

FIRST AND ONLY JOURNAL DEVOTED TO SPIRIT AND DRUG NEUROSIS

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THE JOURNAL OF INEBRIETY

PUBLISHED BI-MONTHLY

OFFICIAL ORGAN OF THE AMERICAN MEDICAL ASSOCIATION FOR THE STUDY
OF INEBRIETY AND NARCOTICS EDITED BY T. D. CROTHERS, M. D.

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THE AMERICAN SOCIETY FOR THE STUDY OF ALCOHOL AND OTHER NARCOTICS.

The forty-third annual meeting of this association will be held in the parlors of the Rittenhouse Hotel, in Philadelphia, sometime in November. The exact date will be announced later.

This was the first medical association in the world to take up the study of alcohol and inebriety, and determine from laboratory studies and clinical experience the phenomena of drink and drug neuroses. The first meeting of this society was held in New York in 1870.

The coming meeting promises to be one of the most important of all the others.

A very warm invitation is given to all students of this subject to take part and contribute. A program is already promised of most important papers. For further particulars address the Secretary, Dr. T. D. Crothers, Hartford, Ct.

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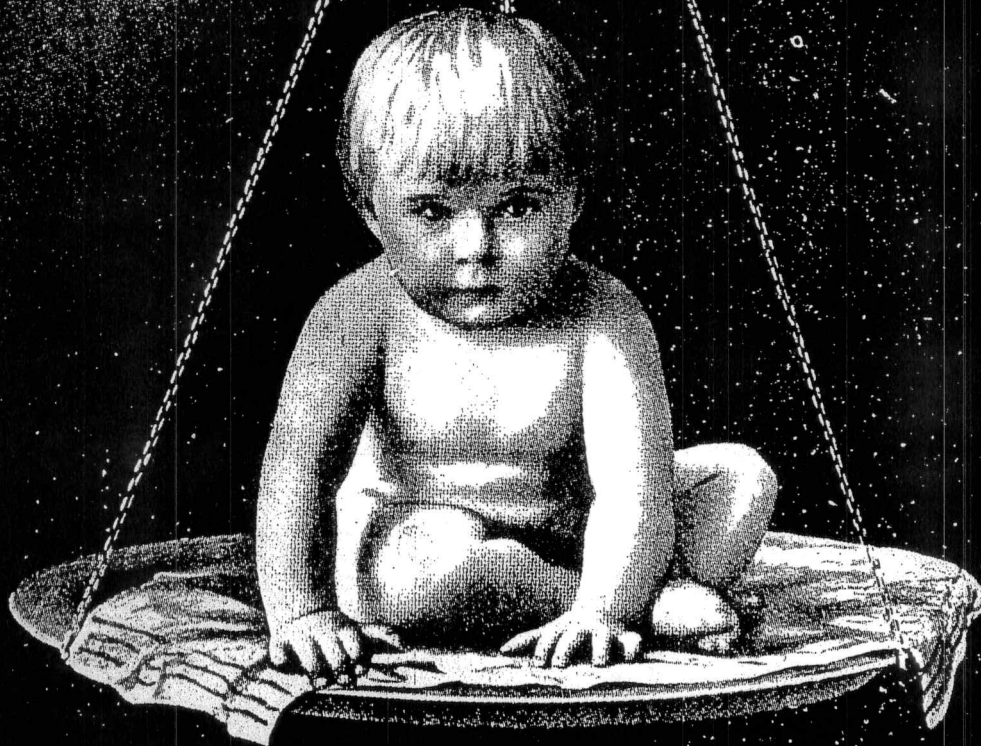
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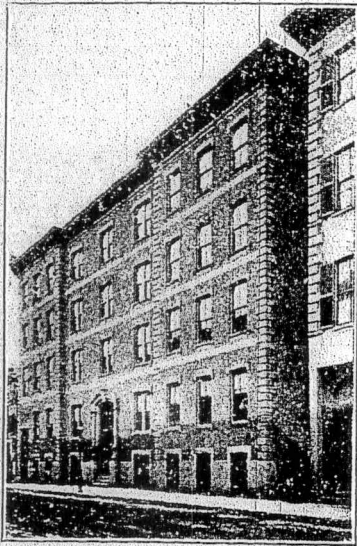
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The Journal of Inebriety

Published Bi-Monthly

T. D. CROTHERS, M.D., Editor

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To whom all business communications, relating to subscriptions and advertisements should be addressed.

All exchanges, contributions, reports and matter pertaining to the Journal should be addressed to the Editor, Dr. T. D. Crothers, Hartford, Conn.

Editorials

ANNOUNCEMENT.

Thirty-seven years ago, in 1876, the Quarterly Journal of Inebriety made its first appearance, under the editorship of Dr. T. D. Crothers, then Assistant Physician at the New York State Inebriate Asylum, at Binghamton, N. Y.

Two years later he removed to Hartford and up to this time has continued its editorial care. In the Spring of 1907 the Hartford publishers transferred its publication to the Gorham Press of Boston, Mass. In 1913 it was again transferred to the Therapeutic Publishing Company of the same city.

With this issue the Journal ceases to be a quarterly, and will be issued bi-monthly. The newer researches of the alcoholic problem are increasing to such an extent that a larger journal appearing more frequently is demanded.

Evidently a new era in the study of this subject is at hand. Alcoholism and Inebriety are rapidly becoming intense medical topics, and the profession are turning their attention to a broader study of this field than ever.

This issue as a bi-monthly will appeal to all our readers as a most important publication in a field that is very largely unoccupied at present. Its special work is to gather and group the facts, which have a personal interest to all society in every section of the country.

RACIAL STRUGGLES.

Today there are at least three million men and women in the United States pledged in societies, churches and parties to break up the traffic in alcohol. There are at least two or three million more men and women who show alarm, intense interest in the impending danger from the license and sale of spirits as a beverage. Every year this number is increasing, and yet the amount of spirits and beer consumed is equal if not greater from year to year.

Why should there not be an immense decrease in the spirits consumed when the number of drinkers is diminishing so rapidly? This question is variously explained, but the most obvious solution is that the armies of emigrants numbering into the millions that come to our land yearly are the real consumers. They are all moderate and excessive drinkers of beer, wines and spirits.

Statistical studies of criminality show this. Police court records, insane asylums, and other institutions indicate a larger part of their inmates of foreign birth, and their disability is due directly to spirits. In all the eastern cities where the southern races of Europe congregate, spirit and wine drinking is prominent. The efforts of reformers to combat these drinking customs are largely unsuccessful.

Their children in the public schools are more easily influenced, but even these show traces of spirit-drinking ancestry and environment. The native population of persons who have been here for a quarter of a century or more is rapidly changing, but how we can assimilate and educate this increasing army of emigrants and bring them up to health levels is a great problem.

The sale of spirits and beer is kept up undoubtedly by the emigrants, and when this demand is cut off, the real condition will be seen. Beer gardens and wine parlors in imitation of old customs, brought from abroad, reflect sadly on public opinion, and in no way contribute toward the development of the race. The time is not far distant when the open saloon and attractive beer garden will be banished and the emigrant will be obliged to give up his drinking customs, and join in the great race march upwards.

There are other causes that keep up the sale of spirits and wine, but they will be known and driven out. In the meantime the army of abstainers are gathering in every section of the country, and it requires no great instinct to realize that they will finally triumph and the sale of spirits as a beverage will disappear.

WINE SAMPLERS.

The late King Edward of England had an extensive wine cellar. The man in charge of it was a specialist, who determined the quality of the wine by tasting, and was called a wine sampler. He was temperate, and prided himself on his position, and was the center of interest to wine dealers and manufacturers of delicate beverages.

Any one who had a special kind of wine, which he claimed to be of very fine quality, sought to have it tested by the King's wine taster, in hopes of getting an order. Like most experts, he rarely swallowed any of the wine tasted, but depended upon his sense of smell and taste.

These tests would be made many times during the day, under different conditions, and he would determine from the average of these, which was the most valuable. The King depended entirely on his judgment, and the Royalty followed the King, who sought to buy the entire output of a certain brand of champagne, so that it could be controlled.

Others of the nobility, like the King, sought to monopolize certain brands, and this man was usually the judge.

Queen Victoria, during her reign gave little attention to this matter, preferring one or two wines, and those sparingly. King Edward sampled a great variety, and while not drinking any one of them to excess, loved to talk with his sampler about the quality and virtues of certain brands.

When King George came in this wine taster was discharged, and the wine cellar scattered. Now if any wines are wanted on a special occasion, the steward of the palace selects them, and the business of determining their qualities is not a royal prerogative. For at least 200 years wine samplers to royalty have existed, but now they are gone.

ALCOHOL AS A STIMULANT TO SURGEONS.

It is evident that the theory of the stimulant action of alcohol is still considered a reality in some circles. In one of the large surgical

clinics in a metropolitan hospital, there is a side room where surgeons rest a moment between operations, and on the table is a bottle of spirits and soda, supposed to be necessary for the surgeon to keep up his failing strength and vigor. Where the operation is particularly tedious and long, some surgeons visit this room often. What the results are is unknown.

Seen from the conclusions of laboratory observations and actual clinical demonstrations, this would seem to be the very worst thing possible. There is no evidence that indicates the increase of sensory and mental activities from spirits, but on the contrary, depresses and confuses. To cover up the fatigue and strain of prolonged operations by the anaesthesia of spirits, is to naturally and literally make the surgeon more and more incompetent to do the next operation, and after two or three operations, preceded by the use of spirits, there can be no question of the unfitness of the operator.

All surgeons recognize the need of the highest kind of skill and good judgment and perfect command of the technic of the work. While all surgeons are not total abstainers, the majority are readers, and realize that alcohol is an anaesthetic to a certain degree, and not to be depended upon where the highest kind of mental vigor is required.

American surgeons above all others are not wedded to tradition, and are alert to take advantage of every new fact, relating to themselves and the patients operated upon, so that in all probability the instances of surgeons drinking during operations, are rare and becoming more and more so.

ARE SPIRITS A SAFE REMEDY FOR THE AGED?

Two men, brothers, living in exactly the same circumstances, and both total abstainers, became ill about the same time, one with a cold, which developed into pneumonia, the other acute indigestion, following over-eating, marked by cramps and exhaustion.

The one suffering from indigestion called in a very eminent doctor, who, finding his heart weak, ordered spirits. The weakness continued, and more spirits were given, and in the course of ten days,

the patient died from general exhaustion, spirits having been given every few hours, with strychnine, to keep up the vitality.

The one with pneumonia was treated by a less eminent physician, without spirits and probably on the expectant plan. Water was used, a restricted diet given, with little or no reference to the heart's action. He recovered without entailment.

These examples bring out clearly the treatment by common sense and treatment by theory. The learned physician literally killed his patient by the anaesthesia of alcohol, adding toxins to those already present and diminishing the vital forces on the supposition that the increased action of the heart indicated return to health. The other saved his patient by avoiding complicated remedies and assisting nature to restoration.

