranging in size from a pin-head to split pea. Many translucent vesicles filled with a viscid straw-colored fluid were scattered over the inferior surfaces of the liver, spleen, transverse colon and mesentery. The intestines were adherent in many places to adjacent organs and to the parietal peritoneum. The pelvis was occupied by two nodular ovarian tumors connected by a third intervening tumor. The liver was but two-thirds the normal size; its surface was smooth and borders rounded. The gall-bladder was contracted. On section, the liver presented a nutmeg appearance, with many white areas of fibrous tissue projecting inward from the surface in a branch-like manner. The spleen was moderately enlarged and dark red in color. The kidneys were very pale in color but otherwise looked normal. Sections from the liver, ovarian tumors and intestinal nodules were all carcinomatous. Fibrous tissue was very much in evidence surrounding the cancer cells. In addition the liver showed extensive fatty degeneration. By request the thorax was not opened.

The accompanying microphotographs were made by Dr. H. S. Maltland.

1002 Broad Street—448 High Street.

THE STATE INSTITUTIONS AND SOME OF THEIR PROBLEMS WHICH MEDICAL MEN MAY HELP TO SOLVE*.

A. L. BOWEN

Executive Secretary, State Charities Commission
SPRINGFIELD, ILL.

From a position of obscurity in the field of public charity, Illinois has within recent years bounded into one of prominence in the nation and the world. As a result of improvements in the service and physical plant of our institutions amounting almost to a revolution, during which the entire system of administration has

been transformed to comply with more modern thought and demands, Illinois to-day is considered one of the leaders in the new movement.

A formal catalogue of all that has been done or is in process to make the physical property efficient and the medical and nursing service comply with modern ideals is an array too long for publication here. It represents that which can be done with money and brains, properly combined and mixed with good business judgment and honesty of purpose and intent. All these things were necessary preliminaries to the greater and more difficult problems which progress encounters. We had to have these things and we had to do these things to furnish us the facilities and the means with which to solve these problems.

There are now two questions of great moment: first, the practical one of financial burden which the growing class of mental defectives and moral delinquents is piling up on the taxpayer; and second, that of our moral responsibility toward this burden, involving the query, What are we going to do about it? It is with the second question that this paper will deal primarily.

MEDICAL MEN AND PUBLIC OPINION

We have had the support and sympathy of men of medicine all through this period of rehabilitation and improvement. What the state has been doing has appealed to you as right, just, humane and necessary. Some have complained that progress has not been fast enough. Some eminent physicians to-day are criticizing the state for defects in the system which are admitted to exist. And they must exist for a long time to come; for it is easier to point out defects than it is to repair them—easier to advocate reforms than it is to put them into effect. The charity authorities of the state cannot move faster than public sentiment will warrant.

After all, improvements in the service and progress in lessening this burden depend on an enlightenment of public opinion. The people must understand these questions better; they must know what is responsible for mental breakdown; they must know what they must do to prevent that portion which we know can be prevented; they must know what is the correct attitude toward the acutely insane patient both before he enters the state hospital and after he leaves it, marked either "recovered" or "improved." It is necessary that the people learn to accept the correct idea of insanity and view from a different point the state institutions and the public agencies at work within them.

The county medical society is a center of information on questions of public health. It is daily disseminating knowledge on this subject. The relation of private and public health to mental defectiveness or mental breakdown is fairly well understood by the profession but not by men and women in the average walks of life. There is no one who can tell these people so well as the county medical society what are the rules of good health, physical and mental hygiene and sanitary environment, how necessary it is to observe them, and what their violation or neglect entails. The relation between so many of the bodily ills and mental and nervous diseases is so pronounced that physicians and laymen alike cannot know too much about it.

IMPORTANCE OF CHILD WELFARE

The child is the seed from which grows up the sound, self-supporting citizen or the mental defective, the insane, the delinquent. We have been paying all attention to the treatment and care of the finished product

* Abstract of a paper read before the Williamson County, Ill. Medical Society, April 23, 1912. A copy of the complete paper may be had on application to the State Charities Commission.

of unwholesome living and none to the potential elements which are forming in the child at our feet.

The demand to-day is for child welfare. The hope of the student in mental and nervous diseases with all their involvements of moral delinquency, racial degeneracy, public burden and the like is the child. The salvation of the child depends on home environment and school training, in both of which the physician in the community has a right to exert the great power of his influence and knowledge.

Unclean physical environment is the soil of unclean moral health. Unclean physical and moral environment of the child means an enfeebled adult mind and body. It germinates the unclean mind and the unclean act follows, from which to the moral obliquity which produces the degenerate, the delinquent and the criminal or what is equally as bad, the feeble-minded youth or the insane adult, there is only one short step. In either case the child has become a menace to society or a charge on the state.

