THE QUARTERLY JOURNAL

INEBRIETY.

Published under the Auspices of The American Association for the Cure of Inebriates.

T. D. CROTHERS, M.D., Editor, Hartford, Conn.

Vol. X.

JULY, 1888.

akinang nakatahan dalam serat bis serat kan kan kan kan tentenggan dalam dalam panggan dalam dalam dalam dalam

No. 3.

HARTFORD, CONN.:
THE CASE, LOCKWOOD & BRAINARD CO.,
PRINTERS.

EUROPEAN AGENCY:

BAILLIERE, TINDALL & COX, 20 King William Street, on the Strand, London, W. C.

TABLE OF CONTENTS.

JULY, 1888.

Points Touching the Medical Jurisprudence of Alcoholic Inebri-	Page -
ETY. Dr. T. L. Wright,	201
THE PROHIBITION QUESTION FROM A MEDICO-LEGAL STANDPOINT DR	
C. C. Fitte,	210
THE HOTCHKISS CASE,— A MEDICO-LEGAL STUDY. DR. CROTHERS, ALCOHOLIC HALLUCINATIONS. DR. F. LENTZ,	218
THE CURARITATION OF THE ANALYSIS AND ANALYSIS ANALYSIS AND ANALYSIS ANALYSIS ANALYSIS ANALYSIS ANALYSIS ANALYSIS ANALYSIS ANALYSIS ANAL	224
THE CURABILITY OF THE INEBRIATE. DR. C. F. BARBER,	230
CLINICAL CASES IN PRIVATE PRACTICE. DR. McCowen,	232
PSYCHOLOGY OF ALCOHOLIC INEBRIETY. Dr. IRA RUSSELL,	236
ABSTRACTS AND REVIEWS:	-
PILOCARPIN IN ACUTE ALCOHOLISM, NOTES ON MORPHINOMANIA AND ITS TREATMENT, SVEHILLS OF THE PROPERTY OF THE PR	
NOTES ON MORPHINOMANIA AND ITS TREATMENT	240
Syphilis in Inebriety,	240
SEMI-ANNUAL MEETING AM. ASSOC. FOR CURE OF INEBRIATES,	
REPORTS OF INSTITUTIONS FOR INEBRIATES,	249
Reviews of New Books,	~255
255	-203
EDITORIAL:	
BINGHAMTON ASYLUM,	264
ANSBRIEFY PRACTICALLY CONSIDERED	266
TRANCE CASES.	270
REPORT ON DEATHS FROM INTEMPERANCE	271
INEBRIETY IN EUROPE,	273
Sin or Disease,	275
CLINICAL NOTES AND COMMENTS,	~/ 3
TENTON DI LO TES AND COMMENTS,	279

A PRIVATE HOME

for the care and treatment of neurotics from alcohol, opium, and other causes. A limited number, of both sexes received, and each one receives the direct personal care of the physician. Location and accommodations excellent, and rates low.

Address L. W. BAKER, M.D., Sup't, BALDWINVILLE, MASS.

REFERENCES BY PERMISSION.— Drs. A. L. Ranney, C. L. Dana, E. C. Mann, Clark Bell, Esq., New York City; Dr. Nathan Allen, Lowell, Mass.; Dr. Ira Russell, Winchendon, Mass.; Frank B. Sanborn, Esq., Concord, Mass.; T. D. Crothers, M.D., Hartford, Coon.; C. H. Hughes, M.D., St. Louis, Mo.

KENSETT ON THE SOUND.

AN ESTABLISHMENT FOR THE

Private Care and Treatment

of persons suffering from Mild Forms of Insanity, Nervous Diseases, and those Addicted to the use of Stimulants and Narcotics. Medical and personal attention, careful and constant.

Greatest consistent freedom. Accommodations ample. Grounds shaded and secluded. Surroundings very healthful and attractive. Facilities for driving, bowling, bathing, fishing, and boating.

EDWIN EVERETT SMITH, Formerly Med. Dir. State Asy. Morristown, N. J.

P. O. Rawayton. Tei, Darien. R. R. station, Five Mi'e River, Conn., 40 miles from N. Y.

HOR:

The air points of dilute pho Phosphate potash, a by the sys base what lime, pota: which it es simply pho has shown fered with no trouble degree the variety of c phoric aci than either phorus," as acid in cor phosphates the phospha in the urine wasting dise We have

without expe RUMFORL

of the highe experience

terms of co

who wish to

Physicia:

Vol. X.-



HORSFORD'S ACID PHOSPHATE,

US.

Dilute Phosphoric Acid.

The attention of the profession is respectfully invited to some points of difference between Horsford's Acid Phosphate and the dilute phosphoric acid of the pharmacopæia. Horsford's Acid Phosphate is a solution of the phosphates of lime, magnesia, potash, and iron in such form as to be readily assimilated by the system, and containing no pyro- or meta-phosphate of any base whatever. It is not made by compounding phosphoric acid, lime, potash, etc., in the laboratory, but is obtained in the form in which it exists in the animal system. Dilute phosphoric acid is simply phosphoric acid and water without any base. Experience has shown that while in certain cases dilute phosphoric acid interfered with digestion, Horsford's Acid Phosphate not only caused no trouble with the digestive organs, but promoted in a marked degree their healthful action. Practice has shown, in a great variety of cases, that it is a phosphate with an excess of phosphoric acid that will better meet the requirements of the system than either phosphoric acid or a simple phosphate. "Phosphorus," as such, is not found in the human body, but phosphoric acid in combination with lime, iron, and other bases, i.e., the phosphates is found in the bones, blood, brain, and muscle. It is the phosphates and not the simple phosphoric acid that is found in the urine after severe mental and physical exertion, or during wasting diseases.

We have received a very large number of letters from physicians of the highest standing, in all parts of the country, relating their experience with the Acid Phosphate, and speaking of it in high terms of commendation.

Physicians who have not used Horsford's Acid Phosphate, and who wish to test it, will be furnished a sample on application, without expense, except express charges.

RUMFORD CHEMICAL WORKS, - Providence, R. I. BEWARE OF INITATIONS.

Vol. X. -- 30

of Cloids always present in the healthy stomach. It is a most valuable digesting agent, and SUPERIOR TO PEPSIN ALONE."—Prof. ATTFIELD. Ph. D., F.R.S., &c., Prof. of Practical Chemistry to Pharmaceutical Society of Great Britain.

The most eminent and successful Practitioners consider LACTOPEPTINE the Standard remoty in the treatment

of all those, allmonts, in which following the dissipant of the disease of mathological conditions.

POINTS DI

> Vice-Presiden Membe

QUAR

Vol. X

This Jour indorsed by

The resinfluence of heart and often exists described a recent Goulthe influent ments. The the habitual seventy per stated thing extraland unleight million thirty-six million thirty-six million.

LACTOPEPTINE.

The most important Remedial Agent ever presented to the Profession for DYSPEPSIA, VOMITING IN PREGNANCY, CHOLERA INFANTUM,

CONSTIPATION, and all diseases arising from imperfect nutrition.

LACTOPEPTINE IN CHOLERA INFANTUM.

We desire to direct special attention to the great value of LACTOPEPTINE in Cholera Infantum, and other intestinal troubles incident to the heated term.

Send address for our Medical Almanae, containing valuable information.

THE NEW YORK PHARMACAL ASSOCIATION,
P. O. Box 1574.

NEW YORK,

sting &c.,



QUARTERLY JOURNAL OF INEBRIETY.

Subscription, \$2.00 per year.

Vol. X.

JULY, 1888.

No. 3.

This Journal will not be responsible for the opinions of contributors, unless indorsed by the Association.

POINTS TOUCHING THE MEDICAL JURISPRU-DENCE OF ALCOHOLIC INEBRIETY.

By T. L. WRIGHT, M. D.,

Vice-President of International Congress on Inebriety, London, England;
Member of the British Society for the Study of Inebriety; Member ber of the New York Medico-Legal Society; Member

of the American Association for the

Study and Cure of Inebriety.

The researches of Dr. B. W. Richardson relating to the influence of habitual drunkenness on the structure of the heart and blood-vessels, and the known connection which often exists between heart disease and insanity—especially described and illustrated by Dr. Wm. Julius Mickle in his recent Goulstonian lectures—open a door for investigating the influence of inebriety upon the mental and moral movements. That the heart is very likely to become dilated in the habitual drunkard, when its pulsations increase from seventy per minute to at least eighty-five per minute as a stated thing, is apparent. For these figures represent an extra and unnatural labor imposed upon the heart of nearly eight million beats per year—a change of heart beat from thirty-six millions to forty-four millions in round numbers

per annum. And that the large arteries also must sympathize and suffer with the heart is evident, for they necessarily become enlarged, lax, and bagging, as their tonicity and elasticity are gradually weakened or destroyed by constant and violent stretching. Of course such a state of the circulation—powerless, though rapid—favors the advent of melancholy moods, leading to despondency and suicidal insanity.

It is obviously impossible, in a brief paper, to go over the whole field of the mental and moral disabilities imposed by alcoholic indulgence. I will, therefore, omit further reference to the changes and diseases of the circulation, as factors in the disturbance, or the destruction of the reasoning faculties, and confine myself to the mental and moral incapacities immediately traceable to the toxic effects of alcohol upon the nervous system. The drunken man is in a condition of partial anæsthesia. His sense of feeling is benumbed, and he unconsciously exerts an unusual roughness of movement in order to be assured that he is really in contact with persons or things exterior to him.

This indefiniteness in the sense of touch is one indication of the partial paralysis of the nervous system at large. Indeed the general insensibility of nerve will become apparent upon a very superficial investigation. The muscular sense is greatly obtunded - as is evinced by the staggering gait, the impeded articulation, the unfixed eye, and the distorted countenance. And so likewise the senses of sight, of hearing, and even taste and smell show indications of disturbed and restricted function in various forms of illusion and hallucination and incapacity when alcohol is dominant in the system. Partial paralysis oppresses the ordinary senses, every one, when they are brought under the influence of alcoholic liquors. Paralysis, in whatever degree it exists, withdraws function in a corresponding degree from the control of volition. No effort of the will can remove, to the slightest extent, the incapacities of paralysis. In this respect the effects of alcohol upon nerve power differ from those of

opium and chloral and tobacco. Weakness, debility, prostration, respond in some measure to the calls of volition. Paralysis does not. Hence alcoholic responsibility is less in degree than narcotic responsibility. The organic nervous system is equally affected and equally disabled. The drunken man perishes from cold more readily than the sober man. Not only does alcohol abstract oxygen from the blood corpuscles and thus "slow" the ordinary physiological combustion of the organism, but it benumbs and paralyzes the heat centers* and sensibly hinders and oppresses their functions. It is absurd to imagine that alcohol would fail to impress the heat centers when its extensive influence upon the brain otherwise is so apparent and demonstrable. Here is the point where alcohol, by its paralyzing powers upon the heat centers, becomes a valuable therapeutical agent in reducing abnormal temperature in disease, "Alcohol lowers, opium raises temperature" -- says Dr. Norman Kerr in his recent work on inebriety. Alcohol paralyzes universally, opium does not.

The paralyzing property of alcohol is that through which it is enabled to masquerade in the character of a food—a food indeed, which very strangely possesses in its own nature no single suspicion of nutriment—a food "in a certain sense" as it is described—in short, a "waste-restraining food," whatever that may be. Well, what may that be? This: When eggs, milk, beef, potatoes, etc., have nourished and built up the bodily structure, alcohol, by its paralyzing powers and properties, interferes with and prevents the natural and physiological waste of the body; and thus it keeps locked up in the system for a period of time longer than is natural matters which otherwise would have been cast out as effete and poisonous. "Food" is an excellent

^{*}These centers are: 1st, in front of, and beneath the corpus striatum; 2d, the parts on the median side of the nodus curiosus; 3d, the parts about Schiffs crying center; 4th, the anterior end of the optic thalamus. These centers are exciting or inhibitory according to the kind of impression sent into them by the peripheral nerve endings. They are inhibited by the paralysis of alcohol.

เลยัสสมาชิกเกาะ

name indeed; and if in arriving at the goal food, alcohol is compelled to take a long, dark, and tortuous way, still once there a "good name" will, at least for a time, rehabilitate somewhat a reputation badly tattered.

But all these disabilities imposed by alcohol upon the several senses, and upon the universal nervous powers through paralysis, do not fully measure the disasters brought upon the human capacities and potentialities by that agent. Indeed they are merely elementary—simply the alphabet of the whole libraries of mental, moral, physical, and constitutional debasement and destruction. But, being elementary and alphabetical, they are, of course, the keys to the correct interpretation of all phenomena concomitant with and consequent upon alcoholic indulgence.

It is impossible for a mind, when the senses are obscured and lifeless, to receive accurate knowledge of persons and things exterior to it. And, if it were possible that such knowledge should, by any means, become the property of mind, still, universal paralysis of the brain, although limited in degree, would prevent the normal use of the reasoning faculties; and knowledge would become the basis of perverted and mistaken conclusions. Yet, again; if perchance the reasoning faculties should act with precision and clearness, the co-ordinating centers of the brain would be incapacitated for justly analyzing the quality of convictions, and the moral activities would be found halting and repressed. Moreover, even if the moral nature was not thus embarrassed, this same brain paralysis would effectually confound and dull the fine distinctions, essential to the formulation of proper and rational motive and choice - perplexing the will and precipitating an irrelevant and irrational conduct.