The dogma that alcohol is a stimulant dies hard, and older men still insist that it is of value, and yet they are unable to determine what this value is, except on theories that are untenable and contradicted by both laboratory and exact clinical experience.

There is no drug more dangerous for its depressing, disturbing and lowering effects than alcohol, particularly to the aged. The comfort it brings to the patient, in the relief of pain and fatigue is most misleading. The stupor that comes from it is narcotism of the most dangerous character. Should the patient recover from an active alcoholic treatment, it is no evidence of the value of alcohol, but is positive evidence of the strength and vitality which have overcome the toxins and survived in spite of the antagonisms from this drug.

There is no medicinal use of alcohol for the aged that can possibly benefit conditions of any kind of disease. There is no theory in this. It is the teachings of science in its best sense.

MEDICAL CREDULITY OF CURES.

Authors who write on inebriety, with a limited conception of the subject, frequently fall into the mistake of commending some drug or drugs that have been endorsed by a prominent physician. Two or three of the recent books in which alcoholism and inebriety have been

Original Papers

*THE PRESENT STATUS OF THE RESULTS OF THE STUDY OF ALCOHOL, IN RELATION TO MEDICINE IN AMERICA.

By Lewis D. Mason, M. D., Brooklyn, President.

This Society was established November 20, 1870. It was the first effort in the history of medicine to form a society of medical men to study the effects of alcohol on the human body and the diseases following; also the care and cure of the inebriate. Its researches and work have covered a period of 42 years without intermission. Its published Transactions and Journal has given a mass of facts during these years, of great medical and scientific value. This society may, therefore, claim to be the pioneer in this special and neglected field of medicine, and being largely instrumental in placing the whole subject on a scientific basis.

If I were asked what was the great reason that secured scientific attention and investigation, with its success, I would say, simply the study of ALCOHOL and its functional and organic effects on the human body—as a disease-producing drug—and studying it from the same standpoint and conditions under which we consider the action of other drugs, in health or disease.

Focusing upon it the full light of modern research, noting every test of experimental physiology, every phase of pathological change,—especially microscopic and cellular pathology, the action of alcohol on cell life,—constructive or procreative, emphasizing the statement of Virchow, that “the organism is not an individual but a social mechanism, always bringing us at last to cells.” The latest statement of the 20th century, expert medical science, is that “alcohol is a proto-plasmic poison to all forms of organic life” and that “it is impossible to say what minimum amount can be taken and not be harmful to our tissues.”

The effects of alcohol upon a normal nervous system, on nerves of special sense,—memory and mental effort,—as shown in the experiments of Kreppilin, Ridge and others, are very striking, easy of demonstration and of great value in impressing the popular mind, and have been largely the means that have compelled commercial and economic interests to insist on *total abstinence* on the part of their employees.

discussed, fall into this stupid error. The same thing occurred a few years ago. Nearly every writer referred to the Gold Cure, sometimes in terms of commendation, at others with an expectancy that great results would follow.

All these disappeared and reflected on the author, rather than added information to the subject.

The same thing is seen today in reference to a supposed cure that appeared in the leading papers, and of course was endorsed without study of inquiry. In one instance a very eminent board of medical men agreed to act as consultants for one of these systems of cures, but later their names disappeared. It probably dawned on them that a specific cure or anything approximating a specific was outside the range of exact science and must demonstrate its reality and not be accepted from the statements of others, no matter how eminent they might be.

The medical profession, like the laity, suffers from credulity. Sometimes this is carried to a degree of childishness that is distressing.

A noted business man said: "I can bottle up sea water and sell it as a cure for rheumatism, depending entirely on the endorsements and extravagant praise which foolish men will give it, with or without a motive."

In like manner, a cure for inebriety and alcoholism can be made prominent and be more or less successful, depending more on its promoters than on the value of the drug.

Examples of this will occur to every reader. We are now looking for a serum cure, which in the order of events, will surely come. In all probability, it will be heralded like the German Consumption cure, and after a while, disappear, but not until its promoters have secured substantial gains from it.

In a word the invention of instruments of precision and the application of more exact methods of examination have revolutionized our attitude toward alcohol. In the light of modern science alcohol is not a food, not a tonic, not a stimulant, and is being rapidly eliminated from hospital and private practice as a medicine.

It may be said that what the 20th century expert medical testimony points to and renders as its final verdict is this: ALCOHOL has not any place in the human system, in health or disease, as a beverage or as a medicine, at any time, in any quantity, or form, or any condition. This will eliminate alcohol from social and medicinal use and relegate it to the arts, sciences and commercial purposes where it may rightfully belong.

The relation of alcohol to life expectancy, and the more accurate study of the comparative statistics of the insured, as to the total abstainer and the so-called moderate user of alcoholic liquors, will continue to be a valuable and continuous contribution to vital statistics. Such a study of comparative statistics is urgently recommended by Sir Alfred Peace Gould, of London, England.

The action of corporate and commercial interests already referred to, as to the employment of moderate (so-called), habitual or occasional use of alcoholic liquors, is a feature of advanced progress in economics, based of course on scientific or medical observation.

Alcohol in relation to disease is this: it does not produce the disease germ but it prepares a "tissue soil" which invites disease germs, in which they may easily grow. It lowers the resisting power of the body to disease—the so-called opsonic index—and paralyzes the defenders of the body against disease. There is no doubt, if alcohol could be eliminated as a causative factor in disease, that a large proportion of the diseases that now ravage humanity would be reduced by a very great percentage, and this would be still further increased if we considered the indirect relations of alcohol to disease.

Alcohol in relation to Eugenics, or race betterment, or the science of the well born, should be carefully studied. The prevention and arrest of race deterioration, the science whose motto is destroy or improve the breed, whose recommendation is to issue a health certificate with the marriage license, is gaining ground. This practice in the class of certain

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degenerates with sterilization, or vasectomy, is in accordance with state law. The question naturally arises, shall we improve on Nature's methods? The law of natural selection, the survival of the fittest, the prodigality of nature in waste, as evidenced in all forms of organic life. Here again we assert alcohol is a most important factor in the production of race degeneracy, and if it could be eliminated, race regeneracy would take the place of race degeneracy to a large extent, whether we consider it as one of the most potent causes of degeneracy, either directly or indirectly.

Alcoholic inebriety and its cause, its etiology. What is behind the drink habit? Why do men drink? These questions are much discussed at present in scientific circles and the most prevalent opinion is that it is symptomatic of a latent condition inherited or acquired, demanding a narcotic to meet a want or distress at least temporarily. Is it a cause of degeneracy, or symptomatic in its use and result of degeneracy or both? Or an associated or co-operative cause acting with other conditions, or an exciting cause developing a latent condition, acquired or hereditary? No normal man desires a narcotic. Neurasthenia always precedes and accompanies the desire for alcohol. What is the idea of normal? What family is perfect in its generation, or exempt in its direct or collateral lines from the degenerating effects of alcohol or other narcotics irrespective of these considerations?

Outside of its social or voluntary use alcohol is sought for its narcotic or anesthetic properties. The two marked heritages of the human race are PAIN and SORROW, and often insomnia dependent on either. This fact has been found out by the laity, experimentally, or through the ill-advised prescription, or its prevalent use as a household remedy. As long as pain and sorrow exist men and women will seek relief in some form of narcotic drug, outside of the foolish social use, which too often results in acquired inebriety. These cases are before the medical profession for study, care, and, if possible, cure. They demand the individual consideration of each one. Whether it be a physical or mental condition which can be relieved or an adverse or pernicious environment from which the person can be removed, for one or all of these conditions may prevail, must be determined in each case.

There is a class of persons which should demand our utmost sympathy and respect and assistance. They belong to the class known as "Po-

tential inebriates." They are not drinkers, they may not have touched alcohol in any form, but they are fighting a diathesis, a tendency, and their principal ambition is to live sober lives and die sober deaths.

There is another class that should in the highest and best sense demand also our special consideration. This class is outside the limit of medical effort as to cure, but nevertheless requires medical care and control—the incurable class of inebriates. These are they who suffer from some incurable form of disease, or incurable mental defect—conditions which may be inherited or acquired, where the inebriety is largely symptomatic; these should be treated as we care for the incurable or chronic insane, placed under restraint and observation. The well-to-do inebriate of this class may be considered as cared for in this manner, having means and friends. Our plea is for the INSTITUTIONAL and LEGAL care of the pauper inebriate, or the one whose moderate means exclude him or her from the private asylum. Provision is being rapidly made for this class so that not only in America, but England and her colonies, Germany and other portions of continental Europe, provision has been made along these lines; so that it now looks as if the world around the care of the pauper inebriate would be at least on a parity with that of the insane.

Alcohol in Therapeutics. The marked advantage of a non-alcoholic over an alcoholic practice in hospital and private practice is now quite familiar to the profession at large. The physician who prescribes alcohol as a remedy at this date of advanced knowledge concerning alcohol in the treatment of disease, and without investigation of the facts of the case, is not just to himself or his patient. The time may come and may not be far distant when the use of alcohol as a remedy will be if not "*de jure*," at least "*de facto*" malpractice.

Alcohol in relation to Accidents and Occupational Diseases is mentioned as of interest to the employer and the employed in the matter of contributory negligence. It is true that a large proportion of accidents that enter our civic hospitals is traceable to drunkenness; and even under a small amount of alcohol there results a carelessness, or indifference, or lack of adequate caution, that leads to serious accident, in the more dangerous forms of employment.

The medico-legal aspect of alcoholic inebriety, habitual or periodic, is relation to crime or misdemeanors. It also interferes with the abil-

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ity to act in any form of legal procedure, such as jury duty, acting as trustee, custodian or guardian, giving testimony or executing an important instrument, as a contract or will. But how far can the habitual or even occasional so-called moderate use of alcohol affect the judgment and render the person under such influence incompetent, at least temporarily, to act under the conditions specified; and yet how seldom, if ever, in selecting a jury or taking testimony, or in the trial of a person convicted of a crime or misdemeanor, is the alcoholic habit or the use of alcohol, to a greater or less extent, considered by the defense or prosecution; or enters, in the least degree, into modern expert testimony, though not infrequently it is markedly apparent in the history of the case.

Secret Remedies, Nostrums, Patent or Proprietary Medicines for the cure of drug habits, or medicine for the cure of certain diseases, that contain habit-forming drugs demand greater care in the sale and dispensing of such preparations. The Druggists' Convention at Baltimore, recently held, took action concerning a greater care in the dispensing, especially of those drugs of the character alluded to above. We can control in a measure the sale or surreptitious dispensing of such drugs under the law restricting the sale of poisons, and the law requiring the label to state the quantity of the habit-forming drug in each package or bottle dispensed. Notwithstanding the law there are methods of evasion. Many persons, owing to necessity or moderate means are driven to self-prescribing and are lured to their destruction by the glaring and promiscuous advertising that is found in the daily, secular and not infrequently religious press. Taking a remedy on a so-called hearsay is not a safe way of medication, and not infrequently leads to the formation of some form of drug habit. In this manner, not only the various forms of drug habit but also the alcoholic habit may be innocently acquired.