DUTY OF THE PHYSICIAN

There is no man in the community so well equipped as the physician to carry to the fireside the truths of physical and moral health, or tell the parent his duty and responsibility to the young child. He can instruct in the simple principles of hygiene and sanitation. He can impart to the parent the truths of heredity and its influence on the mind and future conduct of the child. He knows and can tell some of the sure and certain ingredients of an unstable and broken-down mind. He knows the effect of the excessive use of alcohol. He knows what venereal disease will do for the nervous and mental system. He knows what the toxins of internal secretion, stimulated by improper living and violation of health laws, will do. He knows, too, what injury stress, so often preventable, leaves on the mind.

The medical society in each county should never yield one inch in the fight on the advertising quack and advertised cure-all. These two sinister agents are shaping the material for the asylums and colonies. Their lying advertisements in glaring type in newspaper and on bill-board are carrying to the public false information about health and living. They are doing more to counteract the efforts of the state and science than any other dozen influences combined. Their attitude toward life and the public is vicious. They have masked themselves behind an honorable profession for the purpose of plundering and robbing the innocent and unsuspecting. With fiendish cunning they employ the arts of psychology to ensnare their victims. It is a remarkable fact that the majority of the public will believe and act on the statement of the quack or the nostrum-maker and turn a deaf ear to the advice of the honorable practitioner.

These men are contributing to the nervous and mental wrecks of our country at a frightful rate. They are laying the foundation of public health degeneration, carrying with it all that goes with enfeeblement of body and mind. They deserve the scourging of society. No more important work confronts the practicing physician than that of exterminating by force of public opinion and the act of wholesome legislation the quack and the nostrum.

TREATMENT OF THE INSANE

The public must learn that insanity is no more a disgrace than is typhoid fever or diphtheria, and not so much so as those diseases which spring from insanitary surroundings. They must know that it is a disease

or a symptom of disease or diseases. It must be treated as diseases are treated, skilfully, scientifically and sympathetically. The patient must not be feared. He should not be tied up because he acts queerly. He should not be hurled into a dirty, filthy jail among a crowd of drunken sots or petty offenders.

More damage is done to the acutely insane patient during the first few days of the manifestations of his trouble than can possibly be estimated. Patients come to the state hospitals in a frightful condition, run down in physical health, probably through the fault of an advertising quack or the evils of a nostrum. They have broken bones and scarred limbs. They are tied hand and foot and strapped to the conveyance.

I cannot describe to you adequately in this short time the cruelties and inhumanities which are practiced on the insane during the interim between the first onset and their admission. Many families foolishly attempt to keep their friends at home. The disorder or disease is all this time rapidly growing worse. The time for treatment is in the early days of the disease. The sooner the mentally afflicted reach the receiving ward of the state hospital, the greater their chances of recovery. It seems to me that the physician's duty in this matter is to recommend early transfer to the state hospital. I believe you realize this, but you hesitate sometimes because of the prejudice and stigma attached to hospitals for the insane.

PSYCHOPATHIC WARDS AND PSYCHOPATHIC HOSPITALS

Along this line of early treatment various ideas have been advanced. One is that psychopathic wards should be attached to general hospitals. In some places this experiment is being tried. The results are not definite enough to warrant a judgment.

Claims of cures which sound extravagant are made by some. The statistics may be correct so far as they go, but they do not indicate what class of patients have been under treatment. Such wards usually take only hopeful cases. They are located in the great cities and receive a great many alcoholics. The victims of dissipation, either in strong drink or the frivolities of high-strung social life, are not averse to entering such wards. All these classes are hopeful and the recoveries, of course, form a large percentage of the admissions.

There are arguments both for and against the psychopathic ward of the general hospital, but I shall not undertake at this time to discuss them.

Another plan is for the state to establish psychopathic hospitals in various parts of the state for the reception of nervous and mental cases in their incipency, such admissions to be purely voluntary and without court proceedings.

If the public abhorrence of the state hospitals could be removed, the number of voluntary admissions into them would greatly increase and it would be possible to establish in them such strictly psychopathic wards.

Under the improvement which has taken place in recent years in public sentiment and in the greater confidence the people are learning to have in our state hospitals, the number of voluntary admissions has been steadily increasing; they average one a week at Kankakee, and the psychopathic ward problem will probably solve itself.

It is evident that the public attitude toward these hospitals and toward the insane man and his affliction can be radically changed; for in the last twenty-five years it has been radically changed for the better. We must keep hammering away at the unjust barriers.

Until the public has shifted its view of the state hospital and has come to regard it as a real hospital for the treatment and possible cure of an affliction that is not a disgrace and should not carry any stigma after recovery, the disposition will be strong to avoid the hospital until the last minute, when perhaps the chance of hope has departed. It becomes necessary that the medical society give its aid and assistance in thus changing the attitude of the public toward these institutions.