But in truth, if the receptive faculties are in good order, it may be presumed that all the other mental powers are probably in like order. I mean as a general rule; for I am not ignorant that moral insanity and imbecility of will are held by many to present independent features. On the other hand, if the receptive mental faculties are impeded, or modi-

fied, or insensible, it is presumed that most commonly all the other faculties, both of mind and sensibility, are likewise My friend, Dr. Crothers, has defective and unreliable. directed attention to a mental state, sometimes found in the alcoholic inebriate, which he has called alcoholic trance. Now if a person cannot see clearly, hear correctly, smell, taste, and feel accurately — if indeed he is in a condition of partial paralysis in his entire nervous system, he is very liable to lose his sense of personal identity—so far at least as to be oblivious to what transpires with relation to himself while in that state of incomplete sensibility. For it is the unimpeded action of the senses, and the feeling of a perfect concord amongst them - one with another - which give to a man the idea of his individual existence—his own, his personal identity. Now it is common for a person to say, after recovering from intoxication, "I do not remember anything that occurred." While this may be false, it also may be true, for the reason based upon science, as well as upon experience; namely, the drunken man is, in every instance, partially paralyzed all through. He is thus very prone to lose his sense of personal identity—that is, his sense of relationship with events and things exterior to him. He must be liable to lose his right sense of relationship with other persons and other things, because, being partially paralyzed through his entire nervous organism, he has no just and regular and natural sense of anything whatever. In fact the identity of a person which is associated with the impeded nervous power in partial paralysis is, to all intents and purposes, the identity of some other - some imaginary person with whom, when restored to his normal condition, the mind can have no links or chain of association. Thus considerable modifications in the sensibilities may eventuate in modifications of the sense of relationship which the sound mind sustains to all things else. Hence, though there may be a modified sense of personal identity incident to modified sensibility of nerve, this is not always recognized in memory when the mental powers resume their natural purity and perfection.

These incapacities are inseparable from the use and influence of alcohol—and even the moderate dram of ardent spirits will remove— (to some extent or other, great or small)—will in truth dislodge the human character from the highest position it is capable of occupying—that of a sound mind in a sound body.

Looking at this phase of our subject in any light we may, approaching it from any point of observation whatever, the conclusions are the same. Examine for instance, the capacities and responsibilities of the alcoholic inebriate from the standpoint of consciousness, and what do we see? Take the definition of Wundt, that "consciousness is psychologically a unification, although itself a unit." There is no nervecenter of consciousness, and the entire organism is essential to its exposition. "Thus perception, representation, idea, feeling, volition - form the continuity called consciousness, of which only tautological definitions can be formulated. Taken as a whole, consciousness embraces the following movements: first, impression; second, transmission to a nerve-center; third, general or vague perception; fourth, special perception (called also apperception); fifth, voluntary reaction; and sixth, transmission by the motor nerves." But all these elementary constituents of consciousness are benumbed, dulled, hindered, dwarfed in stature, repressed in function, and deranged in natural order of procession by the paralyzing influence of alcohol.

The rational faculty is not only injured by the influence of alcohol, producing as it does, confused, incoherent, and inconsequent ideas and beliefs, but the moral attributes are debased in an equal degree. The incomplete paralysis of alcohol necessarily overcomes the finer and mobile sensibilities and leaves the grosser ones comparatively unaffected. That is it destroys the humanitarian sensibilities leaving the coarser and purely animal ones nearly untouched. And this is simply the suppression of the distinguishing characteristics of the human nature and leaving in command the brutish and animal instincts without check or monitor. What follows?

The man does not wickedly and maliciously act *like* a brute, but he is in reality a brute himself through the loss or suppression of his humanizing sensibilities.

Latency of function is followed by difficulty of function—if not even impossibility of function through atrophy of structure. A curious exemplification of this principle is furnished by Dr. Livingstone, the famous traveler and philanthropist. He said that upon coming into the presence of his countrymen after years of absence among the black tribes of Africa, he was at home in everything except his own mother tongue. "I seemed to know the language perfectly, but the words I wanted would not come at my call.*

Nothing is more common than that men, after drunkenness, are amazed at the shocking things they have done, or thought, while in the state of intoxication - indicating the insensibility of the moral nature in drunkenness. But if the inebriation is incessant or nearly so, that is habitual, the shocking thoughts and deeds are not subjects of rational review, and the latency of the moral sense becomes automatic, fixed, and congenial to a deformed and unsound reason. The mind may seem to know the nature of morality perfectly, but if wanted it will not come to the call." It is, therefore, not surprising that steady drinking, even when not excessive, as more disastrous in the final outcome than the convulsive sprees of the neurotic inebriate. In the former the moral and mental incapacities become at length habitual and insurmountable, while in the latter, the intervening seasons of total abstinence prevent the establishment of habitual disability in the nervous powers. This looks bad for the daily beer and wine drinkers.

A medical gentleman of my acquaintance has been a steady drinker of ardent spirits for over thirty years. His moral nature is latent, if it has any real existence at all. He is not vicious or malignant, but he is an incessant and shameless liar — shameless because insensible to shame by reason of the long continued suppression of his moral sense through

^{*} Explorations in Africa, p. 436, G. G. Evans, 1858. Vol. X.—31

the chronic and persistent influence of alcohol. He must always have something to say that will surprise his auditors.

Now this seems very foolish indeed, and likewise very inoffensive. This man in fact is, right here, on the verge of insanity. Amongst the great army of the unrecognized insane, there are none more common or more really dangerous than the chronic and steady drinkers of ardent spirits. men in early life acquired the usual habits, both of thought and action, that belong to the average citizen. Habitually or automatically, with the guide and assistance of the example of others, they manage, without much effort, to keep in the ordinary grooves of common life. If such a man is a farmer, automatically he farms as others do, and in a judicial inquiry, should that fact be established, it very likely proves nothing. If he is an artisan, or physician, or lawyer, he may, by force of habit and of example, pursue his avocation with reasonable success. But let some supreme crisis intervene, so as suddenly to throw him upon his own unaided powers - let instant rage, or what is more consonant with his nerve defect, jealousy, come over his mind and disposition - he will then be thrown out of the grooves of automatic life; then, acting upon his own true nature, he heralds to the world his real condition. Then desperation, murder, suicide - true representations of his actual mental state will burst unexpectedly and without warning, upon the scene. To most chronic inebriates this crucial test of insanity is never applied; they live without recognition and die with their great and dreadful infirmity unknown and unsuspected.

There is another great field of inquiry related to the Medical Jurisprudence of Inebriety. It is the field opened by that property of alcohol which promotes proliferation of the interstitial tissue. This field covers the whole organism, for the connective tissue goes every where. Dr. Silveking asserts that "there is scarcely a degenerative condition of the body that may not result from the abuse, or rather the habitual use, of ardent spirits"; while Dr. Maudsley speaks of that "more dangerous form of habitual indulgences in small

must

litors.

very

rge of

ed in-

erous

These ought tually ample

n the

rmer,

quiry,

hing.

force

nable

sud-

et in-

efect,

thén

cting

real

epre-

tedly

ronic

they

read-

the

ened

n of

ism, king f the

abis of

mall

quantities of wine or spirits throughout the day by which some active men of business endeavor to spur their overtasked energies."* The alcoholic structural affections of the stomach, the liver, the kidneys, and the brain are familiar to all.

But I will not enter upon this portion of the subject at length, for time and space admonish me to forbear.

Dr. Ridge, secretary of the British Medical Temperance Society, has issued a circular calling attention to the fact that three distinct medical declarations concerning alcohol have been made in the past fifty years in England. The first statement was made in 1839, and was a general protest against the indiscriminate use of alcohol. This statement denied that alcohol had any value except in disease, and used In health was always disastrous to the organism. It was signed by Drs. Benjamin, Brodie, Clark, Cooper, Ferguson, Hall, Good, Mayo, Hope, Quaine, and a large number of the leading medical men of Great Britain. The second medical declaration was made in 1847, and signed by over two thousand surgeons and physicians. It affirmed the same position of the first statement, and asserted that crime and misery was largely due to alcohol, and that total abstinence was absolutely necessary to health. In 1871, a third declaration concerning alcohol was made, and signed by a very large number of physicians, reaffirming the same facts in stronger language. Dr. Ridge now wants a fourth statement and declaration by the profession, and calls on the medical men to send him a card giving their opinion of the three previous declarations, and how far they are correct to-day.

Blood degeneration and blood poverty is always followed by thought generation and thought poverty.

^{*}Path. of Mind (Appleton, 1880), p. 434.

THE PROHIBITION QUESTION FROM A MEDI-CO-LEGAL STANDPOINT.

By C. C. FITE, M.D., KNOXVILLE, TENN.,

Ex-Secretary Tennessee State Board of Health, and Assistant Physician East Tennessee Hospital for Insane.

They may fail to secure practical prohibition, or they may succeed, but whatever the ultimate result of their efforts, one thing is beyond doubt, and that is, that they have convinced the world that something must be done to curb the great evil, intemperance. That something will be done, no student of history can doubt. The agitation of such a question kept up unceasingly, with so much vigor, by so many elements of society, finally permeates every household and every center of thought.

The evil being recognized by every one, the only question is how to correct it. Many measures, such as high license, local option, etc., failing to reach the trouble, absolute prohibition of the manufacture and sale of alcohol becomes the battle-cry of the enemy of intemperance. It is probable, however, that there are other ways to correct the danger which threatens, and not only threatens but destroys, so many. There may be a time when prohibition will be universal and actual, but long before that is possible the writer believes the vital issue—the prevention and cure of drunkenness—will be reached in another way, and that practically and by common consent.

The proposition is this: Has a man the right to be a drunkard? If we admit that he has not, we are ready to proceed with the remedy; but all will not admit this position. They will cry out liberty! Individual liberty! And the right of the individual to do as he pleases will be forever

their watchword. Has the individual such a right? Has he the right to disgrace his family, and to impoverish his wife and children? Has he the right to have children to inherit his weakness? Has he the right to transmit such tendencies to the unborn? Instances might be selected of men without family or ties of any kind, and the position taken, that no one is hurt but themselves; but how is there to be any security that they will not ultimately commit some crime, or at least become cares to the public as lunatics or as paupers? Does the individual have such a right? It seems to the writer that the unincumbered individual has no right so to live as to damage society and become a burden to the public. It is sheer madness to claim the right of the individual, who has a family, to drink to excess. There is one phase of the question which we avoid as much as we can in debate — the painful one of inheritance—the heavy drinker may see in his children the result of his debaucheries, in most cases the same vice, in others the nervous or the insane diathesis. The tendency to crime or moral irresponsibility is a sad heritage to give to children begotten in the bestiality of drunkenness. These tendencies are natural results following causes easily understood by the physiologist.

Society has the right to protect itself, and taught by the stemperance fanatics" it will, as one man, in the not distant lature, ask for protection and will get it. How? In this way: Drunkenness, inebriety, dipsomania, or whatever scientific term we may be pleased to give to the habit of excessive drinking of alcoholics, will be considered and regarded as a disease, as we regard insanity, and the individual so afflicted will be treated and cared for as though he were actually insane. This proposition may startle those who have not watched the development of thought in the medical world, more especially among physicians who have had charge of the insane, or of drunkards, or who have been so situated as to have to treat inebriates; but the subject is not new,—if the writer cared to burden this essay with quotations and references, pages could be filled with them. The ground has

been so fully covered, that there is very little new to say on the subject, and we can only reiterate what has been said by others scores of times.

There are several ways to look at this question: One is the philanthropical, which would lead us to regard all crime and all vice, including the vice of evil habits, as inherited tendency, and therefore beyond remedy; but society cannot afford to take such a position, now at least—civilization is not yet old enough for it. Then there is the legal view. Crime, including drunkenness, is the fault of the victim himself, and he must be punished. The medical view is to regard dipsomania as an unconquerable tendency, an ungovernable passion, a weakness from which the victim cannot escape, or but rarely, by his own unaided efforts, and he has the right to protection against himself and society against him. It would, perhaps, astonish the astute criminal lawyer to know that a large per cent., perhaps a third, of the inmates of our asylums for insane know right from wrong as clearly, on most subjects, as the best of us; but the trouble is to keep from doing the wrong. The absurd question so often put to the medical witness: "Does the person, in your opinion, know right from wrong?" and if "yes" is the answer, the jury is afflicted with an oration hiding the truth and making a farce of science. Whatever may be the law in any given State, whatever may be the theory of the law, insanity is a disease leading to abnormal conduct, and there is often no discernible boundary line between insanity, drunkenness, and crime. If the world is not ready to admit the medical theory, then it is feasible to regard dipsomaniacs as criminals, and so treat them and prevent criminal conduct by incarceration in asylums or hospitals. One admirable suggestion is to have asylums for inebriates, and send them for one year, then if the habit is again given way to, for two years. If this does not conquer the passion, commit for life, subject to parole on good conduct. If the individual is a laboring man or without means, and has a family, give him steady employment in the institution, and apply part of the proceeds of his d by ne is rime rited nnot n is iew. himregovnnot has inst vyer ates arly, s to ften pinver, and any nity ten ess, ical als, er-

is

ear,

Ιf

to

ıan

oy-

his

y on

labor to the support of his family. If a man of means, his affairs to be placed in the hands of trustees, and a certain part set aside to pay his expenses, and the remainder held in trust for his family or heirs. Such institutions should be, and could be largely, if not entirely, self-sustaining. The inmates to be treated more like insane than criminals, and if the first and second detention does not work a cure, then they are prevented from doing further harm. If this seems utopian at first sight and out of the question, look at the facts. in many, if not all, public and private asylums, there can be found men and women who are insane in no sense except in one habit, and who are treated and cared for as insane. No one ever seems to object to it, and the law winks at it. fact shows the drift of unconscious public sentiment. It shows that society does regard such men as practically insane. Why should not the man with an ungovernable habit, which will lead him and all who are dear to him to sure destruction, be regarded as powerless to act for himself, just as the suicidal maniac is. Should the kindly friend and good father, the true and loyal husband, who has gradually and unknowingly drifted into inebriety, perhaps from a vicious and weakly balanced nervous system, inherited from his foreathers, be allowed to become a dishonest friend, a brutal ather, and a vicious husband, simply because he cries out or personal liberty? Have his children, his friends, no night? Has his wife no legal or moral status? Shall he go on procreating unfortunates like himself, to in time, perhaps, poor-houses, jails, and asylums? The strong arm of a denign and merciful law should stop him and show him that he must control himself or be a prisoner. If drunkenness led to financial troubles in families only, it would be bad enough, but go to the asylum and see the haggard woman moaning out her life; ask her history: a united family where life and love ruled supreme; the husband drinks and drinks again, is abusive, and in his cups is untrue to his wife. The grief, the shock, the madhouse. Is it an overdone picture? Then visit another ward of the asylum and see a father, a

demented imbecile, with a brain burned out by alcohol, a son dead from drink, a daughter in a brothel, the wife a pauper begging her bread. Watch the record for a few generations and see how often that father's name will be repeated in the list of insane. Has the individual that right?