The popular fallacy of the light wine and beer theory, substitutionally considered for the stronger forms of alcoholic liquors as a beverage and the fallacy and danger of the so-called moderate user of alcoholic liquors, involving as it does a suppositious element of safety, is most serious. Both of these delusions should be promptly, and vigorously denounced, by the medical profession, as most deceptive, dangerous and a fertile source of habit formation.

Educational Propaganda. Medical students for some years past in the medical schools.—this applies to our own country and we believe to

foreign countries as well,—are being instructed, as never before in the history of medical education, on all points touching alcohol as it is related to the various departments of medicine, and a full and correct knowledge of the drug itself,—it is needless to add, to the great advantage of the doctor and his patient. The effects of this correct knowledge of the drug is seen in the gradual elimination of alcohol from the hospital and general practice of medicine with a larger degree of success in the treatment of disease as a result. For some years past it has been dawning on the medical mind that we needed an educational effort of a popular character from the physician's standpoint in regard to alcohol. That the average physician must be a doctor, indeed a teacher, an instructor of the people; he must be not only one who gives physic, but he must educate the people and his patrons along the line of preventive medicine, hygiene and sanitary science. This is not only his privilege, it is his duty—his great mission. The glory of medicine is to prevent disease as well as to cure it. The ounce of prevention is always worth a good many pounds of cure. This idea of prevention as opposed to cure or reformation, however desirable in their place, is the new light that is dispelling the old darkness which for so long a period has covered medicine, law, and, even in a measure, so-called reformatory effort.

The importance of presenting the whole matter primarily from a scientific or medical standpoint is that all considerations, physical, economic, social or moral, are based upon and receive their inspiration, impetus and authority of utterance, from scientific fact. I desire to state, that the action of the medical profession, in this educational propaganda, is quite ethical, in accordance with medical usage and the practice of those members of the medical profession who, at home and abroad, are recognized as leaders in their profession, and of the greatest influence and highest social standing. Our own society, for years past, has recognized the value of such scientific educational propaganda. Our members have delivered hundreds of addresses and distributed many pages of scientific temperance literature. We have co-operated with the various temperance organizations and religious bodies. Through opportunities thus secured we have been enabled to carry out our plans in this respect, as a rule gratuitously.

In June, 1912, on the Sabbath preceding the meeting of the American Medical Association at Atlantic City, every church pulpit and platform

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of advantage was occupied, at a special time, by some qualified member of the Association who spoke on some phase of sanitary science, hygiene or preventive medicine. At that time several of our members, who were also members of the American Medical Association, delivered addresses on alcohol and other narcotics. I desire to emphasize this duty and privilege of the physician, not only in his family practice,—often a wide and influential field,—but also from the public platform, or by his pen, in such manner that no one can doubt his sincerity or ulterior motive.

To show the condition abroad in this particular, let me quote the following item from an English temperance periodical, headed *Fifty Doctors Against Alcohol—A Call to the National Defense*. In July, 1911, during the meeting of the British Medical Association, at Birmingham, England, fifty of the members addressed brotherhoods, sisterhoods, and adult schools of the city and district, on the physiological effects of alcohol and of the damage to the nation, economic, moral and intellectual, of the drinking habits of the people. These speakers included such men as Sir T. S. Clouston, Sir Victor Horsley, Sir Alexander Simpson, Professors Burdock-Cameron, Sims, Woodhead, and Hellier. They approached the subject purely from a scientific standpoint, but their unanimous and vehement indictment of alcoholic drinking, as a great national danger, produced deep and indelible impressions upon the hearers. In addition to combined public effort many physicians, the world over, in their individual sphere of influence, are spreading the propaganda of total abstinence from alcoholic liquors as a beverage or as a medicine.

Of no less importance is the consideration of the literature and bibliography of the whole subject issued by this society. The "Transactions" of the Society for the Study and Cure of Inebriety and the "Journals of Inebriety," extending over a period of forty-two years, consisting of the transactions and published papers of the society, constitute a literature of its own, and complete files of the Transactions and Journal of the society have been deposited in several prominent professional and secular libraries in the United States. The Journal of Inebriety is published as a quarterly as it has been since its first inception. Its first editor, Dr. Thomas D. Crothers, still acts in that capacity.

A fact of importance, in relation to the work of our society, constituting a red-letter day in its history and worthy of permanent record,

was the issuing from the Government Printing Office, Senate Document No. 48, "*The Alcoholic Problem in Its Practical Relations to Life*," consisting of papers read at the semi-annual meeting of the "*American Society for the Study of Alcohol and Other Narcotics*," held at Washington, D. C., March 17, 18, 19, 1909. Several thousand of these documents were printed and widely distributed.

Governmental encouragement, appropriation and protection are eminently desirable and urgently called for, in view of our scientific needs, and yet the attitude as a country seems to be opposed to, or incapable of, or indifferent concerning any continuous form of scientific work or research, of a notable or even necessary nature, under Government patronage. Possibly the very nature of our Government may prevent any continuous scientific work or investigation under one head, for any indefinite length of time. Repeated changes of administration, lack of stability, consequent change of views, new heads to various departments, outside interference,—from personal motives or political considerations,—may account, in a measure, for this state of affairs, by which much time is lost and inefficient efforts and measures inaugurated, rendering the Government unable, however willing, to act efficiently under the conditions specified. On the other hand, in European Governments, particularly in Germany, the individual investigator is encouraged and sustained morally and financially. Therefore the great scientific investigators, and the result of important laboratory research work are found in continental Europe.

Fortunately the munificence of private individuals in establishing laboratories for research work in connection with our medical colleges, or as independent institutions will give American investigators, in this special department of medical science, that which they lack and ought to have, in a measure at least, from Governmental aid. We believe that paternalism, which is the basis of all true forms of popular government, calls for just such research work under Governmental care and support, as it is in the best interests of and for the protection of the whole people. We believe the whole medical profession, including this Society as well as the sense of the intelligent community, would gladly endorse such a movement. The advantage of the establishment of such a laboratory for original investigation and research work, under Government control

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and support, would be that here could be submitted all questions of national or local importance, as to epidemic or endemic disease; its prevention or eradication, co-operating of course with State laws in this respect.

Is it too much to anticipate, as has been suggested, the appointment of a member of the Cabinet of the President, a medical man of especial fitness and ability, who could suggest and originate measures that should control all questions that might come up of vital national importance concerning the prevention and eradication of disease, where large sections of the country are seriously invaded, and where national interference might be of great benefit, and state control proves inefficient, and where a judicious co-operation of both would be eminently desirable. In this connection it is easy to see that the Governmental laboratory, in its ability to secure the services of the best experts and the best methods of research work and the funds to carry out and put into practice the results obtained, would be a consummation devoutly to be wished.

Certainly our Society would enthusiastically endorse such a plan, for the investigation of the whole subject of drug narcosis would be close at hand, and we would not have to travel, as now, to other scientific centers, or receive our information from foreign sources, for we would have our own investigators who, under a fair degree of encouragement, would equal at least those of other scientific centers. We would know better how we might eradicate that greatest of all epidemics,—ALCOHOLISM,—which is in a measure incapacitating our army and navy, and enervating and gradually destroying the national life; and with whose destructive, fatal influence, always epidemic, other diseases all combined fall far short, in comparison, of its annual ravages.

All the topics we have considered, and many others that could be cited, emanate from and have their basis in laboratory research work and clinical experience with regard to alcohol and other habit-forming drugs, substantiating the fact that Medical Science is not only the leader but the source of all knowledge and facts of importance along these lines.

Concerning alcohol in relation to these conditions, the thirty or more papers that are announced on this program will endorse the statement that there is not any drug in the pharmacopia that can command, even

approximately, so much attention or investigation as alcohol in its various relations, even from a medical standpoint, exclusive of its consideration as to social or commercial life.

Our *Society* has been studying the effect of alcohol and other narcotics on the human body for a period of 40 years. We were the first body of medical men on record to consider the action of alcohol and other narcotics on the human economy from the physician's standpoint, and yet we feel in common with similar societies, now established in most of the prominent scientific centers, that we are still on the threshold of discovery, in this still new, interesting and superlatively important field of work. Yet we are touching, as it were, only the hem of its garment.

THE DAWNING.

A new era of thought, of human progress and development is coming up the horizon. The alcoholic problem with all its theories and preventable evils is going to break up. A new order of events is preparing, and most startling realities and changes are before us. Alcohol as a beverage and its sale on the corners of the streets, and all the death-dealing tides that flow from it will disappear. Human life and human progress will take a new step forward, and the armies of neurotics, degenerates will recede and be stamped out. New means and new measures of prevention will check this great human tide of evil at the beginning. This is no idealism. It is a reality which is a part of eternal progress.

The spirit of the new age cannot be held down to traditions and teachings of the past. It demands a knowledge of the laws, and their movement and calls for effort along these lines.

The future will not be held down by the past. The disease of inebriety and the poison of alcohol and other drugs calls for a new order of methods and means. The great question which confronts us all is how to meet these dawns of a larger age in the most practical, literal way. How to break up existing orders and supplant them with new truths and new realities. This the *Journal of Inebriety* hopes to indicate in the future issues.

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ALCOHOLISM IN A RURAL COMMUNITY OF DEFECTIVES.

C. B. Davenport, M. D., Supt. Experimental Station for Eugenics.
at Cold Spring Harbor, Long Island, New York.

In field studies that are being made for the Eugenics Record Office, our workers are instructed to report cases of alcoholism and to describe in some detail the effects of alcohol on the individual. As the field workers study several generations some idea is obtained of the effects upon progeny of parental alcoholism, and also the inheritance of a predisposition to alcoholism. We may briefly consider some of the results obtained by such study.

In an investigation, more or less complete, of 850 persons of the "Nam Family," made by Dr. A. H. Estabrook during eight months, it appeared that 88 per cent. of the females and 90 per cent. of the males were given to drinking to excess. In the family are nine matings of two besotted parents giving rise to 21 children about whose relation to alcohol something is known. Every child, including 15 men and six women, has become alcoholic. When, on the other hand, both parents are temperate, in 16 matings, producing 45 children about whose relation to alcohol something is known, 37 are temperate, or 82 per cent. If we divide the fraternities into two lots: (a) those that contain no alcoholics and (b) those that actually contain alcoholics as well as non-alcoholics, then in lot b there are 63 per cent. non-alcoholic. If we should include also those families (unknown) which though potentially capable of producing one in four children alcoholic actually, because of the small size of the family (2 or 3) produce none, we should increase the proportion of non-alcoholics toward the 75 per cent. which is to be expected on the assumption that alcoholism is due to a defect—a lack of control, perhaps, of appetite. When one parent, usually the father, is a sot and the other has self-control, then actually in 25 fraternities, comprising 95 children whose relation to drink is known, 64 per cent. have self-control. If we consider separately the fraternities that contain both alcoholic and non-alcoholic persons then we find 55 per cent. of the offspring with self-control, which approaches close to the expected 50 per cent., following the hypothesis that temperance is due to a positive determiner—self-control.