Treatment of the patient after he reaches the institution depends, of course, on the diagnosis. The diagnosis depends in large part on the history of the patient. This history the members of the family are frequently unable to give. They do not understand the necessity of many of the questions. Some of the queries are offensive, such as, for instance, whether or not the patient has ever had a venereal disease, and whether or not there is any trace of syphilis in his ancestry. On the intelligence and fulness of the history which family and physician can give depends the character of the early treatment.

If the patient recovers or improves and is able to return home, there should be in the community welcoming hands to support him. He is still a sick man in need of encouragement, sympathy, help and nursing. In his case the community as a whole must be nurse and support.

In some states, throughout the cities and towns, societies have been formed whose duty it is to look after the paroled, improved or restored insane patient. They are doing good work and accomplishing results. These societies aid the hospital in collecting a patient's history. They assist in changing a hostile into a sympathetic public. They are bringing about a revolution in the public attitude toward these institutions and the insane. They are likewise spreading the known facts about insanity, its causes and its prevention, and the manner of treating the patient in the early days of his affliction.

PSYCHIATRY IN MEDICAL COLLEGES

Physicians can give to this campaign a force and directness that no other single class in society can furnish. But while we speak of the duty of society and the problems of educating the public to new views, we must not forget the training and education of the physician himself. Every medical school should have a course in psychiatry, and no medical education should be considered complete that lacks training in this branch. It should not consist of perfunctory lectures and abbreviated instruction, made to satisfy the form rather than the spirit of the demand of the day.

Few colleges have adequate courses in psychiatry. Medical students seem to shun what there is. The courses as designed are inefficient in most cases because they lack the clinical facilities. These faults may now be removed by cooperation and coordination with the state institutions, and by the organization of psychopathic wards in the general hospitals. Psychiatry should be made necessary to graduation. It is unnecessary to dilate on this subject. It must be apparent to every intelligent man that a medical education which does not provide the young practitioner with the latest knowledge in mental and nervous diseases and how to treat them is woefully deficient. Every medical society in the state might well lend its support to this movement. You all are interested in higher standards of medical education. You desire that those who come into the profession shall be as fully equipped to meet the medical problems of the

day as it is possible to equip them. Why neglect psychiatry?

I have mentioned in passing the psychopathic ward in the general hospital and have observed that some success has followed efforts along this line in the larger cities. These could afford the medical student the clinic he so much needs in the study of nervous and mental affliction. There is a demand in Illinois that the state create a distinctly psychopathic hospital in Chicago, to be followed later by similar hospitals at several centrally located cities down the state. The sentiment of the medical profession, I believe, will sustain the general assembly in voting the money for such institutions.

Meanwhile our state authorities would welcome a closer union between practitioners and the state institutions. These hospitals are open to your inspection and examination, and it is the desire to make the service within them such as will attract the very brightest of the intern class and the most ambitious of the younger practitioners.

THE BACTERIAL ETIOLOGY OF ACNE VULGARIS *

MARCUS HAASE, M.D.

MEMPHIS, TENN.

A critical review of the literature on the etiologic significance of certain organisms found in acne causes one to wonder if we all mean the same disease when we say "acne vulgaris;" and the numerous opinions on the efficacy of bacterins as a therapeutic agent increase the confusion of a very perplexing question.

That there are three forms of microorganisms constantly present in the comedo is accepted by all investigators of the subject: a small bacillus, a coccus, and that yet mysterious thing known as the bottle bacillus. The last-named, because of its presence in larger numbers and its more fully developed forms in other regions than that occupied by acne, is discarded as having no influence on the disease. The second, the coccus, until recently was classed as one of the staphylococcus group; and while some believed it to be the cause of suppuration, all were agreed that it took no part in the production of the comedo. The first, the bacillus, since it was first discovered by Unna, has been the bone of contention; and the conclusions reported by the various students of the subject as to its morphology, its cultural characteristics, its response to serologic tests and the result in inoculation experiments on animals create a doubt in the mind of the reader as to whether they were all dealing with the same organism.

LABORATORY RESEARCH

Unna¹ in 1893, while making a histologic study of the comedo, discovered a bacillus which he believed to be the causative factor, not only of the comedo but also of the acne pustule. He named it the acne bacillus and described it as being from 0.6 to 0.75 micron long by 0.33 to 0.5 micron broad surrounded by glæa with deeply staining points. He did not cultivate the organism, but Engman working in his laboratory at that time succeeded in obtaining growths, but always in the presence of other organisms. On leaving Hamburg, Engman turned his

* Read in the Section on Dermatology of the American Medical Association, at the Sixty-Third Annual Session, held at Atlantic City, June, 1912.

1. Unna: Histopathology of the Diseases of the Skin, 1894.