Such things must end; the world is growing too old to be so burdened. There must be some way to curtail the growth of the irresponsible classes. Is there a better way than to say to such unfortunate men, "The right of the individual is to enjoy and to build up, and not to destroy; you can go no farther, there is a limit; anarchy in the social and domestic world is not to be allowed; liberty is not license, and you shall not burden the world with your crimes and with descendants to imitate you."

The doctrine of inheritance is a hard one, but founded on immutable law. The seed that is sown is a promise of the plant that is to grow. What use is it for the mother to teach her children virtue and self-discipline if the father or grandfather has transmitted an innate vice of constitution? How hopeless is the struggle of the man with such vice in his blood to be a man, with the voice of pleasure constantly singing sweet lullabies in his ear.

If the reader had listened to the sad history of the victim of habit; had heard his hopeless story, his earnest desire to reform; had seen his attempts to be firm, his sad failure. If the reader had been the physician and friend of such men, often, too often, men with otherwise noble aspirations, and seen the hopeless struggle against self, then ready assent would be given to such a proposition as this paper makes, and as the writer believes to be the final solution of the problem.

Some one has said: "The fanatics of one generation are prophets to the next." We should not make war on the prohibitionists, if they are fanatics, but all the laws that could be enacted would not prevent the dipsomaniac from procuring, or as a last resort, making alcohol. To shut him away from it under legal restraint is the only remedy for the worst

, a son pauper rations in the

d to be growth han to dual is go no mestic ad yo ith de

ded on
of the
teach
grandHow
in his
y sing-

victim sire to re. If men, s, and assent makes, of the

on are could could away wors

cases. This plan does not mean punishment; the idea is that of protection and restraint; and it does not make any false promises or delude any one, it only guarantees the prevention of drunkenness in the individual by keeping him absolutely removed from temptation until he has had an opportunity to be freed from the effects of liquor, and to cultivate self-discipline, and it also guarantees to him that self-restraint and the conquering of the habit which will lead to liberty and the enjoyment of life, while a return to it will surely result in his liberty being again curtailed, and if he cannot break the chains, then permanent protection against himself and his enemy, alcohol.

It has often occurred to the writer, in watching the promoters of the prohibition idea, that they were fighting the club that slew the victim, instead of seeking out the enemy who wielded it,—the demon habit, who with insidious tread stole upon the victim unawares until he could strike the blow and place the mark on the unfortunate as his slave.

If, then, prohibition does fail to prohibit; if the drunkard is still found on the street in spite of there being no saloon and no distillery, the prohibitionists will, as philanthropists, he ready to welcome this proposed remedy. This reform may be delayed until that time, but it may be turned to before that, upon the failure of prohibition being generally voted in and sustained; and whenever the time does come for such a movement, it is almost a certainty that the temperance agitators will have prepared the way and have cultivated public opinion so that it will be accepted as the remedy after all.

All reformers are extremists, it is said; then let the prohibitionists be considered extremists, fanatics, or anything else that suits the fancy of the constitutional obstructionist, but let us be sure at the same time that their cause will win in some way, in their own way or in some other, but the result will be reached in the general acceptance of the proposition that drunkenness must be checked; that crime must be prevented, and that the future generations have a right to

VOL. X .- 32

protection against the inheritance of such tendencies and such influences.

If there is any better remedy, time will develop it, and the experiences of the first attempts will teach more perfect methods; and it is beyond doubt that there will be no retrogression, that it will stand for all time like other reforms, fought bitterly at first, and then accepted as priceless boons by mankind. It is only necessary to ask the reader to recall the fact that all reforms, all revolutions, are at first regarded as utopian, fanatical, and absurd. Yet the high degree of civilization and true liberty we enjoy to-day results from reforms which were at first met with derision from the wits, with scorn from time-servers, and with contempt from the ultra-conservatives; and yet the reform succeeds and the opposers are forgotten, or only remembered as examples of the kind of men who fight against the inevitable, and whose only creed is a negation.

It is not necessary at this time to go into a detailed statement of the experiments already made in this direction. The times are, however, nearly ripe for such a movement, and the writer desires to call the special and careful attention of those members of the medical profession to it who have not yet considered it. The question is a vital one, and no portion of the community knows the great need of some remedy more than the medical profession, and it behooves the physician, who is always, or should be always, a philanthropist, to think well and carefully on this remedy for intemperance, so that when the time comes to spring the issue he will be ready to lead public opinion into the true channel, and at the same time check the extremists. The issue will come in this generation. The world moves rapidly now, and the leaden ways of our forefathers are thrown aside, and as the world moves rapidly so does thought, and he who would not be lost in the mire of delay must act now and think now; and it is very apparent that this great question which is agitating the civilized world through and through, will some day be suddenly crystalized in the line proposed in

t from the

ls and the

xamples of

int.

and whose ailed state-direction. movement, il attention who have ne, and no d of some t behooves ays, a phiremedy for spring the to the true iists. The

to the true ists. The ves rapidly own aside, and he who t now and at question d three h, propole in

this paper, and when it does come the medical profession should be found ready to applaud and lend a helping hand; but why not lead in the movement? It is the sacred duty of the physician to protect and advise the people against danger, and as he would show the way to avoid disease, so should he show the prevention against the worst of all diseases, the cruel, remorseless disease, drunkenness. The demon with blood-shot eyes, and hot, scorching breath, destroying as he goes, and leaving wounds and bruises and crimes as his tokens; the viper who sucks the life-blood from the infant in the cradle, and stings the helpless wife until she dies in agony; the siren who lures the son to death, and leaves the mother to mourn that she was ever born to be a mother.

There is a remedy for this disease, this worst enemy of man in modern times. If the insidious foe cannot be destroyed, then protect his victims from him, put them beyond his grasp, and save them with a merciful but firm hand.

The following list of medicines are advertised as cures for inebriety, writes a valued correspondent. The State Board of Health of Massachusetts ordered an analysis of them with the following results, showing the per cent. of alcohol in each one: Scotch Oats Essence, 35; The "Best" Tonic, 7.65; Carter's Physical Extract, 22; Hoofland's German Tonic, 29.3; Hop Tonic, 7; Howe's Arabian Tonic, 13.2; Jackson's Golden Seal Tonic, 19.6; Liebig Co's Cocoa Beef Tonic, 23.2; Mensman's Peptonized Beef Tonic, 16.5; Parker's Tonic, 41.6; Schenck's Sea-Weed Tonic, 19.5.

Wherever inebriety is practically unknown, there theory and speculation flourish luxuriantly. The absolute confidence and precision of detail with which these theories are explained is a matter of surprise, particularly when they are based on no definite facts. Often these theories are both incapable of proof and disproof, hence it is useless to attempt any argument concerning them.

THE HOTCHKISS CASE,—A MEDICO-LEGAL STUDY.*

By T. D. CROTHERS, M.D., HARTFORD, CONN.

On the 16th of October, 1886, Henry S. Hotchkiss shot and killed his wife, then shot himself: the ball glanced and produced only a slight wound from which he recovered. He was indicted for murder, and by advise of counsel plead guilty to murder in the second degree, and was sentenced to prison for life.

Thus the criminal and the crime was disposed of, but the equity of the case was not considered or even approached. The individuality of the case is of minor interest, but the principle of dealing with the crime and criminal is vital to all progress and civilization. The question is asked, was this sentence in accord with the facts, and was it proximate justice, sustained by the best legal and medical knowledge of the age? Was this disposal of the criminal just to society in the cure and prevention of crime?

A brief history of the man and his crime will aid in answering these questions.

H. S. Hotchkiss was born in 1846 in Hartford, Conn. His father was an inebriate and deserted his wife soon after the birth of the prisoner. His mother died of consumption a few months later, and the prisoner was placed in an orphan asylum. He was said to have had rickets and been a feeble child. The deformity of the sternum and cortal cartilages, which he affirms always existed, seems to sustain this statement. No record of his father's family can be obtained. On the mother's side two aunts had consumptive, insane, and weak-minded children. One of his sisters died in

^{*}We are indebted to A. S. Bill, Esq., one of the counsel for the defense, for his very intelligent and appreciative study of the facts of the case.

EGAL

kiss shot

nced and

ed. He

enten.__

, but the

roached.

but the s vital to

ked, was

roximate

wledge of

o society

ill aid in

d, Conn.

oon after

sumption

an orphan

n a feeble

artilages,

this state-

obtained.

e, insane,

s died in

: defer

el p!

When twelve years old he was bound out to a farmer, with whom he lived five years. At about puberty he was seized with severe headaches, which have continued at irregular intervals down to the present. When about fifteen he was suddenly unconscious for a few hours, and sick for several days after. This came on after a paroxysm of headache. A year later a similar state of unconsciousness occurred, following a headache. He thinks this was some form of sunstroke, as it occurred in the harvest field. He was addicted to self-abuse from the age of ten up to twenty five, and thinks he suffered from this, in weakness and nerve prostration. After the first attack of unconsciousness his temper changed, and from that time on these severe headaches were always preceded by great irritability, suspicion, and sensitiveness. This at times merged into mental confusion, and stupidity.

From his own and sister's statements it appears that these paroxysmal headaches have always been preceded by alterations of temper, mental dullness, and incapacity, more or less prominent, for a time. When nineteen years of age he enlisted in the army, and was first a waiter and then a drummer. Had in New Orleans a severe fever, during which he was unconscious for several weeks. He was discharged and came back, and worked in a shop and on a farm for some time. From ill health he gave up this work, and later enlisted in the regular army as a musician. He temained here five years, and began to drink beer to strengthen him. Was injured on the head by a falling timber, and suffered more headache from this. Since his discharge from the army has worked in different shops, been a night watchman, and also musician in a band. He has changed places frequently, owing to ill health and other circumstances. He began to drink beer to excess in the army, and continued from this time on.

When twenty-six years old he married, and was very

devoted to his wife. They had four children, and were very poor; and often it was diffcult to procure proper food and comforts. He was weak and nervous and could only do light work. At intervals he drank beer or spirits to excess with his friends.

During this period he lived most amicably with his wife. Two of his children died suddenly of diphtheria, and he suffered from a severe attack of the same disease. He was laid up nearly two months, and was delirious and unconscious for over a week. He thinks he never fully recovered from this illness, and has been weak and more nervous than ever before.

Soon after the death of his children his wife began to spend much of her time away, visiting friends and neighbors. He thinks that his wife lost all ambition to do well after this event. She seemed to take pleasure in the company of other men, and would go away riding with them, and come in late at night. He could not sleep, and had recourse to alcohol, and was stupid often after this, and also was discouraged and angry at the conduct of his wife. The evidence of her infidelity increased, and she acknowledged it, obtaining his forgiveness on the promise of a change. He wanted to win back her love, and move away into a better neighborhood.

'He consulted his brother-in-law, who remarked: "That he would put her out of the way if she was his wife." This idea seemed to have suggested violence. Soon after this his wife told him that her paramour would shoot him if he disturbed her illicit relations. He bought a revolver when intoxicated, saying he intended to shoot his wife and paramour if he found them together. When sober he said he purchased the pistol to defend himself; that he would not shoot any one unless they tried to shoot him.

The year before the crime was committed was one of great wretchedness. He drank continuously, quarreled with his wife, threatened her often; was absent-minded, talked to himself, could not sleep unless using large quantities of

ood and only do excess

he suf-He was unconcovered ous than

egan to ighbors, fer this pany of ad come burse to discourevidence obtainle want-

"That
"This
this his
he diser when
nd parasaid he
ould not

r neigh-

one of led with . talked tities

spirits; was poor, did not have regular food. Complained bitterly to others of his misfortunes, and drank to stupor to drown his troubles; was unfit for business, and was discharged from the band. He could not keep his mind on any work, and seems to have been unable to do anything satisfactory. His wife spent most of the time away from the house, only occasionally returning. Finally he broke up his home and lived around wherever he could find a place to work and sleep. In October, 1886, he had drank more than usual, and had been more delirious, wandering round, talking to himself, and complaining of his wife and situation to others. About 1 P. M. on the 16th day of October he saw his wife on the street in company with a woman. He called to her to stop, as he wished to speak to her. She answered him derisively, and continued on her walk. He called to her again, using a familiar name, to which she paid no attention. Suddenly he drew his revolver, fired three shots at her, then placed the pistol to his head, and fired again. She died at once; he was taken to the hospital and found to have only a flesh wound, from which he recovered.

His statements before the coroner's jury were clear and consistent, and detailed all the facts up to the shooting; bom this time all was a blank up to his recovery in the hospital. He seemed in a state of despair, and wanted to the but generally did not appear to realize the nature and character of the crime. He spoke kindly of his wife, and cherished no bitter feeling against any one. His health improved greatly in jail, and except the old severe headaches a times, nothing unusual was noticed. He read the Bible and talked rationally, and appeared more weak and inoffensive than willful and designing.

On my first interview, Feb. 20th, he told the story of his life with frankness and candor, and seemed in no way inclined to conceal anything, and displayed no particular depression of mind. He talked of his eldest child who was weak minded, and the second child who was greatly attached to him, and the great affection he had for his wife. He

222

had frequently dreamed of her, but seemed to have no hallucinations or delusions. He seemed deeply interested in religious topics.

On the second interview, March 9, 1887 (after the sentence to prison for life), he was much the same. No change except his religious convictions had deepened. He said the devil had possessed him, and had urged him to die and go to hell, and be with his wife. He had escaped by reading the Bible, and was convinced he could sin no more, for Jesus was his friend. He seemed to derive great pleasure in opening the Bible at random and considering the passages as special messages to him. He thought he was going to die soon, as he had seen the glass fall and break to pieces. A general impression that religious delusions were coming on was apparent in this interview. The keepers say that when he suffers from headache he is really crazy. His mind and conduct at these times is greatly changed.

From these general outlines in the history, the following conclusions seem to be fully sustained. I. Hotchkiss was insane at the time of the homicide, suffering from acute alcoholic delirium. 2. He was a neurotic from birth, inheriting an unstable nerve organization. The paroxysmal headaches and states of delirium were symptoms of continuous brain degeneration. The use of alcohol was only a stage in the march of the brain disorder. 3. The shock at the death of his children seemed to fix and develop the acute alcoholic delirium, making him more and more unconscious of the nature and character of his acts.