In relation to the sex of the alcoholic offspring this remarkable result appears—that whereas alcoholism is shared equally by both sexes of the fraternity derived from two alcoholic parents it is rarely found in the daughters when the mothers are temperate, but almost exclusively among sons. The case reminds one of sex-limited characters like color blindness and hemophilia, where the daughters of affected fathers are unaffected, but may transmit to their sons. This resemblance is probably only an accidental one, however, for in England and Wales the convicted habitual inebriate females are three times as numerous as the convicted habitual inebriate males. (Mason, 1890).

When both parents are alcoholic, out of 21 children studied 8, or 38 per cent, were imbecile or epileptic; when only one parent (mostly the father) was alcoholic, out of 94 known children 13, or 14 per cent., were imbecile, none epileptic. Where both parents were temperate out of 45 known children, 9, or 20 per cent., were imbecile, none epileptic. There is here a marked preponderance of imbecility and epilepsy in the offspring of two feeble-minded parents. When the mother is not alcoholic, whether the father is or not, the frequency of imbeciles in the progeny falls strikingly. So far as this fact goes, it is in harmony with the conclusion that alcoholism in the mother affects the mental development of her children.

It is noteworthy, however, that few cases of markedly defective development occur. No hare lip, spina bifida or other such defect is recorded from these marriages. The results from the matings of human alcoholics are thus not the same as from the small mammals with which Dr. Stockard has worked. It seems probable that the effects of alcohol upon the young of animals cannot be applied directly to man. Certain strains of man, which for long generations have become acclimated to alcohol, can resist without marked injury doses which are highly injurious to guinea pigs.

The large amount of feeble-mindedness in the Nam family is striking, but it cannot be ascribed solely to alcohol. Because the proportion of feeble-minded is higher when both parents are alcoholic than when only one is alcoholic is to be expected even if alcoholism is merely a symptom and not a cause of feeble-mindedness. On the symptom hypothesis—viz. that alcoholics are born feeble-minded—belong to a strain that lacks inhibitions to resist alcohol, a strain that has never

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acquired such inhibitions—we should expect twice as many feeble-minded children when both parents are defective as when only one is. We get 38 per cent to 13+ per cent., which is more than twice, and in so far favors but does not demonstrate the hypothesis that alcoholism *per se* had an effect in these families.

Some studies made in collaboration with Dr. David F. Weeks, Superintendent of the New Jersey State Village for Epileptics, led to a similar conclusion. We wrote (1911): "Is there evidence that alcoholism is a cause of epilepsy and other defectiveness? There is no doubt about its association with defectiveness; the doubt is whether alcoholism may not be a symptom—evidence of such a mental weakness as cannot resist the temptation of alcohol. A criterion may be found in the outcome of such matings as we have tabulated. If alcoholism is merely a symptom like chorea and if it is evidence of a simplex mental condition, then results of matings should show, undisturbed, the expected proportions; but if, on the other hand, alcoholism is a cause of defective offspring then the proportion of defective offspring should exceed expectation. We do not pretend to have sufficient data, and data of the right sort, to settle this question; but what we have is sufficient to give some support to one hypothesis or the other. In Table II we find a great preponderance of defective offspring—87 per cent., instead of the expected 50 per cent. In Table V the matings of alcoholics with other "tainted" consorts yield 23 defectives in 71, or 32 per cent. instead of 25 per cent. The two fraternities from two alcoholic parents give, together, 25 per cent. epileptic and the same of neurotic offspring. In the alcoholic X normal matings of Table VI, where only 25 per cent. defectives are to be expected, actually 29 out of 80, or 36 per cent., are defective. We see, accordingly, a constant excess beyond expectation of epileptic and feeble-minded offspring from alcoholic parents. In so far our results support the view that alcoholism is, to a certain extent, a cause of defect; that 10 or 20 per cent. more children in any fraternity are defective than would be were it not for alcohol. However, a word of caution must be added. It is not improbable that some of the alcoholics are actually feeble-minded, and any such would tend to increase the average of defective offspring because of their inherent defective germ cells and quite apart from any poisoning effect on the germ cells of alcohol. The hypothesis that alco-

hol is a 'race poison' deserves more critical, especially experimental, study on the lower animals."

Finally, reference should be made to a general difference in reaction to alcohol of different inbred communities. In the Nam family excessive alcoholism leads to besottedness. There is a slight increased activity after ingestion of alcohol, but this soon passes and the individual is left more sluggish and unresponsive than ever. Relatively few crimes of violence are committed among the Nams. With the Jukes the reactions are, we find on the whole different. Whiskey more frequently leads to hyperactivity, the excited person becomes maniacal, seeks a fight, is destructive. The reaction sets in much later than with the Nams. The criminal record, especially for acts of violence, is correspondingly much darker among the Jukes than the Nams. Among the Hill folk, of which also an account is published by the Eugenics Record Office, drunken rows with assaults are not infrequent. This difference in the reaction to drink corresponds to another difference in the various strains. Thus "The Nams" show little insanity (except one small line) and less epilepsy than the population in general (as 8 is to 18 per 1000 of deaths). The "Hill Folk," on the other hand, have many cases of insanity and epilepsy; attention was first drawn to the "Hill Folk" because of the cases of epilepsy that had arisen there. The hypothesis may be suggested that the nervous "instability" which characterizes the insane and the epileptic is in some way responsible for the very violent activity that follows the use of alcohol in these nervous families.

In conclusion let me urge the necessity of careful studies of families as a prerequisite to a sufficient insight into the causes of alcoholism.

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BRAIN MENACE TO MAN AND NATION OF ALCOHOLIC AND OTHER NARCOTIC NEURO-PSYCHOPATHY.

By Professor Chas. H. Hughes, M. D., St. Louis, Mo.

Man in his brain and mind is much dependent upon what he feeds upon, plus inheritance and environment.

An habitually alcoholized blood starves and taints the brain cells and allied nervous system, as do other toxic drugs. This and the food he eats and drinks, and the environing atmosphere, whether rich or poor in blood purifying and brain rebuilding and enriching power, combined with congenital endowment, to resist or yield, make or unmake the brains which the world needs to use in its service or which it should from a eugenic standpoint eliminate from the field of action. Our time needs men—rightly endowed men with stable, non-poisoned brains.

If we would move the world aright, psychically speaking, our mental Archimedean levers should be free from alcoholic deterioration and other drug consequences. Psychic brain cells, bathed in toxined blood, do not give such safety and logical surety to the movements of the intimately related mind as the clear and normally nutritiously potent blood stream does, or may, and alcoholic drinks, viewed with true chemically illumined vision are poisons of the brain and perverters of mental action. Hence this matter becomes a subject of supreme importance in the study of patriotic eugenics wherein human as well as individuals rise or fall through right or wrong care of the brain of man.

Alcoholics should, from the standpoint of the scientific proof of their nerve center poisoning effect, be classed with other poisons, and their use as beverages should be discountenanced and discarded.

A neuropath is one whose nervous system has become shattered and unstable. His nervous system is out of order. He has become deranged and damaged in power. He is no longer normal in ordinary action and often markedly abnormal under stress of unusual demand.

Our honored and esteemed President has justly eulogized one of the greatest of America's and world's medical men, who placed alcoholism among the diseases as well as among the vices of the mind, at a time when it was regarded only as a vice, and who plead for its medical rec-

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ognition and treatment and hospital care as an insanity of the mind. True the gross effects of alcoholics as in the causing of delirium tremens and mania a potu had been recognized before Benjamin Rush described the insanity of alcoholic drinkers, terming it oinomania, but the insidious undermining of mental stability, the neuritides it engenders and other toxic nerve center and peripheral nervous states have become better known to the medical world since the immortal Rush made his great contribution to the cerebro psychic pathology of insanity more than a hundred years ago.

Added to the popularly known and oft proclaimed perils of the still and the vat, in moral, mental and physical wreckages but too little considered by the alcoholically bibulous, medical men have had testimony from laboratory, hospital and fatal family pathologic lineage and sequent forceful testimony against alcohol as a safe drink beyond former estimate, as in sudden heart failure, etc., where nature may be spurred by it to resistance and the calling forth of her latent organic powers against the further tolerance of alcohol as a beverage and as a remedy, save in exceptional exigencies of transitory demand. The warnings of the Goughs and Dows and their later platform emulators in eloquent warning cry of danger are much accentuated in medico-pathological revelation with potent evidence and conviction of the insidious undermining of vitality of this poison of the brain neurones and the viscera.

We pass the epilepsias, idiocies, imbecilities, insanities, the gross paralyzes, apoplexies and sensibly perceptible brain and viscera damaged states so well known to the profession, as either direct or indirect results of alcoholic toxemia and the contributory damage of alcohol to the brain as in sunstroke, to briefly note in passing and in conclusion those insidious harmful influence of alcoholic intoxication on the central neurones none the less hurtful to the human organism that further and completely confirm our conviction that alcoholics, even in their so-called mildest forms of dilution, as in wines, beers and ales, or in form of the seductive julep, diluted cocktail, and other mixed drinks, are not fit for the family table, the festal bard, the social club, open public bar, or in the bottled bitters or but no less perilous alcoholic patent medicine of the family sideboard, designed for clandestine catering to the alcoholic appetite or to develop the same.

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Long before we knew its intimate nature, as chemists know it today, the Arabian tongue supplied the world with the term "al-koh'l," out of which we formed the similarly sounding word alcohol, and subtle was its meaning; and Solomon warned against it and its ultimate effects upon the human organism as a stinging "mockery," for "in the last it biteth like a serpent," the wise man said.

Since that wise warning thousands of years have passed, yet the scars of the chemical bites of alcohol on the human organism, to maim and blast it in mind and body, are inflicted still, and "in the last" worse than the sting of an adder.

If we look at the vaso motor changes, its poisoned mark is there in the oppressed and damaged neurone morphologically altered in tone that gives us the damaged sequences of hyperemia and psychic aural, visual, tactile, gustatory, general anesthesie and psycho motor change, osthenose, space and distance hallucinations, etc., which fortunately usually passes off with the exit of the poison through nature's kindly acting if the poison be not fatal, and subsequent adequate aqueous and nutritional replenishing of the blood and the subsequent prolonged rest which nature demands for the repair of man's potation mistake or folly here provided the ebration is not prolonged by more alcoholic drink or too soon or often repeated.*

What is this vaso motor system about which we knew so little before Claude Bemord, Marshall Hall, Brown-Sequard, Golgi and the European physiologist generally of recent years, and our own Ott, Sequin, Sajons and others let in the light from the laboratory on the intimate structure and work of the marvellous nervous system of our bodies. And what does this nervous system do for us, against us, and with us in its relation to alcoholic toxemia? Why! first it déhydrates the normal neuron of its sustaining capillary and serum supply as it does the tissues of the body. As the drunkard must have immense quantities of water after a debauch to replenish his serum robbed and parched blood and tissues, so

* I have seen an inebriate fall in a severe epileptic fit at the drinking table, a real grand mal seizure, and yet recover to have successive returns of this experience after abstinence. Yet he lived beyond middle age with no sign of syphilis or other cause. Abstinence from alcoholics gave him partial exemption but he did not absolutely refrain from his pernicious habit. He had no epilepsy before he became inebriate.

the vaso motor nerve centers cell feels and displays in impaired function the effect of the alcoholic mixture in the blood and serum whose function is to nourish. An enemy invades the blood and the organism is confused and riots in disorder. These central neurones of the vaso motor system feel and show the alcoholic damage in paresis of function and damage by vaso dilation. Paradoxical as it may appear, this gives us the explanation of the wet brain of the excessively and persistently alcoholized, the dilation of the blood vessels permitting the so-called but mis-named serious alcoholic meningitis.