From this time on to the commission of the crime, he was insane and without power of control. He was acutely delirious, melancholy, and homicidal, depending on physical conditions and surroundings. The suggestion of crime by his brother-in-law found fertile soil for growth. The infidelity of his wife was an exciting cause, and an accident in the progress of the case, developing a condition that might have been delayed for years. But sooner or later acute mania would have appeared, or suicidal melancholy. The use of

alcohol only gave form and direction to the march of degeneration. The crime was committed in a trance state and without any recollection or consciousness of what he did. His appearance of sanity in the jail and at the time of trial was no evidence of his real mental state. His health improved on the removal of spirits, but the paroxysmal headaches remained, proving that the disease still existed.

hal-

d in

sen-

inge the

 $_{
m d}$ go

ding

for

sure

ages

g to

ces.

th**at** rind

ring

was

eut**e** erit-

ead-

ous

age

the

ute

ous

he

ely

cal by

lity

he

ive

nia

of

It is clearly apparent that the sentence of Hotchkiss as sane and responsible was an error, and wrong in principle and in fact. It was a reflection on the intelligence and the civilization of the day, that an insane man should be regarded as criminal and treated as responsible for his conduct. Justice demanded that such a man be examined by a medical commission, and his real state discovered, and from this his treatment or punishment be determined. The principle of all justice to society, to the criminal, and law and order is outraged by treating the lunatic as a criminal, practically destroying the victim and making restoration impossible. Society gains nothing, human rights and protection by law gains nothing in punishing such cases. Crime is never diminished or criminals deterred from committing crime by such blunders.

The use of methylic spirits as a drink has been noted in Edinburgh, and the authorities have taken measures to stop the sale. In this country, methylic spirits are used more and more in the low saloons without attracting any attention. This is apparent in the acute delirium and paralysis so often seen in the cases that are arrested for intoxication on the street.

A man who had drank spirits to intoxication every night for at least fifteen years, was pronounced sane and conscious of the nature and consequences of his act by a medical commission. He was convicted of a forgery that was without object or reasonable purpose.

ALCOHOLIC HALLUCINATIONS.

By Dr. F. LENTZ.

Medical Superintendent of the Insane Asylum at Tournai, Brussels.

The dominant character of chronic alcoholic hallucination is a sensorial delirium, which gives a peculiar tinge to the morbid idea, without supplying the foundation for it. This is rather epiphenomena, which may be quite short, appearing and disappearing from light causes, then becoming more acute, continuous, and often accompanied by rapid delirium, which results in a real attack of delirium tremens.

It is usually in the sphere of physical sensibility that we find the first symptoms of alcoholism, which are characterized by phenomena of diathesia. Among the symptoms may be mentioned general disquiet and distress, giddiness, creeping sensations, explosions, shooting pains, and many strange sensations, like that of an animal scratching the skin. These phenomena appear at bed-time, and may be the result of changes of temperature, or moral emotions. At first they are limited to the feet and hands, then they creep up the limbs, rarely passing the knees and elbows. This diathesia is accompanied by increased and diminished sensibility. The former is general or limited, spontaneous or provoked, and can be observed along all the nerves, prominent by painful unrest, heat, and tension, and finally by shooting pains which make the patient scream. In the latter, both partial and complete loss of sensibility, preferably limited to the skin, and in most cases to the inferior extremities. Sensations of temperature may be perceived, but are not acute. The organs of sense are likewise affected. Among these vertigo is more prominent, especially in the morning. This is followed by troubled visions, change of color in objects, and other subjective sensations, which run into veritable hallucinations.

The special senses share in this disorder. The sensation of respiration is impeded, and a feeling of restriction ensues. The disorders of motion are more pronounced than those of sensibility. Tremor appears in the morning, or from any slight causes, beginning at the extremities, and becoming general. Oscillation while standing, also difficult walking follows; stuttering, and diminution of muscular force; not infrequently followed by cramps, or spasmodic contractions.

It is in the sensitive-sensorial sphere that these phenomena become apparent, such as dreams, followed by illusions, and culminating in hallucinations. The usual sleep is interrupted and filled with dreams of terrifying character, different from natural dreams, which lead up to natural nightmare. This phenomenon begins at night, and the dreams may not be distinguished from waking hallucinations; the sufferer may be most tormented when beginning to sleep, or awakening from sleep. Finally, these apparitions appear in broad daylight. While ordinarily these apparitions may be fleeting, sometimes they are tenacious, being determined by new excess or some moral cause. The moral sensibility is lessened, the sufferer is anxious and frightened, and continually looking for repose and peace which he cannot find, and pursued by a feeling which he cannot define.

The intellectual domain seems the least disturbed in appearance, although a careful examination will show that it participates in the general degeneration. He will continue his usual avocation, while often realizing the real cause of his disorder. To give courage he will resort to an excess of drink, thus producing delirium tremens, which is only an acute form of his chronic condition.

Hallucination seems to be the most prominent symptom of this form of alcoholism. They are subject to periodicity, but generally few in number, and always characterized by a double consciousness of his sanity and insanity on the part of the sufferer. This disorder culminates suddenly, as a rule, but premonitory symptoms will always express unrest, inconstancy, sadness, moroseness, irritability, usually with

insomnia. It is during states of this kind that, deceived by hallucinations, the sufferer is driven to acts of the most violent character. The following cases may illustrate the symptoms we have described:

S., thirty-six years old, drinks both wine and spirits. He has suffered for years from vomiting and vertigo, especially in the morning. Brutal and irritable impulses increase with him, and he threatens his wife's life. His wife drinks with him. From the 1st to the 8th of December they were both drunk all the time. From the 8th to the 16th day S. has delirium tremens, seeing processions, brigands, saints and angels, hears music, and sees cats. From the 16th to the 4th of next month his hallucinations leave him. Is weak tremulous, and incapable of work. In his troubled sleep the brigands seem to force their way into his room, and he suffers from headache and dimness of vision. At this date he is called away some distance on business. On this journey he drinks two and a half quarts of wine, which has the effect of making himself more or less unconscious of himself. He thinks he is in the midst of a herd of horses, or cattle, and is frightened, running for several hours, reaching his house much exhausted. Is there more quiet; talks to his wife, and drinks more wine. Suddenly he hears shouting, and sees brigands at the window pointing their guns at him. Getting his loaded gun, he thinks two red angels are at the window. Approaching them, he hears the discharge of a gun, and finds his wife on the floor, covered with blood. He then was heard to shout that his wife had committed suicide, The testimony of his servant shows that she heard the wife say, "Victor, thou art crazy!" immediately followed by the discharge of the gun. He had shot his wife through the head. He was possessed with the idea that his wife had committed suicide, and gave the impression that he wished to destroy himself. After arrest the symptoms of alcoholic hallucinations continued over a month. His memory of the tragedy continued vague, but in six weeks he conceded it might be a possible thing to have killed his wife. He recovved by most ite the

s. He

se with is with S. has s and to the weak, ep the nd he

s date ; jouris the mself. cattle, ig his to his uting, t him: at the

e of a
He
sicide.
e wife
by the
h the
had
rished
bholic

of the

led it

ecov-

ered fully, with the exception of slight feebleness of mind, slow pulse, insomnia, and great sensitiveness to the smallest quantity of spirits.

Case second. G., forty-one years of age. Is a hard drinker; suffers from catarrhal stomach and poor appetite, eating but little. On the 19th he feels better, resumes work which he has abandoned for some time, and drinks during the day three pints of wine. At eight in the evening, becomes restless and complains of heavy head; sees crowds in the street which threaten him. He calls the guard and causes the arrest of two people whom he points out. To his surprise, these are released when questioned. He is told to go home, and thinks he is pursued by menacing figures. In the house, voices call him the black man. He arms himself with knife and deals blows to these visions, until he is disarmed. The next day, is without fever, face congested, has tremors and sweats, slow pulse and turbid urine, sees rats and mice. Under the influence of chloral, sleeps convulsively, and wakes in the morning lucid. He admits the Illusions concerning animals, but not the crowds in the streets. He insists that had he not defended himself he would have been thrown into the river, as others were. His geep improves, but convulsive jerkings precede its coming. fallucinations disappear, but he is extremely excitable, somper, and morose. He recovers at the end of fourteen days.

Case third. T. had been an inebriate, for three years, of a periodical form; periods lasting three weeks at times. The effect of spirits was greater on his mind than on the body. Hallucinations appeared while playing with his child. An interior voice said to him that it was necessary that his son should perish at his hands. The dread of the thought caused him to put his son down and leave the house. At intervals the voice returned several times, urging this murderous act. Finally he awoke one night, hearing the imperative command to kill his child. He appealed to God, asking if he should do it. Hearing no voice, he returned to bed. Instantly the same voice urged him beyond all power of resistance. He

found a hatchet and did the deed. He then aroused the family, and gave every evidence of his horror and sadness at the act.

Case fourth. George, a heavy drinking man, was married to his second wife. After a period of sobriety, began to drink; this his wife opposed, making him very angry He went to his room and called his step-daughter to bring a light, then beat her to death with a stick. Rushing to his brother's house, he declared that he had killed a man and woman while defending himself. Exhibited no emotion on seeing the corpse of his step-daughter. George had a feeble-minded mother and an alcoholized father. He drank to excess from his nineteenth year; his record is full of eccentricity, irritability, and mental depression. So violent was he at times that seclusion was proposed. On examination, he was in good physical state, both ate and slept well After a rest his whole deportment was that of complete apathy, but subject to violent explosions without the least provocation. He gradually sank into a state of imbecility six months after.

Case fifth. Joseph B. was married when twenty-four. He exhibits an amiable and considerate disposition, and lives a regular life. Suddenly he exhibits an instinctive craving for drink, which is attributed to grief at an unfortunate event. His whole character changes, he becomes irritable and jealous, and at times is brutal to his family, except to For five weeks he complained of inhis youngest child. somnia, headaches, diminished muscular force, and melancholy. A few days prior to the crime, he seemed at times lost, and wept without cause frequently. On the day of the crime he was very restless. He attends his wife to work, then goes to the saloon, where he sits and speaks with no He goes from place to place with his little child, always silent and wild-looking. To a passer he said, "My little child and I are going to drown ourselves." Later, he was seen to tell the child to go home. The little one followed him, perceiving which he caught up the child and

dashed his brains against a stone, shouting, "This is the way I work!" He continued his walk in a menacing and aggressive manner, and wounded a woman before arrested. He showed no sorrow when confronted with his dead child; admitting his act, he said, "The world is upside down. I am not master of myself." A few hours later he tried to strangle himself. When placed in an asylum, he appeared mechanical, with an expression of mirth and self-satisfaction. All is vague and confused with him. He killed his child in obedience to voices, and thinks the world is turned upside down.

11

а

is

n

a

ık

οf

nt

all. te st

ty

IT.

es

ng

ιte

ole to n-

m-

es he

rk,

no Id.

٧I٧

he

olnd These cases show, by their suddenness and irresistibleness, that they proceed from a brain lesion, and also that emotional delirium is a corollary of the delirious conviction which produced the murderous act.

A very curious and suggestive bill has been introduced into the legislature of Kentucky, which prohibits marriage with an idiot, lunatic, pauper, vagrant, tramp, drunkard, rambler, felon, or any person rendered physically helpless it unfit for the marriage relation, or any person with a violent temper, or who has, within one year, been a frequenter biany immoral house.

Dr. Fox, in the *Dietetic Gazette*, says in all cutaneous diseases, alcohol, tea, coffee, and tobacco are injurious. These substances seem to impair the functions of the skin, and arrest the reconstructive tissue process. Eczema is rapidly increased by the use of beer. Alcohol in any form checks the reparative action of the skin, and no treatment of these cases is successful where the patient is permitted to use stimulants, including tea and coffee.

THE CURABILITY OF THE INEBRIATE.

By C. F. BARBER, M. D.,

Assistant Physician Inebriates Home, Fort Hamilton.

It has been my fortune during the past six years to have seen nineteen hundred and forty-one inebriates. These unfortunates have come from all grades of society, and from lands far and near. There have been among them the periodical drinkers, the social club bibber, who drinks at all times and dotes on the quality and quantity of his liquors, and the common tramp, who drinks anything from pure alcohol to bay-rum or Worcestershire sauce.

The means of reform undertaken to correct the habit in these nearly two thousand intemperate beings has been as varied as their temperaments. Enforced restraint, mild persuasion, the no limit plan, allowing the free use of stimulants with the hope of disgust, medical treatment, and even the popular craze "mind cure" has been brought to bear upon these patients by their ever-hopeful friends. But what has been the result? Here opinions are at variance. Statistics are impossible to obtain, owing to the inability to keep the patient under observation for any length of time. The result to my mind is far from satisfactory. I believe the per cent. of cures of inebriety are less than those of cholera. I mean when I speak of a cure, where the patient has not relapsed for a year or more. Some who have had dealings with these unfortunates consider they have gained success when the patient has remained apparently sober (I say apparently sober, for I am certain that many of the so-called cures have a "quiet still on" the greater part of the time) in the eyes of his friends. In general practice we do not consider our patients in health when they are suffering from any ailment, no matter how triffing or when they complain from time to time, and why should an exception be made in the

case of the inebriate? That which is inborn is, in my opinion, just beyond the line marking the curable from the incurable. From these two thousand patients it would be a difficult matter to select ten per cent. who have not been obliged to seek aid to restore them to a healthful state; their ill health having been caused either by a continual debauch or a spree of varying duration. Many have died, and of those who have passed from the ranks I have endeavored to ascertain the cause of their death. The mortuary record fails to announce one who has died a natural death. The use of stimulants has been the cause either direct or indirect. Some have given up the battle, and to protect themselves have entered some of our many institutions for the care of such unfortunates. Many have told me that it is a useless endeavor for them to try to control the habit. They say they have the craving, not for the liquor, but the effect which they constantly feel in need of.

When the much honored Alonzo Clark, M. D., used to state to his class that phthisis was curable, how startled would many of his hearers be, and sometimes even the sleepy ones in the back seats would wake from their revery. But how much more astonishing and gratifying would the announcement be that inebriety has been mastered and a course portayed by which we might hope for success. The disease, I car, is a more hopeless one than phthisis, the sources from which the habit originates are so numerous that our hands seem tied in endeavoring to grasp the exact cause and so feat the malady. While hereditary taints, syphilis, epilepsy, as an onthing of the social and moral sources, are to be sombatted with, our last is a most discouraging one, yet we hould not despair but by strenuous endeavors seek for the hidden cause and hope for success.

I must make some apologies for this paper owing to my inability to turn to statistics, and rather than rely upon my memory, have purposely omitted them. The point which I wish to convey to the reader of this article is, that while the proportion of cures is so small, it is, in a great measure, due to the lack of attention given to the source of the disease.

CLINICAL CASES IN PRIVATE PRACTICE.

By Dr. McCowen, Davenport, Iowa.

Case 1.—Miss A., aged 32. Milliner. Father subject to paroxysms of ungovernable rage without adequate cause. Mother neuralgiac. One sister an epileptic. As a child was delicate and nervous, with frequent headaches, yet attained womanhood without serious illness. Was slender and pale worked constantly beyond her strength in ill-ventilated rooms. During busy season worked far into the night for weeks at a time, keeping herself awake with strong tea. Had blinding periodical headaches. One day was shocked by a boy rushing into the store and abruptly announcing the drowning of a younger brother to whom she was devotedly attached; immediately after the limp and dripping body was brought in, at sight of which she fainted away and lay insensible for some time. An attack of brain fever followed from which she convalesced but slowly. Was obliged to resume her duties at the store while yet enfeebled and unable to do a full day's work. Did not gain strength, had frequent palpitation of the heart, obstinate constipation, sleep irregular and disturbed by nightmare, was unhappy and depressed. On one occasion when unusually exhausted, a large order came in necessitating protracted night work. The only way in which it could possibly be accomplished was by resorting to stimulation. From this time on she had morbid craving for stimulants, which nothing else satisfied, which no resolution of her own could withstand and which she gratified by stealth. Gradually her character seemed to change, she became irritable, capricious, and exacting, and finally, after an undue indulgence, had an attack of wild delirium which revealed her condition to her employers and her family. Her course was now from bad to worse. Her condition was aggravated by

bitter upbraiding and unwise altercation on the part of her father. Protracted drinking alternated with intervals of deep and pungent remorse. But in vain did she resolve and reresolve, neither threats nor entreaties could prevent the recurrence of the paroxysms, and finally death came to the relief of the unhappy sufferer and her equally unhappy friends.

ct to

ause.

was

ined

pale.

oms.

ata

ding

rush-

ng of

; im-

it in,

some

she

uties

day's

n of

ırbed

asion

ating

could

tion.

ants,

own

adu-

able.

ndul-

her

was

d by

Case 2.— Mrs. C., aged 25. Two children, youngest fifteen months. Did not get up well from her last confinement. Labor protracted, forceps delivery, post partum hemorrhage, inducing general debility and nervousness which persisted for weeks. Was faint and dizzy on attempting to rise, sufered from backache and other symptoms of uterine disorder. Her physician recommended wine, which promptly relieved the horrible sinking feeling, and was resorted to with increasing frequency until something stronger was necessary to satisfy the uncontrollable craving, and whisky and finally brandy was indulged in freely. From being a most exemplary wife and devoted mother, she became entirely indifferent to her children, irritable and abusive, appetite capricious, bowels onstipated, had violent attacks of neuralgia, and at each scurring menstrual period, notwithstanding the entreaties ther husband, found it impossible to resist the insatiable aving for stimulants and drank to stupefaction. Uterine camination showed a patulous os and defective involution; terus moderately retroverted, depth four inches. This conlition, however, yielded readily to appropriate remedies, and partly by the most strict surveillance which kept temptation of her way, and partly by the exercise of strong willnower her impulses were controlled, though she never recovered her former even balance. About a year later an aborion with dangerous flooding again reduced her strength and brought to light the smothered propensity. Again the morbid craving proved stronger than maternal love or family Under the influence of proper remedial measures addressed to the physical condition she was restored to health and more gradually regained her self-control. At every menstrual period, however, the impulse is felt.

Case 3.- Miss L. P., aged 19. Factory girl. Father moderate drinker, with "sprees" on special occasions, as Christmas, Fourth of July, etc. Mother died of consumption shortly after L,'s birth. Stout and rugged. Menses appeared at fourteen, was so disconcerted and alarmed, never having had a mother's instruction, that she sat in cold water until the flow was stopped. It did not appear again for six months, and she has since suffered intensely from painful menstruation. For this the neighbor women administered gin and hot water in immoderate quantities, which gave temporary relief, and a habit was soon formed of resorting to stimulants on the slightest provocation. After appearing several times intoxicated she was discharged by her employer. Her father who had first bestowed the inheritance upon her, and then left her to grow up absolutely without care or attention, which might perhaps have kept the fatal taint in abeyance, showered upon her abuse and vituperation, and finally resorted to personal violence, but neither curses nor blows, nor hanging up by the wrists till she fainted from pain and exhaustion were sufficient to deter her from drinking when the "spell" came on. Finally, after all the resources of brutality were exhausted, the father, in righteous indignation, turned her out of doors. The only shelter open to her was a saloon, thence she readily found her way into worse quarters, and now, from time to time, she figures in the police courts as "drunk and disorderly." Charitable ladies have labored with her in vain, again and again have they been assured of her penitence and remorse, and of her determination to do better. Home after home has been found for her, but after an interval of good behavior, sometimes longer sometimes shorter, she has a headache, then a sleepless night, a day of feeling "all gone" with an occasional rush of blood to the head; she is depressed and in tears, then sullen and defiant, and on the third day she rushes out of the house and appears at the nearest saloon wild-eyed and staring. Again and again does she go through this vicious circle of symptoms with scarcely a hair's breadth variation.

Case 4.—Mrs. M. T., aged 35. A beautiful, educated, refined lady. No hereditary taint, Always had excellent health until, in returning from a picnic, had sunstroke, a sequelae being persistent headache. Had occasional fainting spells, the home remedy for which was whisky. Presently it was given to ward off the spells, and later a desire for stimulants began to be experienced, independent of the conditions for which it had been at first prescribed. Her increasing use of liquor was observed, and upon being remonstrated with, it was thereafter continued in the privacy of her own room. On her wedding night the first taste of wine awoke the sleeping desire, and being already on the verge of exhaustion in preparation for the event (as is the manner of women), resistance was impossible, and before the evening was over, the young bridegroom was horrified to find his bride pronouncedly under the influence of liquor. Protestations of penitence and remorse condoned the offense which, however, in spite of all efforts at control is still repeated at irregular intervals. An interesting feature in these attacks is the fact that they always begin in the stomach. She has first an indescribable feeling located in the pit of the stomach, sensation of emptiness, of central feebleness, a violent pain the head comes on, and after a more or less protracted struggle against the impulse, the will is overpowered, and with the first taste all restraint is flung to the winds and she does not stop till dead drunk.

Bavarian beer is used very largely in Northern Germany. Its physiological effects are more pronounced and destructive than the milder beers. Dr. Nodolph says that this beer rapidly increases lassitude, and depression of the system, breaking up the appetite and taste for food, and finally develops in a steady decline of intelligence. Such beer drinkers eat at long intervals, inordinately, then abstain, and grow more and more degenerate in body and mind.

PSYCHOLOGY OF ALCOHOLIC INEBRIETY.

By IRA RUSSELL, M.D.,

Member of the American Association of Superintendents of Insane Asylums; New York Medico-Legal Society; Sup't Family Home for Treatment of Mental and Nervous Diseases, Winchendon, Mass.

"O Thou invisible spirit of wine, if thou hast no name to be known by let us call thee devil!" Such was the exclamation of Cassio when he had recovered from a drunken brawl, during which he stabbed his friend Montano, who in vain had tried to quiet him. Alexander the Great in a drunken debauch killed his general and friend Clitus.

The world is full of just such tragedies. The subject of alcoholic inebriety is becoming a matter of absorbing interest to the philanthropist, physiologist, jurist, and statesman; and it bids fair to become one of the great issues in party politics. It is my purpose to show the influence of alcohol upon the mind.

The brain is the seat of the mind, and different parts of the brain preside over different faculties of the mind. Every physiologist knows that the functions of organic life are located in the base of the brain. The affections, the emotions, the passions are located higher up. The judgment, will, conscience, and reason are located in the superior part of the brain. The brain may be compared to a three-story building: the functions of organic life reside in the first story; the affections, emotions, and passions in the second story; the intellect, judgment, reason, and conscience, in the upper or third story.

The above may be considered irrelevant to the subject, but my object is to show what particular faculties of the mind are affected by the alcoholic inebriety, viz., the affections, the emotions, the passions. In this condition (of alco-

holism), instead of the emotions and passions being controlled by the man, he is controlled by them; the reason, judgment, and conscience are overwhelmed; hence the frequent occurrence of the terrible tragedies that shock whole communities. The Cassios and Alexanders are still abroad in the land, unrestrained and uncontrolled; friends, wives, and children are murdered by the inebriate friend.

For convenience we will separate inebriates into four classes: occasional, habitual, confirmed, and dipsomaniacs; each of which has its peculiarities. The occasional inebriate is one who, through social enjoyment on some holiday, becomes intoxicated; due, perhaps, to the solicitations of jovial companions. He becomes exhilarated, loses self-control, and quarrels with his best friends. Such an event is followed by mental depression, a sense of shame and a feeling of disgrace, with a determination never to repeat the offense.

ie to

ama.

rawi,

vain

aken

ct of

g in-

ates-

es in

e of

ts of

very

are

ions,

con-

the

ling:

the

the

r or

ject,

the

ffec-

⊒lco-

The habitual inebriate is one who makes constant use of stimulants; is not often fully intoxicated but is thoroughly saturated with liquor. The influence of such a course upon the mind is marked by unreasonableness, occasional fits of ill-temper, and gradual deterioration of the higher mental faculties, and weakened ability to control the lower faculties. Such a husband or father will have periods when he will be kind, affectionate, and indulgent, followed by abuse and ill-treatment.

The confirmed inebriate is one who, uninfluenced by moral considerations, and caring not for the disgrace and loss of character that follow intoxication, becomes drunken whenever an opportunity occurs. In such a person the sense of moral obligation is completely blunted, the lowest and most brutal passions unrestrained, and the love of home, wife, and children destroyed. The destitution, hunger and nakedness of those who should be nearest and dearest to him, make no impression upon him and are treated with utter neglect.

The dipsomaniac is one who goes on sprees occasionally,

the craving for stimulants occurring periodically. the interval of sobriety he has no desire for stimulants, and at this time his deportment is above reproach." He may be the kindest of husbands and fathers and most punctilious in the performance of every duty, but when the paroxysm occurs, nothing will restrain him; love of home, social position, wife and children, have no influence upon him. He will hide away and seek the companionship of the lowest and vilest, and drink until he is completely exhausted. He will pawn watch, coat, wedding ring, and any other valuables he may have about him, to procure liquor. After remaining in this condition from one to two weeks, and becoming come pletely exhausted, a paroxysm of repentance and remorse comes over him; he returns to his family broken-hearted and with tears and sighs promises that nothing of the kind shall occur again.

The dipsomaniac, before commencing his debauch, has certain psychical, premonitory symptoms; he is nervous, low spirited, irritable, moody, and taciturn, and takes less interest than usual in his business.

The legitimate influence of alcoholism upon the intellectual faculties are seen in loss of memory, impaired judgments, and dullness of observation. The moral faculties suffer no less than the intellectual. It seems to paralyze the higher moral faculties, the sense of right and wrong, of duty and accountability, giving full sway to the lower passions and propensities. The most important part of this subject is the relation of alcoholism to insanity.

In reading the reports of our insane asylums, we find that a large percentage of cases are attributed to alcoholism. But the insanity to which I wish more particularly to refer, is that of insane drunkards. The insanity which lasts only while the victim is under the influence of alcohol, and which passes away when he becomes sober. Among the insane drunkards we have every variety of symptoms that are observed in an insane asylum. One will have melancholia with all the characteristic symptoms peculiar to that form of

insaful for the place

inter all to cidal of the

with surr

delir

ation in the upon such The mos

som becc than and type the

whic

vari not prouthe

perv

insanity—depression, self-blame, suicidal tendency, with direful forebodings of impending calamities. Another will exhibit the symptoms peculiar to general paresis: the same self-complacency, exaltation, and extravagant ideas and actions.

Another will manifest all the symptoms of acute mania; intense excitement,—the reason completely dethroned, and all the lower passions in full play—destructive, and homicidal, a perfect terror to all around, and utterly regardless of the consequences of his acts.

Another class will have all the symptoms of dementia with its stolid indifference, the mind oblivious to all surroundings.

The mental symptoms exhibited by those suffering from delirium tremens is not foreign to the subject under consideration, inasmuch as the peculiar form of mental manifestation in this disease is due to the poisoning influence of alcohol upon the mind. Fear is a uniform symptom common to all such cases—fear of death, fear of devils, fear of enemies. They have hallucinations of sight and hearing; sights of the most terrific character among them.

There is a form of insanity due to chronic alcoholism which differs very materially from the acute attacks that frequently accompany and follow intoxication. It is seen in some persons where the intoxication is prolonged, and it becomes a fixed habit. The mental symptoms are less acute than in the insanity of acute alcoholism, but more persistent and continuous. The delirium is milder, of the melancholic type. There is distrust of friends and fear of persecution; the memory and judgment are weakened, the imagination is perverted and the moral sense greatly impaired.

From this enumeration of the mental phenomena expressive of inebriety in its various forms, we see what a great variety of psychical symptoms alcohol will produce that are not due to any structural lesion of the brain. The most prominent effect of alcohol upon the mind is a paralysis of the will and higher moral and intellectual faculties, and stimulation of the lower and vicious propensities.

Abstracts and Reviews.

PILOCARPIN IN ACUTE ALCOHOLISM.