Just here also is the explanation of the drink thirst recurrence, the drink habit of the inebriate, periodic and habitual, which is more patho-physiologically and logically explainable than the usual and time-honored one of hereditary acquisition or transmission and the disposition of the habitual alcoholic inebriate to be dissatisfied with the substitution of soft drinks for his craving when he is without alcohol in his blood to impress his brain neurones, especially in the gray cortex area, with the capillary supporting function eutoning distention to which, under alcoholic vaso-motor dilation, they have become habituated, and there may be also something in the mere lack of alcoholic impression to which the cells of the psychic cortex have become accustomed. The neurones of the cortex like a dropsical patient who has to be bandaged under paracentesis abdominis, misses the supporting pressure of alcoholically distended vessels and feels the craving for his usual night-cap and morning eye-opener. But whether my conception of the cause of this recurring phenomenon in the drunkard or dipsomaniac of imperative, often resistless, craving for alcoholics be correct or not, the all-demanding appetite of the alcoholic drinker, that sooner or later comes upon him, after frequent, long-continued, excessive, and often after rather moderate drinking, is a strong, if not the strongest indictment against this bane of the human race's welfare, engendering as it does what De Quincey in his forceful arraignment of opium, an Iliad of woes, as was sadly demonstrated in his own unfortunate and wrecked life as the victim of the next most potent of habit poisons.

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PSYCHOLOGIC PHASES OBSERVABLE IN INDIVIDUALS
USING NARCOTIC DRUGS IN EXCESS.

C. C. Wholey, M. D., Psychiatric Staff St. Francis Hospital; instructor
in Psychiatry, University of Pittsburgh, 4616 Bayard Street.

Any individual may become addicted to the excessive use of narcotic drugs. The majority of my cases represent the average individual with the average heredity and environment. These persons have generally acquired their habit accidentally. It is, therefore, fallacious and unjust to refer without qualification to drug-users as a class inherently neurotic and degenerate. No habitue should be labeled with the stigma of such terms, however unpromising he may look, unless his history warrants it. It is surprising that drug taking, particularly alcoholism, is not more prevalent. We are confronted with the fact that most individuals sometime in their lives are fairly well tested as to their ability to withstand alcoholic indulgence. Alcohol is fed to infants; depended upon by the laborer, and by the business man; it appears on tables everywhere as a drink, or in various foods; it is the common medium for good fellowship. The fact that one-tenth of the amount of morphine and cocaine imported would suffice for all legitimate medical needs shows how commonly people are exposed to these insidious drugs. They seem to be recklessly prescribed, and are notoriously easy to obtain.

There are many individuals whose powers of resistance, by reason of inheritance and environmental factors, are merely sufficient to enable them to maintain a healthy balance. They have enough nerve stability to carry them through an efficient life provided no exceptional strain is placed upon them. When such persons come into contact with narcotizing drugs, their delicate balance is likely to be overthrown; the nervous organism has no reserve with which to meet the added demand made upon it by the inroads of the drug. These individuals are not essentially neurasthenic. They have been endowed with no more endurance than the ordinary routine of each day would demand.

There is another individual who is just short congenitally of the balance which the above person normally possesses. This individual is inherently neurotic. His nerve endowment is not quite sufficient to enable him to live from day to day comfortably and effectively. He will, therefore

—a mere biologic incident in his struggle for self-preservation,—desperately grasp at whatever seems to aid his own inadequate efforts. When drugs come his way, with their seeming power to increase his flagging energy, or to bring peace and order into his turbulent, chaotic, harassed existence, it is inevitable that he shall anchor himself by their use. These are individuals whom physicians should particularly safeguard; it is hazardous for them even once to experience the soothing influence of an opiate.

In addition to the normal individuals, and the neurotic who get into drug habits, there are a few fairly well-defined types, distinctly pathologic who seem especially likely to become drug users. A type, noticeably prone to narcotism is that known as the cyclothymic, a class of individuals possessing a peculiar emotional instability which, as a general thing, manifests itself in periods of depression alternating with periods of elation. This class represents various shadings within that group of borderland cases showing manic-depressive characteristics. To the casual observer they may seem merely erratic. We find at times among them people of exceptional talent. And curiously, it is not so often the depressed individual as the elated who becomes addicted to the excessive use of drugs. This elated, or hyperthymic phase, induces a feeling of good-fellowship, a restlessness, a surplus energy which seems often to find a satisfying outlet in a narcotic such as alcohol or morphine.

A second pathologic type is that known to psychiatry as the constitutional immoral. Individuals of this class invariably furnish a history of a self-willed childhood. They have been pig-headed, and often cruel. Consequently, for the sake of domestic peace, they have as children been pampered and undisciplined. As adults they show undeveloped moral and ethical sense, impatience at interference, lack of endurance for physical or mental discomfort. Such individuals are often athletic and may be extremely popular with their fellows. But they are irresponsible, out for fun. Naturally they drift into dissipated circles, and hence into the use of narcotics. In this class we find among others the ne'er-do-well, the tramp, the petty thief, the prostitute. Closely associated with the constitutional immoral group there are some distinct types which, for purposes of diagnosis, must be clearly differentiated. One is the high grade imbecile; another, but recently recognized as of especial significance, is

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known as the heboid. The latter mental condition is often difficult to recognize. Persons thus afflicted may at puberty suddenly display freakish conduct, and indulgences out of keeping with their former behavior. This heboid condition is sometimes a precursor of dementia precox.

These psychiatric types must be carefully differentiated in order to deal intelligently with drug addictions. The cyclothymics and the constitutional immorals possess an anomalous makeup which often precludes the possibility of cure. They drift from institution to institution, relapsing again and again; the hopeless picture presented by these persons, really mental cases, has done much to create the practically universal skepticism regarding cure for the drug addict.

In addition to such borderland conditions there are definite insanities upon which drug taking is frequently engrafted. The early dementia precox, in his wayward following of the moment's vagary, may become addicted to alcohol or morphine should either come his way; the parietic, as a result of his gradual mental reduction, and of his general mental and moral let-down, is an easy candidate for drug habit formation. I note these insanities because the mental condition is sometimes overlooked; and the patient carelessly regarded as a mere drug addict, his eccentricities and abnormalities considered as a result of his habit. I recall cases of paresis and of cerebro-spinal lues who have gone for years their true mental condition unrecognized because they were known to be alcoholics. In this connection it may be interesting to note that if there is a potential or latent psychopathic or neuropathic condition in an individual, narcotic drugs, particularly alcohol, may bring it into noticeable activity. Convulsions, frequently seen in alcoholic wards and commonly known as "whiskey fits," often are found to have an epileptic basis. The alcohol has caused the latent disease to manifest itself. In alcoholics afflicted with tabes excessive drinking is commonly followed by great exacerbation of the tabetic symptoms.

It is further interesting to note in this connection that where there is no underlying mental pathology, alcoholism or morphinism may induce a disease picture closely imitating that peculiar to certain insanities, such as paresis, paranoi, and even dementia precox. The syndrome of paresis is frequently imitated in the well-defined condition of pseudo-paresis. This picture, practically always a result of chronic alcoholism, so closely re-

sembles true paresis in physical signs and mental symptoms as to make laboratory investigation of blood and spinal fluid necessary for differential diagnosis. In pseudo-paresis, as in true paresis, the patient may develop a feeling of well-being or euphoria, which gives him a boastful confidence in his ability to do whatever he may wish. He may make the most plausible promises, and with such an appearance of sincerity and good faith as to mislead those in authority into permitting him a premature freedom which is invariably followed by relapse. For he is still a mental case, at times entirely irresponsible. The pseudo-paretic is a dangerous individual. Liberty for him is likely to be fraught with disastrous consequences to his property and to his family.

Before considering the physiologic and psychic necessity for continuance, after habit has been established, I wish to speak briefly of how the average individual gets into the morphine habit. And this brings us, as physicians, face to face with the ugly fact that perhaps the majority of the morphinists in this country today were first prescribed their drug by a physician. Many histories reveal the appalling truth that the administration of the drug as a medicine was carried on until habit was formed. Usually I find the patient has at first been ignorant of the nature of the drug; after he has come to the habit stage there is little use to inform him of the harmful nature of his panacea; for he has found that for *him* it seems good, and he will not consider parting with his drug until he has reached that stage where he finds himself so impaired as to be unable longer to hold his own. We find patients who have had given into their own hands the hypodermic needle. The use of the needle practically always insures the formation of the habit. There are, of course, various ways of acquiring the habit. Women suffering from dysmenorrhoea or headache, pass on the word that paregoric, laudanum, etc., is a specific. The easy access to patent medicines containing morphine beats a well-worn road to habit formation. Yet the fact confronts us that probably the majority of drug addictions can be traced directly to our prescriptions.

A physiologic and psychic need for continuance has usually been established before the morphinist finally reaches the place where he realizes his condition sufficiently to seek a physician; he has undergone marked changes in body chemistry, and in mental processes and estima-

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tion of ethical values. He presents the picture of abject neurasthenia. He is afraid to continue his drug and has no courage to contemplate the discomfort of discontinuing it. His nervous and mental degeneracy manifests itself largely in fear which dominates his conduct. He fears death, he fears his ability to carry through the day's work; he is afraid of falling into poverty, and is obsessed by the fear that he will not sleep. This factor of fear makes for the continuance of the habit and accounts largely for many relapses when the drug has *seemed* to be successfully withdrawn.

The fact that a pathologic condition has been induced becomes very evident during the time when therapeutic measures are being applied. Getting the patient off his drug, as we phrase it, is a small part of the therapy; for when this has been done we have still a condition to face brought about often by years of artificial and psychic reaction. There is yet to take place a slow nerve rebuilding, and a tedious mental and ethical reconstruction. The habit of quickly relieving pain has become so deeply rooted in the morphinist that when distress appears, as it will during the long period of rehabilitation, he reacts automatically to the pain stimulus in resort to the accustomed drug. The association reaction to pain, or fear of pain, with use of morphine has, as it were, become fixed in his spinal cord; he may not want to take his drug; he may despise himself immediately after he has resorted to it; he often cannot say why or how his relapse came about.

Not bodily pain but emotional stress, such as remorse, anxiety, and states of fatigue or exhaustion have been associated in the mind of the morphinist with relief following administration of his drug; therefore, when similar states of emotion or exhaustion arise he is bound to react more or less automatically. It is this reaction, irresistible until he has regained his normal vigor, which leads the drug-user to so-called lies and deceptions in order to obtain his drug. He cannot be judged by standards which apply to normal persons. He is driven by the same instinctive impulse towards what seems to himself preservation, as is the starving man who obtains food by stealth or deception blinded to consequences.

THE RELATION OF ALCOHOLISM TO CRIMINALITY.

By W. C. Sullivan, M. D., Supt. Rampton State Lunatic Asylum, Nottingham, England.

The remarks which I have the honor to lay before you touching the connection between inebriety and crime have reference more particularly to the question as it presents itself in Great Britain, and may therefore perhaps require some qualification before they can be taken as fully applying to the conditions met with in other countries. But while I think it well to make this frank reservation, I may nevertheless point out that the differences which occur in respect of these two phenomena in different civilized countries are probably ascribed to their superficial aspects, being due solely to the variations in social and economic circumstances which arise in the complex conditions of modern life; they can hardly affect the fundamental factors, physiological and psychological, which underlie the phenomena and which are probably in all essentials alike even in communities of relatively diverse civilization. We may indeed find a proof of this radical identity in the fact that the masterly studies of morbid conduct in alcoholism and other intoxications which we owe to your distinguished secretary, Dr. Crothers,—that the conclusions, I say, established by these studies are recognized as valid when tested by observers who have to deal with material entirely different from a racial point of view from that which he utilized and obtained from milieux differing widely in social economic conditions. So that it is at all events highly probable that the relation of alcoholism to crime is sufficiently alike, in nature if not in degree, in all civilized countries to render it desirable that the data bearing on the problem in any one community should be made known to students of inebriety elsewhere. This, then, must be my excuse for venturing to offer for the consideration of this distinguished meeting a short account of the facts of alcoholic criminality as observed in Great Britain.

For the purposes of this paper I will resort to the customary and convenient method of classifying criminality into three main categories according to the nature of the characteristic impulse in each variety, that is to say into crimes of violence, of lust and acquisitiveness. And I propose further to consider as due to alcohol only those criminal acts which

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are directly dependent on alcoholic intoxication, and not those disorders of conduct which are only indirectly connected with the vice of drunkenness. As my remarks will necessarily be of a very summary character, I must refer those students of the question who desire fuller details to the volume which I have published on this subject where they will find in full the clinical and statistical evidence in support of the views advanced here. (Vide "Alcoholism, a Chapter in Social Pathology." London, James Nisbet & Co., 1906.)

In crimes of violence which we have first to consider and which, as affecting human life, rank very rightly as the gravest form of delinquency, we find that alcoholism exercises a very important causal influence, far greater indeed than any other single factor. Clinical inquiry on a large scale has led me to conclude that we must attribute to this cause something like sixty per cent. of graver homicidal crime, and over eighty per cent. of less serious offences of violence in Great Britain; and this clinical estimate is strongly supported by such indirect statistical evidence as is available on the matter. In the graver cases we have to deal must usually with chronic intoxication, or with conditions of original abnormality of mind which create a special susceptibility to the action of alcohol. Very frequently the murderous act in such cases is committed in a state of dream consciousness, and leaves no trace, or only a vague and fragmentary recollection in the mind of the perpetrator—they are instances of that alcoholic amnesia so vividly described by Dr. Crothers. In other cases, connected with these last mentioned by a chain of intermediate instances, the homicidal act is the expression of a fully conscious impulse related to definite delusions of persecutory content. Simple drunkenness, that is to say drunkenness occurring in an individual who is not chronically intoxicated and is not morbidly susceptible to alcohol, does not as a rule, give rise to homicidal impulses, but it plays a large part in the causation of minor offences of violence.

In the next category of crimes that we have to consider, crimes of lust, alcohol is also a very important factor, both in the form of simple drunkenness and in that of chronic intoxication. There is, however, an important difference in the relation of these two conditions to criminal conduct. Simple intoxication, casual drunkenness, is a frequent cause of sexual assaults on adults—such offences are

indeed the special form of delinquency that simple drunkenness is most prone to produce. Chronic alcoholism, on the other hand, is more often a cause of the violation of children, and in a very large number of instances it is the drunkard's own children who are the objects of his lust.

In the third great category of serious crime, crime of acquisitiveness, we find, in contrast to the condition regarding homicidal and sexual crime, that the influence of alcohol is quite insignificant. Offences of this class are not in fact, as a rule, of directly impulsive origin, and it is mainly, of course, in impulsive delinquency that alcoholic intoxication can be expected to play a considerable part.

In a general view of the question we may conclude then, that alcohol is the chief causal influence in two out of the three main categories of delinquency in Great Britain; and its role is probably of equal importance in other modern communities where the industrial conditions are at all similar. And we may further note that these forms of criminality in which it plays so large a part, though numerically they constitute only a small proportion of the whole volume of delinquency, include nevertheless precisely the offences which most gravely violate the social conscience and degrade humanity to the level of the brute.

The foregoing remarks are directed altogether to the influence of alcohol as a cause of crime in the individual drinker; but it is necessary to add a word with reference to another and perhaps more important relation which connects alcoholism and crime. I refer, of course, to the influence of parental intoxication on the health and vitality of the stock. This action of alcoholism, in my opinion the most serious of the many evils that intemperance brings on the community, is nowhere, perhaps, more obvious than in the facts with which the criminologist has to deal; for, while in the more pronounced degrees of degeneration such as are presented by the low-grade imbecile and the idiot, alcoholic heredity, if present, is generally found co-existent with other causes; in the case of the defective delinquent it is very often the sole influence that can be discovered.

So far at all events as clinical evidence goes, it warrants fully the conclusion that in the genesis of those conditions of arrested or perverted development which characterize the moral imbecile and the instinctive criminal, parental alcoholism is one of the most important, if not actually the most important causal factor.

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Abstracts

INTOXICATION AND EXCITEMENT IN ANIMALS.

From Studies in Psychology of Intemperance, by G. E. Partridge, Ph. D.

Something may be learned about any human trait, whether of body or mind, by studying its beginning or antecedents in animals. There is no longer need of justifying this approach to human psychology. Genetic methods prevail everywhere, and comparative psychology has become a well-established science. So we may safely start with the assumption that whenever we find a deep-seated trait in the human mind, we shall profit by trying to trace its origin in animal life. Sometimes the trait in its human form can be traced but a little way—for example, the conscience—but we can always find primitive traits related to the higher, and in some way involved in producing them.

We might well begin the study of intoxication in an investigation of animal life with three questions in mind. We should like to know, first, whether animals are affected by stimulants and intoxicants in the same way that men are; and if so, how low down in the scale of animal life the physical and mental capacity for intoxication may be found. It would be important, next, to know whether animals acquire the habit of intoxication; whether they enjoy intoxication as men do, and can be said to have a craving for it, or for alcohol or other intoxicating drinks as such. We should like to know also whether among animals other states may be found, or other impulses, cravings or habits which can throw light upon the nature of the intoxication motive; whether, if animals have intoxication habits of any kind, reason for the enjoyment of such states can be found in their relation to activities that are useful to the animal, and the presence of which we can understand.

Animal psychology has as yet less to offer than we might wish in the way of facts bearing directly upon the intoxication impulse, and these facts are often difficult to interpret, especially facts about the formation of a habit; for, of course, we cannot secure introspective reports of the states of feeling of an animal.

Apparently many animals are affected physically by alcohol in ways essentially like intoxication, as we find it in the human species. Romanes made experiments upon jelly fish, star fish, and sea-urchins. The first effect upon sarsia, for example, was to cause a great increase in the frequency of the swimming movements: so much that the bell had no time to expand properly between the successive contractions. Gradually the movements grew less and less frequent and forcible, until finally the animal was no longer responsive to stimuli applied to its tentacles. Here are, then, the external signs of a series of steps, very like the stages of intoxication in a man. Whether the animal feels in any way as a man does; whether there is a stage of heightened feeling and excitement, followed by depression and a comatose condition, perhaps no one would feel competent to say. It is not at all unlikely. Whether the animal is capable of remembering or not, the experience, and desiring its repetition is more difficult still to decide precisely, and yet it is less likely.

There is much evidence to show that the effects of large doses of alcohol upon many species of animal is essentially the same. A period of increased activity is followed by lessened activity. Insects are capable of becoming intoxicated. Wasps have been observed apparently intoxicated by the juices of over-ripe fruit. They become excited, and finally crawl away in a semi-somnolent condition and lie in the grass until they recover, and then return to the fruit. Dogs show quite unmistakably the typical stages of intoxication. Under the influence of large doses of alcohol they become exalted in feeling, or, at least, motor activities and expressions of the social feeling increase; and following this stage there is one of depression and fear, and the animal skulks away and hides.

Do animals have, or can they acquire, a craving for intoxication or intoxicants as man does? This is difficult to decide. Facts are not wanting, but the interpretation of them is difficult. Stories are often

told by reliable sources of a man who acquired a taste for alcohol among sailors, and that chickens will drink. Stories are told of a man who drank both together, and that he leaves much to be desired. We do not know of the drink of a man once more. The alcoholic beverage, people, would be a drink that is a psychic effect of man. The what pleases, a

On the other hand, often dislike alcohol. It relates an instance of a man who, in the morning the kitchen offered beer that they right for all the men alcohol. It is Hodge's dogs, two years, new large doses. Alcohol, skulking in scented a bottle to produce into

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told by reliable writers about elephants, apes, and dogs that have acquired a taste for alcoholic liquors. The fox terrier, a favorite among sailors, is often credited with a craving for alcohol. Hens and chickens will eagerly devour bread soaked in brandy or whiskey. Stories are told about dogs that prefer beer to meat, and when offered both together, will drink the beer and refuse the meat. All such cases leave much to be desired in the way of psychological interpretation. We do not know whether the animal merely becomes fond of the taste of the drink or whether the mental state is remembered and sought once more. There is no doubt that animals can be trained to drink alcoholic beverages, and to like them; but whether a dog, for example, would be capable of forming so complex an association as to seek a drink that is disagreeable to the taste for the sake of a remote psychic effect seems doubtful. This is what happens often in the case of man. The mental effect of the drink, and not the drink itself, is what pleases, and as we shall see later, forms the basis of the habit.

On the other side, there are numerous facts showing that animals often dislike either the taste or the effect of intoxicants. Darwin relates an instance of baboons being made drunk with beer. The next morning the keeper found them holding their heads tightly, and when offered beer they refused to taste it again. It is too much to assert that they rightly attributed their feelings to their drink the day before, for all the mental action needed is a feeling of nausea at the smell of alcohol. It is quite likely they would have refused food also. Dr. Hodge's dogs, which were experimented upon with alcohol for at least two years, never showed a taste for it, although they had it daily in large doses. One of these dogs, after two years' experience with alcohol, skulked into a corner and refused to come out again when she scented a bottle of alcohol. In her case the dose had never been sufficient to produce intoxication.