BY E. A. NEELY, M.D., MEMPHIS, TENN.

Revolutionary discoveries only brighten medical literature at intervals of long periods, but this does not signify a cyclic quiescence in medical science. Constantly and unceasingly the profession is engaged in testing the accuracy and value of known truths; in extending the scope and usefulness of existing measures and means, developing and perfecting them for utilization at the bedside. My contribution, therefore, is not pretentious beyond offering for your consideration a few original facts, illustrating the value of pilocarpin in the treatment of acute alcoholism.

This, I believe, is a new application for a remedy whose intrinsic worth has already been unassailably established in the treatment of other diseases. I was led to employ it in this condition from observing its good effects in the case of a patient to whom I was hastily summoned during the past summer. I arrived to find a well-developed man in a most intense maniacal delirium, the efforts of half a dozen men being required to keep him on the bed, and from doing violence to himself and those about him. I was told he had sunstroke An examination was impossible. At this juncture several other physicians arrived, having been called in the excited ment of the moment. These, like myself, accepted the popular diagnosis, and one of them having treated several cases of sunstroke with it, suggested that we give him a good dose of pilocarpin. We gave him a half grain subcutaneously. In thirty minutes he was perfectly limp, his skin was cool and covered with profuse perspiration, the heart's action was increased and tension diminished, distressing vomiting occurred, and his intellect cleared, With the cessation

of the nausea and vomiting he sank into profound slumber, from which he awoke some fourteen hours later much refreshed and perfectly rational. I then learned that his sunstroke was nothing more than a well-marked case of alcoholic delirium. Since then I have used pilocarpin in all cases of alcoholic poisoning coming under my care with unvarying satisfaction.

The first effect noticed after the subcutaneous injection of a physiological dose of the muriate of pilocarpin is a flushing of the face and neck. Almost simultaneously a profuse perspiration occurs, saliva in great quantities is poured out, the heart's action is increased from ten to twenty beats per minute, but its tension is greatly lowered, and the temperature falls from .5 to 1.5°. Nausea and vomiting nearly always follow its administration, and occasionally a serious diarrhœa. Much prostration may occur, especially if large doses be given, hence the necessity that the indications for its employment be well defined and appreciated. While it should be administered with care, I can find, in the literature at hand, no record of a death resulting from its use. Several instances of poisoning by its ingestion are recorded, but these were promptly relieved by subcutaneous injections of atropine, its physiological antagonist.

That I may more clearly outline its limit of usefulness in alcoholic poisoning, and at the same time illustrate the good results I have derived from its administration, I extract from my note book the records of six of the nine cases treated with the remedy, the remainder, because of circumstances and conditions, not being fair tests.

Case I. August 3d. H., male, æt. thirty-one, well developed. Has drank moderately for several years, with occasional excesses. For several days has been drinking heavily. At four o'clock in the afternoon fell on the street, and was carried home. When I saw him there an hour later he was raving with a maniacal delirium, threatening to do violence to himself and others, from which he was restrained by force. Pulse full and bounding. Face flushed and conjunctivæ con-

gested. Pilocarpin, grs. ss. subcutaneously. In thirty minutes he was completely relaxed. Perspiration copious. Vomiting occurred with great retching. Bowels moved several times. Arterial tension reduced and pulse rate increased. After two hours he was feeling comparatively comfortable, and was perfectly rational. Ordered quinine, grs. iii; hydr. chlor. mit., gr. ss.; podophyllin, gr. 1-20; morph. mur., gr. ½. M. every three hours during the night. Next day felt comfortable, except a general muscular soreness. No elevation of temperature. Appetite returning. Discharged.

Case II. October 9th. J. P., æt. forty-six, illy developed. Has drank habitually for years, but never to excess. While at work on above date was seized with very painful cramping of the muscles of right leg. This condition soon extended to all his extremities, and when I saw him he was suffering excruciatingly. Was told he had been drinking His face was flushed; conjunctivæ conimmoderately. gested; pulse rapid and arterial tension great; bowels constipated; tongue coated and flabby, and his temperature 100.5°. I gave pilocarpin, gr. 1-5, at once. In two hours he was completely relieved and sleeping. I ordered calomel, gr. ss., every two hours during night. On the following day I found his temperature 101°, but comfortable. Ordered salicylate of ammonium, grs. viii, every three hours. Under its influence his fever subsided in twenty-four hours, his appetite returned, and he convalesced rapidly.

Case III. October 22d. R. B., æt. thirty-six, male and very muscular. Accustomed to the daily use of alcoholic stimulants for twelve or thirteen years. Occasionally got on a spree, which always terminated in an acute gastritis. Jovial companions at the races tempted him into another one of these. When I saw him he was suffering most intensely with muscular cramping of all the extremities. His face was of a livid hue; conjunctivæ congested; eyes prominent, and a wild expression of countenance; tongue heavily coated, heart's action slow, and arterial tension very high; had vom-

in-

18.

ed

te

٠ly

ie.

э;

١ţ.

S.

<u>-</u>]-

s.

ul

n

g

g

d

ited several times, and nausea constant. I gave him philocarpin, gr. 1-5, at once. In twenty minutes he was relaxed, and his distressing symptoms relieved. I then ordered calomel and ipecac, aa gr. ss, every two hours. Six hours later he was comfortable, but sleepless. At his solicitation I gave him morph. sul., gr. \(\frac{1}{4}\), hypodermically, under the influence of which he slept during the entire night, and was able to take some nourishment with relish the next day. He convalesced nicely for several days, when a jaundice developed, which yielded readily to the usual remedies.

Cases IV and VI. October 19th, and November 17th. These two cases occurred in the same individual, a man of studious habits and a man of exceptional intelligence, but one who cannot refrain from frequent sprees. H. E., male, æt. forty-one. On both these occasions I found him in a high state of nervous excitement; face flushed and wearing a weary, expectant expression. The slightest noise startled him; sleep was unknown; tongue coated; bowels constipated; respiration somewhat hurried; pulse ranging from 90 to 100, and arterial tension great; no desire for food whatever. In each instance three injections of pilocarpin, 3-5 grain each, repeated at intervals of three hours, relieved all the nervous symptoms. Insomnia, however, persisted, and necessitated morph sul, gr. 1, subcutaneously for its relief. This was followed by quin. sul., grs. iii; calomel, gr. ss, every three hours till bowels acted. This constituted treatment in both cases. Convalescence in each in from thirty-six to forty-eight hours.

Case V. October 23d. J. S. McL., male, æt. forty-nine, railroad engineer. In early manhood drank excessively. Rarely takes a drink now, but when he does always winds up with delirium tremens. Began to drink a week ago. I found him exceedingly nervous at 4 P.M., face flushed, an occasional muscular spasm, tongue coated, bowels constipated, respiration hurried, pulse slow, full and bounding; had slept none in over forty-eight hours, and food was repulsive. Gave pilocarpin, grs. 1-5, and in thirty minutes

left him comparatively comfortable. At 9 P.M. his symptoms not being completely relieved I repeated the dose, combined with morph. sul., gr. $\frac{1}{3}$, and ordered calomel, pv. ipecac aa, gr. ss.; pv. Doverii, gr. ii, every three hours. The following day I found him much improved, having slept fairly during the night, and taken a plate of hot soup at breakfast. A saline to move his bowels, and a $\frac{1}{4}$ gr. morph. sul. at bedtime to guarantee a sleep, terminated the treatment. The next day he felt good, and the next returned to his work.

It will be observed that all of the cases in which I have used the remedy, have been those characterized by more or less nervous manifestations. It is in this class, too, that it is particularly valuable. It may be employed in the ordinary or typical forms before the stage of depression has occurred, the maniacal and the convulsive form, and in all forms of chronic alcoholism marked by psychical derangements. To generalize, it may be used in all cases exhibiting exaltation of nerve force, or tension of the circulatory system and derangement of the secretory system. On the other hand it is contraindicated in all cases where depression exists, or is about to occur.

The effect of the excessive use of alcoholic liquors, apart from their transient influences, is to check the function of secretion, thus causing retention in the blood products of waste of the nitrogenous elements, which, reacting upon the nervous system, gives rise to those phenomena so familiar to us in all such cases.

In pilocarpin we have a powerful motor depressant. It relaxes muscular tonus, lowers vascular tension, and excites to a wonderful extent glandular action, thus hastening elimination of waste products, removing in doing so the source of nerve irritability. This accomplished, the debauchee exhausted by vigils, and a lack of proper and sufficient nourishment, sinks into a refreshing and recuperating slumber. If not, his system has been brought to that condition when this may be encouraged by the administration of morphia without any apprehension as to its evil consequences. The portal

circulation may now be acted upon, and convalescence established in a period of time infinitely shorter than from any other plan of treatment with which I am familiar. Theoretically it suggests itself to our intelligence as a most rational treatment. In my experience it has practically stood the test.

I do not advance it as an agent to be solely relied upon in alcoholism. Its special value is at the beginning of the treatment, and its action must be supplemented by that of other remedies, as the exigencies of the case demands.

This may seem a limited field, but is indeed a large one, for it accomplishes for us in a few minutes what by older methods of treatment took us days to effect. The patient is tided over that period of high nervous excitement, restless insomnia, and intolerable nausea. He is excused from the possible supervention of delirium and all its horrid phenomena, and put at once upon the high road to a speedy recovery. This is sufficient to commend it as a medicament of inestimable benefit in these cases, provided of course that my experience is corroborated by the profession.

s

To obtain the best results, it is necessary to administer the drug in doses sufficiently large to produce its full physiological effects at once. It should be given with full confidence in the indications and its power to meet them. Only in this way will it realize our expectations. Small but repeated doses accomplish no good whatever. The symptoms demand an aggressive remedy. To temporize with them may possibly expose the patient to serious results; at best, will only be a useless expense of time.

My experience leads me to conclude (1) that in pilocarpin we possess an agent of great value in acute alcoholism. (2) That because of its motor depressant and paralyzant effects we can act promptly and decisively. (3) With it we can shorten the duration of an attack, and establish convalescence much more quickly than with any other remedy at our command. (4) That we can always rely upon it. (5) That its minuteness of dose renders its administration an easy act,

and (6) when judiciously employed is perfectly safe.— Mississippi Valley Medical Monthly.

NOTES ON MORPHINOMANIA AND ITS TREATMENT.

In a communication to the French Academie de Medicine Drs. Ball and Jennings give the following notes: For a long time distinction has been properly made between morphinism and morphinomania. By morphinism is understood all the phenomena which results from a chronic poisoning. By morphinomania we understand the vicious habits of regularly taking in ever-increasing doses the toxic stimulant.

Gradually morphinomaniacs are held captive by that intolerable malaise which overcomes them when they attempt to force themselves to give up the habit. This feeling of general malaise is often accompanied by disturbances going to the verge of syncope, and may even end in death. This is the collapse described by all writers, and is present in different degrees in all patients in course of treatment. If the pulse of these subjects is studied by the aid of the sphygmograph, there are obtained tracings that exactly indicate the variations through which the circulatory functions pass. Take a patient who has been deprived of his usual dose for a time (is in the state of want), and the sphygmograph presents a plateau corresponding to the systole, and which resembles to a certain extent the tracing obtained in some cases of chronic nephritis, in aneurism of the innominate artery, and in some other diseases. At this time there is a break in the equilibrium between the cardiac impulse and vascular resistance. All the tissues are in a state of anæmia by default, and the nerve centers are the first to suffer from this state of things. This is why the morphinomaniac in a state of cerebral anæmia, suffers the distress caused by it. He feels himself giving way and all his vital functions seem suspended. Now give him his dose, and in a few minutes he is comfortable.

The peripheral resistance is overcome, the heart triumphs all along the line, the tissues enter into a state of turgescence, the functions are re-established and all malaise disappears. The sphygmographic tracing indicates the normal condition of the circulation with the exception of a slight degree of arterial tension.

It is known that morphinomaniacs when deprived of their stimulant return to the normal state after a struggle more or less painful and prolonged, with the exception of neuralgic cases and the vicious. But for those who have any real motive to free themselves from the influence of morphine the problem to be solved consists in the suppression of the use of the stimulant, and to replace it with a remedy capable of arousing the activity of its circulation and of giving the tissues their indispensable aliment. For this purpose many different remedies have been used.

Alcohol, coffee, paraldehyde, cocaine, apomorphia, chloral, vanalline, pilocarpin, and other things have been advocated, but for the most part, they are not only useless but hurtful. The idea occurred that it would be preferable to use heart tonics and to stimulate the action of this organ at the time it begins to fail. To this end they tried the sulphate of sparteine which fulfilled almost entirely conditions desired and can be administered hypodermically. They watch for this moment of failure, as indicated by the sphygmograph and the feelings of the patient, and then give an injection of from two to four centigrammes ($\frac{1}{3}$ to $\frac{2}{3}$ gr.) and repeat if necessary. In a few minutes the pulse rises and the malaise disappears, and, as patients express it, the medicine gives them a heart.

The treatment of morphinomania is then: I, To place the patient in a hospital where the indispensable surveillance of the physician can be exercised at any moment; 2, To stop more or less the use of morphine; 3, To stimulate the action of the heart at the proper time by an injection of sparteine, to which should be added in cases of need an injection of morphine, if the symptoms become too threat

١e

ıe

ly

οſ

n If

c-

οŧ

is 10

ľť

11,

ening. For it must not be forgotten that collapse can terminate in death, and the use of morphine immediately causes it to disappear.

We have also used nitro-glycerine, the effects from which are much more rapid, but much less lasting, coming on in a few seconds and disappearing in fifteen minutes, leaving persistent headache. The medicine is administered by placing a few drops of the properly diluted preparation on the tongue, and it may be used in mild cases. This treatment, which we have often employed with good results, is applicable especially to that period when the patient, deprived of his habitual dose, suffers that distress that so often causes the resolution of the most determined to fail. At the end of some weeks the patient is cured or greatly benefited.

This article, in the original, is illustrated by cuts of the sphygmographic tracings showing the condition of the circulation in patients in the state of want—after a dose of morphine—after a dose of sparteine—after a dose of nitroglycerine, and, also, a normal pulse after cure, which adds greatly to its interest.