So far as these facts are concerned we have evidence neither for or against the view that animals are capable of enjoying and seeking intoxication as a man does. It certainly is not impossible that they do. They surely have the expressive signs of enjoyment of the state while it lasts, and if they can form the association between the drink and its effects, and retain a sufficient memory of the state itself as different from their ordinary experiences, they have the mental equip-

ment and degree of intelligence to become drunkards in the real sense. Whether the mental state of intoxication affords for them a sufficiently rich experience to be so retained and sought may well, however, be matter of doubt; but the difference between man and animals, in these respects, must be one merely of degree and complexity of experience, and not of nature. We cannot suppose the animal capable of the higher motives for intoxication, such as a desire to drown sorrow, or to increase the pleasure of his social relations; but he may not be incapable of obtaining these effects in some degree from the state when it is once attained.

We cannot leave the subject of animal intoxication without taking notice of certain traits observed among many species of animals, which are very similar to alcoholic intoxication, usually, but not always, connected with the sexual life. These states of exaltation appear to be more common among birds, but are not wanting in mammals. One or two examples will serve to illustrate a phenomenon, which occurs in all degrees of intensity, from slight increase in activity to the wildest excitement.

Besides the various plays of animals, in which there appears to be a love of excitement for its own sake, there are in some species marked rhythmically occurring periods of intense excitement. Chapman describes a sky dance of a woodcock as a succession of wild rushes in the air, with always increasing speed and with louder and louder cries, the object of which seems to be to rise to the highest pitch of excitement.

Hudson speaks of the screaming contests of Platan rails, and remarks upon the striking resemblance to the human voice exerted to its utmost pitch, and expressive of extreme terror, and despair. Wallace says: "We see that the inferior animals, when the conditions of life are favorable, are subject to periodic fits of gladness affecting them powerfully, and standing out in vivid contrast to their ordinary temper. Birds are more subject to this universal joyous instinct than mammals, and there are times when some species are overflowing with it."

Groos also speaks of these strange characteristics of the love dances and the play of animals, and explains the intense excitement

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of some of them on the ground that it is necessary that the sexual impulse acquire tremendous power and its fulfillment be rendered difficult—hence the great and long-continued excitement preceding the act of pairing.

Such facts suggest at the very outset many problems; and although they cannot be probed deeply at this point, one or two principles of development may be mentioned, which will later assist in understanding them.

We can assert, first, that whenever a habit or a capacity for a particular form of behavior is found to be deep-seated and widespread, whether in animal or in man, it has a practical meaning. This we find to be true of all play and other seemingly purposeless activities, and we should expect to discover, on this principle, that all states of extreme pleasure and excitement, such as intoxication, and the capacities to attain them, would not prove to be exceptions.

We cannot readily believe that they are mere chance phenomena, without meaning, but should expect to discover in them a deep origin and close connection with the practical life of the species.

Now, whenever we try to trace back the higher emotions of man to their beginnings, we usually find them connected with one or both of two fundamental modes of behavior, having for ends the preservation of life of the individual, and the continuation of the race by reproduction. To carry on these activities many structures, functions, and impulses have been established, and these fundamental structures and modes of action underlie all later developments: from them are created forms and functions sometimes seemingly very remote in their purpose and mechanism from the primitive mechanisms from which they are produced. Often old structures and habits remain latent in the organism, and are only in unusual circumstances utilized by being taken up into higher functions.

We are justified in assuming, with a high degree of probability, that in all exceptional traits of unconsciousness, such as intense excitement and intoxication, and the craving for these states, old pleasure and pain mechanisms, once connected with the practical life, are at work, and that these states are somehow connected with the mode of development of the individual or the progress of the race as a whole.

Such a conclusion is not based upon precise evidence in regard to any one function, and is not to be taken as demonstrated truth; but the testimony in its favor is so corroborative, part to part, and this view now clarifies so many problems of the emotional life of man, that it must be accepted as at least a co-ordinating point of view from which such problems as intoxication may be investigated. We do not know precisely to what extent either the reproductive or other functions are involved in the history of the intoxication pleasures and impulses; but we shall see that it is difficult to avoid the conclusion that they are concerned in them, and it is because of the connection of these states with practical functions that they have been preserved by selection, and that impulses to seek such states of intensity have been established, still further securing them. All this, however, is at this point merely suggested as an illuminating hypothesis, on the basis of which the problems of intemperance in man may be studied.

THE TREATMENT OF DRUG ADDICTIONS.

The following propositions appear in Dr. Petty's work on *Narcotic Drug Diseases* and give a good summary of the topics which he presents:

1. The essential pathology of narcotic drug addiction is a toxemia, the toxins being of drug, auto and intestinal origin.
2. At least six of the most troublesome and dangerous complicating symptoms have their origin in a perverted function, viz.: deficient excretion. These are intestinal colic, nausea, vomiting, labored and deficient heart action, and collapse. By thorough elimination these may be prevented altogether, and a number of the other symptoms of nervous and mental origin greatly modified, if not avoided.
3. The motor function of the bowel is the function most impaired by the effects of opiates.
4. Purgatives, secretory stimulants, as ordinarily given, which excite intestinal motion and reflex action, do not sufficiently restore that function to bring about effective emptying of the intestinal canal of a drug user.
5. In order to empty the intestinal canal of a drug user direct, positive stimulation of the motor centers is essential, strychnine being the most suitable agent for this purpose.

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6. Since in all narcotic drug users all the nerve-centers are profoundly impressed with the narcotic, resulting in extreme lethargy of intestinal motion, larger than ordinary medicinal doses of strychnine are required to overcome this lethargic state and excite efficient peristalsis.

7. If the motor activity of the bowel be efficiently induced and maintained by direct stimulation of the motor centers with strychnine, no larger quantity of the glandular stimulants is required to promptly and fully empty the intestines of the drug user than in those not using the drug.

8. If free peristaltic action is excited while the system is still under the sedative influence of morphine, little, if any, distress occurs and the intestinal canal can be thoroughly and promptly emptied.

9. Strychnine, if given in sufficient doses, will excite active peristalsis, notwithstanding the restraining effects of the opium.

10. Unless efficient provisions for the prompt and full excitation of the motor function of the bowel be made, any secretory stimulant given will merely excite excessive secretion in the upper part of the intestinal canal, accompanied by griping, nausea, vomiting, and other distress, but will be unable to empty the canal, reflex action alone not being sufficient to induce peristalsis when the nerve-centers are so benumbed by narcotics.

11. Deficient heart action leading to collapse in these cases is mainly due to portal engorgement.

12. When the intestinal canal has been thorough cleaned and portal engorgement overcome, morphine or other narcotics can be at once withdrawn from an habitue without danger to life and without the occurrence of shock, diarrhea, colic, vomiting, or the slightest appearance of collapse.

13. A general hyperesthesia follows the withdrawal of opiates from an habitue, this being the natural reaction from the state of chronic anesthesia to which the drug user has been accustomed. This extends to all of the functions of the body, mental as well as physical.

14. The severe suffering incident to the abrupt withdrawal of opiates, after thorough elimination has been carried out, has a natural limit of a few days' time. This suffering, severe as it would otherwise

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15. The therapeutic use of scopolamine, for the time it is required in these cases, does not, in any way, perpetuate the desire or necessity for the use of an opiate. While it relieves pain, induces sleep, and overcomes those distressing symptoms of nervous origin that follow the withdrawal of morphine, its action so opposes the effects of the opiate that, instead of perpetuating the effects of the morphine, it stimulates the centers which have been benumbed by that drug and shortens the time during which its secondary effect would be manifested.

16. When the patient's system has been thoroughly cleansed from toxic matter, the drug withdrawn, and the patient prevented from suffering with scopolamine, for from two to three days, no craving or desire for the drug remains, abstinence symptoms, such as ordinarily follow the withdrawal of opiates, are obviated and the patient is brought to a condition in which he can pass his time in comfort, eat heartily, sleep from four to six hours out of each twenty-four, and this insures safe and rapid convalescence.

17. The dose of scopolamine cannot be definitely fixed. The dose varies greatly in different individuals, the range being from 1-300 to 1-50 grain at intervals of from 30 minutes to six hours. At first the smaller doses should be given and repeated at short intervals, until sleep is induced, or at least until the patient is free from all pain. After this the dose should be of such size and be given at such intervals as are necessary to overcome all painful symptoms and to keep the patient comfortable. The dose in one case is no index of what will be required in the next: only by a physician experienced in such matters being present and observing the effects of each dose can the proper dose be ascertained and the patient be kept in a comfortable condition.

18. The patient should not be allowed to suffer. Scopolamine, in remedial doses, does not materially effect the vital functions or leave after effects on either the mind or body of the patient; therefore, it should be given until its whole physiological effects are manifested, if necessary. To allow the patient to suffer during the treatment impairs his nervous system, lengthens the time in which treat-

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19. The period of convalescence, during which the patient must be kept under supervision and also considerably reduced, varies greatly in different individuals. The absence of that train of nervous symptoms, the ability to sleep naturally, to eat heartily, and the improved digestion and assimilation by which the patient rapidly gains in flesh and strength, lessens the liability to relapse almost as greatly as this curative plan of treatment lessens the dangers and sufferings while under treatment.

20. The after treatment in these cases does not consist of the administration of drugs, and no drug should be given, unless specifically indicated. There is certainly no place for the administration of alcohol or strychnine in the after treatment.

The reduction or suspension of inhibitory control by the effects of alcohol permits an extravagant and premature expenditure of energy, and this is followed by marked depression. This depression is felt to an exaggerated degree by one who has recently been taken off of a narcotic drug, and such a one will not long tolerate it, but will seek to blunt their sensibilities to it by taking more alcohol.

This, in turn, lessens inhibitory control, and energy is again prematurely expended, and this is followed by increased depression.

Depression from the secondary effects of alcohol calls loudly for a dose of the narcotic to which such person had been accustomed, and if that is taken the person is well on the road to relapse. Alcohol in all forms should be interdicted during convalescence and forever afterwards.

Strychnine keeps up too active peristalsis and inclines the bowel to empty itself too often. This interferes with digestion and assimilation and causes diarrhea by the passage of incompletely digested food through the bowels.

21. Unloading the intestinal canal and relieving portal congestion lessen the strain under which the heart has been working more than enough to compensate for the loss of the stimulus it derived from the effect of morphine and, instead of the heart's action being weak or irregular, the character of the pulse is decidedly improved. It has greater volume, is softer, more compressible, and is, in every respect, of better quality than when propelling the blood against the obstruction of an engorged portal system, even though it was supported by morphine. However, should the heart action be weak, or for any reason need support, sparteine sulphate, one to two grains hyperdermically every four to six hours will give it more uniform and efficient support than morphine or any other known drug.

Book Reviews

NARCOTIC DRUG DISEASES AND ALLIED AILMENTS.

By George E. Petty, M. D., Member of the A. M. A., Tenn. State Asso., Miss. Valley Asso., etc., etc.

F. A. Davis Co., Publishers, Philadelphia, Pa.

This work of over 500 pages is a special presentation of the author's theories, explanations and practices in the treatment of drug addictions. He has combined an immense amount of very suggestive and helpful facts. We have quoted liberally from this work, in this issue and believe that he has made a distinct contribution to the subject.

The author's protest against the Lambert so-called treatment is timely, and represents the experience of leaders. Already a decided reaction has begun and the efforts of men to promote a special specific treatment, carry with them their own condemnation. We commend this book most heartily as a contribution to the whole subject, giving greater prominence to the treatment, and while authors will differ with regard to minor particulars and certain drug effects, there is so much that is clear and practical, that the objections are forgotten. We refer to quotations published in this issue which give a good idea of the value and helpfulness of this work.

We commend the author most heartily and his book as deserving a place in the library of every expert who is caring for the drug taker.

The publishers have presented a very fine volume of good clear type, and we predict a large sale.

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MODERN TREATMENT OF MENTAL AND NERVOUS
DISEASES.

By American and British Authors.

Edited by W. A. White, M. D., Supt. Govt. Hosp. for Insane at Wash-
ington, D. C., etc., and Smith Ely Jelliffe, M. D., Prof. of Diseases
of the Mind and Nervous System in the Post Graduate School of
New York, etc., etc.

Volume I. Illustrated.

Lee and Fibiger, Publishers, Philadelphia and New York. 1913.

This volume of 850 pages, to which nineteen authors contribute special articles, is by far the most comprehensive effort that has been made in the literature of mental diseases. Each author seems to have sought to give the best summary of the present knowledge, particularly along therapeutic lines of the various mental and nervous diseases. One article in this volume will be particularly attractive to our readers. It is on Alcoholism and Alcoholic Psychosis by Dr. H. W. Mitchell of Warren, Penna. It presents a very clear summary of the general facts as seen by a specialist of insanity, and gives a very excellent idea of many phases of the subject that are more or less confusing in the minds of many persons. We have marked several passages for future publication in the Journal, which will give the reader a very fair idea of the value of this study. The editor, Dr. White, contributes a very excellent paper on heredity and eugenics. Dr. Salmon describes immigration and the mixture of races in relation to the mental health of the nation, with some very striking illustrations and conclusions that will be referred to in the future as the best authority, up to the present time.

A paper on Traumatic Neuroses and Psychosis and Occupation Neuroses by Dr. Thomas will attract a good deal of attention and is a very striking contribution to this subject. Treatment of Paranoic States by Dr. Adolf Meyer, is an excellent summary of what can be done. The paper on Prison Psychosis is also very valuable. One on Senile Mental Disorders by Dr. Barrett is most interesting. Other papers on Crime in Relation to Mental Disorders, the Sexual Problems and their Nervous and Mental Relations, and on the Applica-

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tion of Legal Methods in their Remedial Bearings, also on Mental and Nervous Disorders and their Military Relations are strong, well digested summaries of the various subjects.

In a symposium of this kind, there is of course some variations in style and method of treating the subject. Some authors are very lucid. Others are obscure and involved. The editors seem to have done good work, in clearing away some of the necessary rubbish which will creep into an extended discussion of particular phases of the subject.

Some of the opinions expressed by the authors and some methods of treatment have a far off belated sound, and yet on the whole, the volume commends itself most heartily, to both the general and special practitioner. The article on education by Prof. Collins is a very clear discussion of many things that are rarely noticed in textbooks, and as such is entitled to a great deal of consideration. The specialist will find this book of unusual value, and much of it will be epoch making in the future. To all persons who treat mental and nervous diseases, this will comprise a library in itself, and should form a part of every good library. The publishers have presented a very well printed volume, in type and arrangement of topics, and we shall look forward to the second volume, which if equal to this one, will place them among the great books which have appeared at this time.

SUMMARIES AND LAWS RELATING TO THE COMMITMENT AND CARE OF THE INSANE IN THE UNITED STATES.

Prepared by John Koran, for the National Committee for Mental Hygiene.

This volume of 300 pages gives a good summary of the laws in the different states of the Union, concerning the commitment, care and treatment of insane. The Society for Mental Hygiene, who issues this volume, aims to correct the abuses which have grown up in several states, by giving a summary of the various laws and showing

their practical application in many ways from the Secretariat of the New York City.

The American Journal of Psychiatry has given the most complete and accurate statement in the history of the short article.

Other features are given with great force. By the best summaries and professional

STUDIES IN

By G. E. Partridge, "The Study," "The University,

The author estimates in a volume part of the book on savage people, culture and language, the state of intoxication, impurities, these several things be very helpful.

In the second part of the book, practical problems, measures, the character of the practical

their practical relation and value to the insane. The volume is valuable in many ways and will serve a good purpose. Copies can be had from the Secretary of the Society, Number 50 Union Square, New York City.

The American Review of Reviews, for the last three months has given the most satisfactory outlook of the progress of the world, than any other journal published. There is a breadth and clearness of statement in the summaries offered that impresses the reader. Some of the short articles are equally graphic and satisfactory.

Other features of the journal appeal to the busy reader, with great force. Beyond the daily paper, the Review of Reviews gives the best summary and outline of passing events which the physician and professional man can desire.

STUDIES IN THE PSYCHOLOGY OF INTEMPERANCE.

By G. E. Partridge, Ph. D., author of "An Outline of Individual Study," "The Nervous Life," etc., formerly lecturer in Clark University, New York. Sturgis & Walton, Pubs. 1912.

The author has condensed a great variety of facts of much interest in a volume of 260 pages, written in a popular style. The first part of the book discusses intoxication among animals, primitive and savage people and among civilized nations. Intoxication in literature and language, and mental and physical effects of intoxicants; the state of intoxication; study of abnormal cases; theories of the intoxication impulse; summary of facts and interpretations. Under these several titles he has grouped a great variety of facts that will be very helpful and instructive to all students of this subject.

In the second part of the book, there is a discussion of the practical problems, the saloons and the clubs, preventive and educational measures, the care, cure and control of the drunkard, and a summary of the practical principles involved.

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The author shows a clear psychological insight into many of the problems and is evidently a very earnest, careful writer, and the book will appeal to the readers as a valuable contribution. We shall quote from this work in future copies of the Journal; in the meantime commend it to our readers, as a little book of value.

REPORT OF THE DALRYMPLE HOUSE AT RICKMANSWORTH.

The twenty-ninth annual report of this pioneer home for inebriates, practically the first organized in England, is very interesting. The following referring to admissions under the laws, patients can be admitted under the act and also as private patients. Under the act patients must remain for a period of two years or unless discharged sooner. They are committed by the magistrate under their own signatures, and after a time may go out on parole. Private patients may terminate their residence any time it is thought best by their friends and themselves.

The Superintendent, Dr. Hogg, writes, "There is of course, a very natural objection on the part of most persons to the signing away of liberty of action, for an indefinite or a fixed period. Many are far too optimistic in their own judgment and in too much of a hurry to get well quick; whose impulses and very natural desire to return to their ordinary life and vocation outweigh the caution that should be adopted in dealing with an issue where health, fortune and life are at stake. These persons are not fit judges as to the period of rehabilitation of self-control is sufficiently established, and the settlement of such a question should be placed beyond their decision, while, of course, their arguments, views, and their special circumstances should receive due consideration. It is frequently preferable that the signature under the act should be for a period in excess of that considered in all probability sufficient; a discharge can at any time be applied for and obtained, if such a course is advisable, also the patient may be permitted to live elsewhere as long as he abstains from al-

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From the statistics it would appear that the average length of treatment is from five to six months. Many of the persons stay the whole two years. The results are as expected, very good indeed. A large number of the patients are reported years afterwards as doing well. This shows the value of long rest. The institution is doing excellent work, although only receiving fifty or sixty patients a year. The Superintendent, Dr. Hogg, says that he is fully justified in the assertion that 67 per cent. are improved and practically cured.

PATHOLOGICAL INEBRIETY: ITS CAUSATION AND TREATMENT.

By J. W. Astley Cooper, M. D.; Paul B. Hoeber, Publisher,
New York City. 1913.

This little volume of 150 pages, is written by an English physician who is Superintendent of Ghyllwood Sanatorium, a Government Licensed Home for Inebriates. The doctor presents some very just criticism on Hare's book on Alcoholism, and points out what he considers to be the most reliable facts on pathological inebriety, its causation and treatment.

He evidently has no knowledge of the American Literature on the subject and assumes that the quotations from English authorities are final.

On page 14 there is an admirable summary of the psychological defects prominent in inebriates. His observations on the causes are very good and clear, but his distinctions and classifications are open to criticism.

In the treatment there are many very striking chapters and very fair summaries of the best judgment of practical men. His reference to American specific cures is unfortunate, in conveying the idea that they are at all prominent or have been endorsed by persons who are familiar with the subject.

As a practical book, it is admirable in style, lucidity and fairness, and the author is evidently a very close observer and has done great service in presenting his views on this subject in a most reasonable, scientific way.

We hope he will continue his studies and issue another volume sometime in the future. We commend this book very highly as a contribution to the subject, and entitled to a place in the library of everyone wishing to keep abreast with every new thought. The price is only \$1.50.

IMPORTANT MEETING.

The British Medical Journal reports the following:

An international conference for the biological and statistical study of alcoholism was recently held at Paris at which France, Great Britain, the United States, Austria, Italy, Russia, Switzerland, and Belgium were represented. The following list of questions was drawn up as an international programme of studies: (1) Does alcohol possess any alimentary property or not? (2) What is the relative influence of the forms and manner in which alcohol is consumed? (3) What is the alimentary value of the different alcoholic beverages? (4) What are the effects of pure alcohol and the extraneous substances produced by the distillation of fermented products? (5) What are the principal causes and effects of alcoholism? (6) What are the means employed against alcoholism, and with what results? (7) A critical investigation of the national statistics of the production and consumption of alcohol and alcoholic beverages; consideration of the effect of such production and consumption.



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Under the auspices of The American Society for the Study of Alcohol and Other Narcotics, Dr. L. D. Mason of Brooklyn, N. Y., Vice Pres. of the Society, offers a prize of \$150.00 for the best essay on the following topic: "The Biological and Physiological Relations of Alcohol to Life."

The essay must be the result of original research which shall confirm or disprove the present theories of the inherited effects of alcoholic degenerations and indicate how far the defects of parents are transmitted to the children.

Such work may be carried on in man or animals, and the results may be illustrated by drawings or photographs and must be typewritten and sent to the office of the Secretary before July, 1914.

This offer is open to students in all countries, and each essay should be accompanied by a motto and a sealed envelope containing the same, with the author's name and address.

A committee of award of which Dr. W. S. Hall, Prof. of Physiology in the Northwestern University, Chicago, Ill., is the Chairman.

All inquiries should be addressed to Dr. T. D. Crothers, Hartford, Conn., Sec'y.

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Directory of Sanitariums.

We are pleased to present our readers with a list of some of the Sanitariums in the United States and Canada for their choice if they desire to make use of such an Institution. This list will be added to each month.

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