Morphinomania in Monkeys. Experiments have hitherto tended to show that animals did not acquire the so-called morphia habit. Rabbits, to which morphia is administered for months in enormous doses, as much as eight grains per day, bear the sudden expression without any evidence of discomfort.

But it would appear from a memoir sent by Dr. James of Cambridge, to the Academy of Science, that this is not the case with monkeys, when these live with opium smokers and have become accustomed to medicated atmosphere, they acquire a taste for the poison. One monkey for instance would wait until his master had laid aside his pipe, and would then take it up and smoke what remained. If not allowed to do so for several days it would fall into a state of depression and stupor which disappeared as soon as the stimulant was supplied. Some of our readers may remember a monkey at the Zoölogical Garden which had been taught by the keeper to smoke tobacco.

SYPHILIS IN INEBRIETY.

Alcoholism has a very marked, though not a constant, induence upon the gravity of syphilis, and it acts in four different modes: First, it predisposes to grave and precocious forms of the syphilides, which do not usually appear until Alcohol has an influence after the lapse of many years. appon all dermatoses, and it is not astonishing to find that infuence in syphilis, and it is often so marked that one can diagnose alcoholism by the aspect alone of the lesion. Alconolism also favors the production of those forms in which the syphilitic manifestations succeed each other in a fashion imost continuous. It favors again those cases which act on the general health, and can, in little time, cause a veritaple cachexia. Alcohol at last predisposes to cerebral syphilis. It figures largely in the antecedents of those thus afflicted, and it is to its influence that are due the precocious cerebral cases that appear in the secondary period, and even in the brst year of the disease. - Boston Medical and Surgical Fournal.

SEMI-ANNUAL MEETING AMERICAN ASSOCIA-TION FOR THE CURE OF INEBRIATES.

A semi-annual meeting of this association was held in Brooklyn, N. Y., June 6th. Dr. L. D. Mason was made chairman. Letters of regret were read from Drs. Day, Parish, Barber, and Baker. The first paper was read by Dr. Fite of Knoxville, Tenn., on "The Prohibition Question from a Legal Standpoint" (published in this journal). The next paper was by Dr. Wright, Bellefontaine, Ohio, on "Points Touching the Medical Jurisprudence of Alcoholic Inebriety." (This appears in this journal.) Dr. J. B. Mattison of Brooklyn, read two papers, "The Ethics of Opium Habitues," and "Antifebrin, vice Opium, as an Anodyne." In the former, he asserted that several years' exclusive professional experience among a large and enlarging number of opium habitues convinced him

can bet ly causes

om which g on in a ving perplacing tongue, which we le espechabitual esolution at we.

s of the the cirdose of of nitroch adds

hitherto so-called nistered nins per ence of

ames of

not the ters and te, they instance oe, and If not state of as the remem-

i bee

that the popular idea that all men who use opium are liars, is a mistaken one. He argued that the prevalent opinionuncharitable and untrue - of an opium habitue being merely the victim of a vicious indulgence—was a leading factor in his desire to shield himself from censure, and claimed that a more rational and right appreciation of the situation - regarding such patients, with certain exceptions, as creatures of conditions beyond control-would be most helpful against the protective temptation to untruth. Besides, a more liberal and correct opinion on this score would have an important bearing on their medico-legal status and treatment. In his second paper, Dr. Mattison referred to the recent triumphs of analytical chemistry in giving the profession such valuable hypnotics as amylen hydrate and sulphonal, and noting the far reaching value of any drug that will take the place of opium — which, while so great a blessing is so often a bane expressed his belief that the new anodyne, Antifebrin, was the richest addition of modern times to the therapeutics of pain. Very interesting discussions followed the reading of these papers, after which the society adjourned.

The Thirtieth Annual Report of the Washingtonian Home, Boston, Mass. — The superintendent, Dr. Day, reports that the number of patients admitted during the year was 404. Of these, 214 were natives of Massachusetts, 82 of other States, and 108 were of foreign countries. 344 were residents of Massachusetts, and 223 were married men. 14 physicians, 11 lawyers, 1 clergyman, 74 merchants, 102 clerks, 48 mechanics. There were 83 cases of delirium tremens. Average number of days which each patient has remained in the institution, about 17.

Of the early history of the asylum, Dr. Day remarks: "Thirty-one years ago the Home was established in the full faith that many of the evils of inebriety were susceptible of successful treatment, and that in a large number of cases, intemperance might be eradicated and cured by

strict regime, appropriate therapeutic measures, and by proper restraint, in an institution designed and conducted for such purposes. This belief has been confirmed by the experience of over thirty-one years, and from certain data in our possession, we have reason to believe that the number of patients successfully treated and restored to lives of sobriety and usefulness, will fully equal the ratio of cures in any of our lunatic asylums, or recoveries in our hospitals for the treatment of other diseases.

rs, is

n ----

erely

ir in

nat a

gard-

es of

ainst

beral

rtant

his

hs of

iable

the

e of

ne—

was

cs of

g of

ome.

that

404

other

resi-

phy-

erks,

nens.

ed in

ırks -

the

epti

er of

l by

"While the idea of establishing inebriate asylums for the medical treatment of inebriety is older than the generation now quite advanced in life, its practical adoption, and the efforts at treatment, are comparatively recent.

"The thirty-one years last past have developed all that has been attempted in this direction, consequently it is not surprising that even at the present time a large class of our people, comprising some of the learned and intelligent, still regard the establishment and maintenance of institutions for the cure of inebriates as a novel and doubtful expedient, and with little or no information upon the subject, but influenced more by prejudice than intelligence regarding this subject, condemn the project as utopian and fruitless.

"We cannot fairly estimate the value of any new undertaking by its immediate results. What public or private enterprise brings full and ample remuneration at first? The institutions for the deaf and dumb, for the blind; the lunatic and idiot asylums, and even our hospitals for the sick, all had small beginnings, and at first made inadequate returns. It surely cannot be expected that a pioneer institution for the treatment of inebriety should be an exception to the general rule."

The report presents at some length a history of the action of alcohol in causing various diseases, and their relations to society and practical life. Then refers to its work as follows:

"During the thirty-one years of the existence of the Washingtonian Home, it has been to this community more

like a life-saving station than otherwise. It has cared for and treated over ten thousand cases of inebriety in its worst form. There have been treated here yearly, from seventy-five to a hundred cases of delirium tremens. The rate of mortality has been comparatively small. It has labored under much disadvantage in various ways. It has not had the sympathies of the general public to that degree which its managers think it entitled, as a beneficent agent established more than a generation ago, for the purpose of caring for, treating, and reforming the inebriate. Many have been rescued, and are now scattered over our broad land leading lives of usefulness and good citizenship.

"Our record will now show that the institution has accomplished a great and good work. It is now, and has been, performing its assigned duty without ostentation. It has met the demands of duty without fear. We have treated the most formidable and varied cases of inebriety and its contingents, generally with success, and with such a history we can but feel that we have a right to call for means to enable us to open a wider field of usefulness. The demand is great and calls for this. In view of the physical diseases which we claim exist in every case of habitual drunkenness, and which the foregoing statements are designed to corroborate, we would argue the policy and duty of extending to all, rich or poor, the means for the care and attentions to which the helpless, the unfortunate, and the afflicted are entitled."

The doctor urges a longer time of treatment, and expresses a most confident hope that this asylum will receive the full recognition which it so richly deserves. The report is well worth notice, and we advise our readers to address Dr. Day for a copy.

Report of the High Shot Tower Home for Inebriates, Tickenham, England, Dr. Branthwaite, Supt.—On January 1, 1887, I had with me fourteen patients, and during the year have admitted nineteen—thirteen under the Act, and six as private patients—for periods varying from three

to twelve months. These were drawn from the upper and upper-middle classes, and consisted of eleven married men, seven single men, and one widower. The average age has been thirty-seven, which is about the same as last year. The baleful results of intemperance seem to culminate in the fourth decade of life, which is generally a period of special strain, domestically and commercially. I have admitted this year eight between the ages of thirty and forty, as against four between twenty and thirty, four between forty and fifty, and three between fifty and sixty. Twenty-two have been discharged in the ordinary course, and two expelled for disobedience and misbehavior.

В

·d

е

le

at

:h

١d

e,

ne

is)r.

3.

ιζ

Referring to the whole time since I opened High Shot House, I find some difficulty in keeping in touch with many old patients (whom I have no reason to believe have resumed habits of intemperance) owing to a reticence they feel in keeping up a connection by correspondence with an episode of life which they prefer to forget or at least wish to be ignored; nevertheless, I am constantly receiving letters assuring me of continued abstinence as well as containing expressions of gratitude. Not only can I point to a large number who are "doing well," that is to say, men who I believe to be permanently improved, who are living abstemious lives, managing their own affiairs with tact and ability, and who have been restored to their homes to the benefit and pleasure of their friends and families, but also to others who I know, from personal knowledge, to be not only cured of all desire for stimulants and total abstainers, but who are fully convinced that for others, as well as for themselves, there is but one reasonable and righteous course; and this is something to say considering that this conviction is wrought, not in those already half-persuaded, but in those who have tried every possible avenue of escape from the drink-crave before seeking, as a last refuge, the shelter of an Inebriate Home. I append a short analytical synopsis of a full and scientific report of all the cases under my care since the commencement.

Average age of patients, 39 years. Heredity distinctly traced, 19; insanity, 6; allied habits (smoking or opium), 48; intemperance, regular, 46; intemperance, periodical, 5; delirium tremens, 20.

Principal assigned causes: — Company, 15; domestic troubles, 8; business worry, 7; business temptations, 4; depression, 4; overwork, 2; accident, 1; other causes, 10—51. Average time under treatment, 5½ months.

Results as known January 1, 1888:—Continuing total abstainers, 11; doing well, 16; relapsed, 10; no information, 6; dead, 1; still under treatment, 7=51.

Report of Dalrymple Home, England, for 1887.— Thirty three patients have been admitted during the year, nineteen of whom were private cases. Twenty-seven were regular and six were periodical drinkers. Twenty-one patients are at present under care at the home. The average length of treatment of each case is seven months. In a summary of the one hundred and fifteen cases discharged since the asylum was opened, occur the following facts. Of the ages of the patients fifty-four were between thirty and forty, and twenty-nine between twenty and thirty, and twenty-six between forty and fifty.

In the family history, ten had a heredity of insanity, twenty of inebriety, and fifty-nine of no history of insanity or inebriety. This later statement is very unusual, and differs widely from all other studies of heredity. In the records of complicating diseases, only forty-two cases are noted. Three of these are placed under the term of general debility. This is also quite unusual, and points to a degree of health almost unknown among American inebriates. One hundred and one cases used tobacco. Of morphia cases only two were received. The average time or duration of the inebriety was eight and a half years. The institution was more than self-supporting during the year.

This report is very suggestive, and shows that the man-

agement has begun the study of the subject on a true scientific basis.

ctly

m),

5:

stic

4 ; ၁ ==

otal

ion,

irty-

teen

and

e at

reat-

the

ylum

the

enty-

forty

nity

anity

and

ı the

s are

neral

egrec

One

Cases

on of

ution

man

This home is but the infancy of one of the most complete hospitals for inebriates in Europe. Dr. Branthwaite is the superintendent, and Dr. Kerr the consulting physician.

Inebriety—Its Etiology, Pathology, Treatment, and Jurisprudence. By Norman Kerr, M.D., F.L.S., etc. P. Blakiston, Sons & Co., Philadelphia, Pa.

This is a handsome volume of 415 pages with a full and convenient index. Its scope is very wide. But as alcohol has to do with the whole organism of man, with every detail as well as with the completed structure, it will appear that the space given to the discussion is not excessive. Inebriety is defined by Dr. Kerr to be "an overpowering impulse to indulge in intoxication at all risks" (pp. 10-34). This is a good definition, and it corresponds closely with a definition of dipsomania in an American book on alcoholism. In that work (Inebriism, a pathological and psychological study, p. 3) dipsomania is said to be "an overpowering desire for intoxication — not intoxicating liquors." These definitions live a better notion of the neurotic constitution of the ordi-Mary inebriate than any references to a "thirst" or "taste" or alcohol can do. Inebriety is recognized as a disease, and assigned, very properly, to "the group of diseases of the ervous system." The causes of inebriety are discussed at eigth and lucidly. "Some drink because they are insane" that is, with respect to intoxication. There is also "inebriety from syphilis, from head injuries, from heredity, from nervous shock, from sunstroke, from prolonged sickness, from malaria"; in short, from anything which permamently diminishes nerve power, and seriously impairs the physiological freedom of nerve interaction. Certain exceptions, however, are made. "To avoid misunderstanding, let be noted that all drunkards are not subjects of disease." that "drunkenness" is not an infallible evidence of disease is

Vol. X. - 37

true, but, if "drunkards" are inebriates, and inebriety is "an overpowering impulse to indulge in intoxication," it is difficult to see how any true drunkard can be eliminated from the diseased class. "Moral obliquity and vicious tastes are often the cause of intemperance." Unquestionably, but it may be doubted whether (the intemperate habit being once established) the inebriate can easily exert the will power to abstain; whether, in fact, he is not a subject of disease. It may be, after all, that our author in advancing the idea that a drunkard may exist independently of disease is merely "throwing a tub to the whale" in placating the prejudices of a certain powerful and influential but obstinate class of moralists in Great Britain. The physical changes due to alcoholism are well described. The heart is changed in structure by mechanical stretching and over-work, as particularly noted by Dr. B. W. Richardson. "Alcohol dims perception, paralyzes the will, and deadens conscience by a long train of degenerative processes," says Dr. Kerr. And so the stomach, liver, kidneys, and brain, as well as the organism as a whole, become structurally injured by the morbid changes of the connective tissue, which indeed goes everywhere. "Alcohol is a puissant will paralyzer," says our author. This is a central fact, around which revolve all the questions relating to the jurisprudence of inebriety. But alcohol is, in truth, a universal paralyzer, and this fact is thoroughly emphasized in the book before us. The acute effects of alcohol for a time interfere with the muscular movements, impair the functions of the several senses, giving rise to illusions and hallucinations, lower the temperature, restrain the physiological waste of the body, impede the rational faculties, and subvert the moral nature. All these are the direct consequences of the paralyzing properties of alcohol when recently taken into the system. But the acute effects of the poison, when intemperance becomes habitual, cease readily and wholly pass away. They are no longer merely acute; they become habitual, chronic, and fixed. It is therefore unwise and incorrect to declare that a small portion of

alcohol is innocent because it seems to be innocuous when taken a few times only. The final event shows a cumulative disaster arising from innumerable apparently insensible particulars, which is most woful, both in its appearance and in its consequences. The habitual or constitutional effects of alcohol are universal throughout the whole system. They are, however, most readily discerned through their impressions upon the moral nature. The habitual drunkard is callous to the impulses of morality; he is notably an incessant and even motiveless liar, yet he may talk sensibly of morality and virtue. He may even clothe them in the radiant hues of poetry, or glorify them in the language of the most exalted eloquence. His reminiscences of the sympathetic nature may be, possibly, of the most pleasing character, but they are deceptive; he has become forever incapable of making the moral nature a factor in the formulation of motive. To him, morality is simply a semblance, a phantom, a corpse, a thing that is past and gone with the years that have passed and gone with it. Alcohol has no physiological effect whatever. Toxic paralysis is never physiological. The effect of alcohol upon health is always paralytic — pathological; while is effect upon disease may be therapeutical through its whibitory or paralyzing properties. There is, therefore, no such thing as moderation or "temperance" in the use of cohol as a beverage; those who are striving to draw the ne between the temperate and the intemperate use of alcoolic liquors, are wasting their efforts in fruitless sophistry nd unproductive verbiage. Dr. Kerr has given us a great It will enhance his reputation, already deservedly ligh. It will be a store-house of facts for the inquirer, and advance the interests of humanity. The doctor is to be congratulated upon his admirable exposition of the great subect of inebriety.

Bellefontaine, O.

 V_{-} is

it is

from

s are

it it

once er to

. It

hat a

erely

cs of

mor-

oholcture

noted

, par-

in of

stom-

as a

 ${
m ges}$ of

vhere.

This

relat-

is, in

iv em-

lcohol

impair

usions

n the

facul-

direct

when

of the

readily

acute i there

tion c

T. L. WRIGHT.

Quarterly Review of Narcotic Inebriety. Edited by Dr. A. Loveland of Gilsum, N. H., has appeared. The first wo numbers are very promising, and the editor has the

unusual felicity of being alone in this great field, far beyond the clash of contact and rivalry. However rough the track may be, or heavy the burden of the journal, perseverance will be rewarded in the future.

Inebriate Retreats: Their origin, utility, necessity, and management. By Charles McCarthy, M.D., J.P., Supt. Northcote Retreat for inebriates, Melbourne, Australia. Stillwell & Co., publishers, Melbourne, 1888.

This volume claims the attention of the reader "as the result of thirty years' study of inebriety, and fifteen years' practical management of the Melbourne Retreat." It opens with an autobiography of the author, in which the origin of the Melbourne Retreat, and the various disasters and troubles are detailed that marked its infancy and growth. It appears that this retreat was projected in 1871 and went into operation in 1873. In 1876 a contest began over the title to the property, which lasted nearly ten years, and was finally decided in favor of Dr. McCarthy and the early management. In the meantime the usefulness and value of the retreat were greatly impaired. From that time the institution has been prosperous and is doing most excellent work. The volume is made up of papers by the author, written and published in various journals on the following topics: Dipsomania, Moral Insanity, Retreat for Insane Drunkards, The Cure of Inebriates, Retreat for Inebriates, The Law Controlling Inebriates. In each of these papers, the disease of inebriety is urged and defended with scientific order and clearness. The practical value of the physical treatment of the inebriate is shown by a great variety of evidence, and the questions of restraint are very strongly and correctly urged. The doctor asserts that "inebriate asylums are a necessity, and their absence a crime of the age." He asserts that over a thousand persons a year are lost who could be saved by inebriate asylums in Australia. This book will repay careful study, and coming from that far-away land of Australia, shows how far the subject has taken root and made permanent growth.

The Drink Disease: Its cause and cure. By Dr. Kawebewsky of Kharkoff, Russia, editor of Annals, Psychology, and Mental Medicine at the University of Kharkoff.

This is the first book which has appeared in the Russian language in which the disease of inebriety is recognized, and its treatment by physical means in hospitals is urged. The author gives a very clear summary of the subject under the following heads: Origin and early causes of inebriety; Different effects following excess of alcohol in different races; Different effects in the individual and varied symptoms which are manifest in the march of the malady; Different physiological and psychological symptoms and their insidious course; The complicating nerve and brain influences and the power of heredity; The treatment and cure of inebriety. Under the latter topic he urges very clearly the need of asylums for the restraint and permanent restoration of inebri-He quotes freely from Drs. Parrish, Mason, Mann, Day, Wright, and Crothers, in this country, and Drs. Kerr, Richardson, and others of England; also Morel and Magnan of Paris. This work is a most suggestive contribution to this subject from a thorough scientific teacher of mental disease. It is gratifying to realize that leading scientific men of all parts of the world are turning to the study of this new field of alienism. This little work, coming from the pen of both an editor and teacher, is the certain promise of a more exhaustive study in the near future. We hope to give our readers some extracts in the next number.

Medical Jurisprudence: By Allan McLane Hamilton, M.D.;
E. B. Treat, Publisher, New York City.

This is a volume of 380 pages, giving cases and notes with concise descriptions, embodying the latest conclusions and legal decisions on questions relating to mental disease and injury to the spine and nervous system.

It is very fully illustrated with cases drawn largely from *American* sources, and hence better calculated to meet the

wants of *American* physicians and legal advisers — a feature that is not always to be found in similar treatises. The leading chapters embrace Insanity in its Medico-legal Relations; Hysteroid Condition and Feigned Disease; Epilepsy; Alcoholism; Suicide; Cranial Injuries and Spinal Injuries.

The first chapter defines Insanity, its general indications, classification and Hereditary Influence—Including Post Mortem Examination of the Insane. Under the legal Relations of Insanity are mentioned—Duties of Medical Experts—Tricks of Counsel—Illusions, Hallucinations, and Delusions—Reasoning Mania—Medico-Legal Relations of Aphasia—Marriage and Insanity—Insurance Frauds—Responsibility of Deaf and Dumb—Criminal Responsibility—Responsibility in Relation to Imbecility—Commitment of Lunatics and State Laws Regulating it—Concealed and Feigned Insanity, etc. The chapters on Cranial and Spinal Injuries are particularly valuable for the numerous decisions cited from our courts in connection with suits for damages from railroad collisions, etc.

Manual of Diseases of the Nervous System. By W. R. Gowers, M.D., F.R.C.P. Published by P. Blakiston, Son & Co. pp. 1357. Price, \$6.50.

The most superficial examination will convince the reader that this is a work of great practical value. The grouping of the topics is admirable for ready reference. The classification is clear and scientific, and the treatment is thoroughly sensible and sound. The author describes four pathological classes of diseases of the nervous system, organic diseases, structural disease, nutritional disease, and functional disease. The description of the many brain diseases are minute and exceedingly practical. This may be justly called the most complete volume on nervous diseases in the English language. All the recent advances on this field are discussed in a conservative way. The reader will be disappointed that so few authorities are referred to, and the impression will grow that the author is over assumptive, in supposing his

readers are not critical and able to judge of the facts he states so positively. The chapter on alcoholism indicates that the author has read nothing in this field for years. The few lines on neuraesthenia have the appearance of great exhaustion, and debility on the part of the author. As a book of reference to the many complex nerve disorders constantly appearing, we commend it most heartily.

ture

ead-

ons;

rlco-

ions,

Post

Celaperts

)elu-

pha-

pon-

- Re-

t of

and

pinal

sions

ages

R.

ston,

eader

iping

ıssifi-

ighly

gical

ases,

easc.

and most

jan-

ussed

that

ı will

g his

Evolution and its Relation to Religious Thought. By Prof. Le Conte. Appleton & Co., New York City. 12mo. \$1.50.

Every reader should be familiar with the questions of evolution and their bearings on life and progressive thought. New views and new conceptions of life appear with each advance, and it becomes a matter of necessity to follow along this ever-widening track. This work is by a thorough scientist, who writes in a broad philosophical tone, presenting all the facts, and their probable conclusions. He outlines the entire subject of evolution, showing the facts on which it is founded, and the practical relations to life.

The following sentence in the opening chapter gives a good idea of the work. "Every system of correlated parts may be studied from two points. The one concerns changes within the system by action and re-action between the parts, producing equilibrium and stability, the other concerns the progressive movement of the system as a whole, to higher and higher conditions. The one concerns things as they are, the other the process by which they become so."

This work should have a place in the library of every reader.

The Principles of the Art of Conversation. By Prof.
Mahaffy of Dublin. G. P. Putnam's Sons, New York
City, 1888.

This is the title of a little work that is having a unusual sale, and great popularity. It deals with principles and is a very helpful little work.

Psychology, The Cognate Powers, by James McCosh, D.D., LL.D. Charles Scribner's Sons, publishers, New York City, 1887.

In this volume of two hundred and forty-five pages the author has condensed a series of lectures on this topic in a clear and most pleasing text-book. In the definition of psychology the following sentences give an idea of the treatment of the subject: "In induction we gather in facts, but always with a view of discovering an order among them and arranging them. It is found that in all nature physical and mental facts proceed uniformly and regularly according to laws. Psychology may be more fully defined as that science which inquires into the operations of the conscious self with a view of discovering laws." The cognate powers of the brain are discussed under three heads: the presentative powers, such as sense, perception, and self-consciousness; second, the reproductive powers; third, the comparative powers. While the medical reader will differ from the author in many conclusions, he will admire the broad generalizations and philosophic tone, as well as the graphic setting of the thought, and place this work in his library as indispensable for reference.

Psychology: The Motive Powers, Emotions, Conscience, Will; by James McCosh, D.D., LL.D. Charles Scribher's Sons, publishers, New York City, 1887.

This is a text-book for teachers and students, and is clear, concise, and full of interest. This analysis of the motive-powers of the mind brings out the metaphysical views in a strong light, and in all probability this is the best discussion of this topic which has appeared.

Manual of Clinical Diagnosis. By Drs. Seifert and Muller. G. P. Putman's Sons, New York City.

Is a most excellent work, and one which will be of practical value to every physician. Such books are often more consulted than more pretentious volumes. In cloth, \$1.25 a copy.

.D.,

ork

the

opic

ı of

eat-

but

and

and

ς to

ence

with

the tive

ess;

itive

thor

ions

the

able

|'ill; her's

lear. wers

rong

this

iller.

pracmore

.25 a

The Factors of Organic Evolution. By Herbert Spencer. J. Fitzgerald, publisher, 24 East Fourth street, New York. Post free to any address fifteen cents. The far-reaching consequences of the doctrine of evolution are strikingly set forth in this essay. As commonly apprehended, this doctrine is supposed to be a theory to account simply for the differences between species, but in fact it applies to life in all its phases—not less strictly to psychology, ethics, sociology, than to physiology and anatomy. In a word, there is no department of human knowledge or of philosophical speculation that has not been revolutionized since the publication of Darwin's "Origin of Species." The work before us, published at a merely nominal price, should be in the hands of every one who would think the thoughts of the age in which we live.

The *Popular Science Monthly* grows steadily in merit from month to month. Some of the best contributions to medical philosophy appear in this journal. The advances of evolution, sociology, and all the various branches of science, are grouped in a clear, graphic way, making this journal invaluable to every scholar.

The Humboldt Library, published by J. Fitzgerald, 24 East Fourth St., New York city, comprises a series of leading scientific works in a popular form, within the means of every one. They are the most practical volumes published.

The Scientific American comes weekly with a rich table of contents and steady-growing interest. It is the best family paper for facts in popular science that is published.

The Wide Awake is a most excellent magazine for young people. Every page is full of instructive facts, which are presented in a very graphic way.

The *Homsletic Review* is a rare journal of theological thought and fact, which even a layman can read with great profit.

The Science is edited with rare ability, and gives its readers weekly an excellent idea of the march of scientific thought.

Editorial.

BINGHAMŢON ASYLUM.

In the last number of the Journal, we noticed the recent publication of the history of the New York State 146 briate Asylum at Binghamton.

Probably no other institution of modern times has been the center of such bitter controversy, misconception, and wrong. Its history is one of most extraordinary interest evidently not yet completed, the final chapter of which promises to be more startling than all the others.

In 1854 the United States Inebriate Asylum was char tered as a stock company, the shares of which were ten doi: lars each. In 1857 the name was changed to the New York State Inebriate Asylum. The city of Binghamton donated a large farm, and in 1858 the corner-stone of the building was laid. The work of building the hospital was long and difficult; money had to be raised, public sentiment had to be educated and often antagonized, and the idea of disease was sharply opposed and credulously defended. Both the prin ciples and plan of organization were new and without prece dent, and wide differences of opinion of necessity prevailed Under the presidency of Drs. John W. Francis, Valentine Mott of New York, and Chancellor Walworth of Saratoga the work progressed favorably, and the difficulties which center about every new enterprise were gradually being overcome. Finally the death of the president was followed by a reorganization of the board of management, turning out the founder, Dr. Turner, and placing the late Dr. Willard Parker in the presidency.

A few months later, in 1867, this new organization deeded the entire property to the State of New York for one dollar, without the advice or authority of any one. In 1879,

the State changed this asylum to an insane hospital, and the management consented.

Thus the pioneer asylum of the world, whose necessity far exceeded that of any insane asylum, was diverted, and the physical treatment of the inebriate pronounced a failure. The dishonesty and ignorance of the management which transferred the property to the State without legal right or authority was followed, most naturally, by the still greater blunder of changing it to an insane asylum.

The State of New York holds this magnificent asylum, which was built from the subscriptions of stockholders, by a deed from the board of managers, who had no authority to change or dispose of it. The stockholders were the owners, and they only by a majority vote could have delegated the power to the managers to sell the property. The managers acted on their own responsibility, and assumed that the large number of stockholders holding only small shares would make no objection. A great wrong can never be concealed for any length of time. The day of judgment always comes, sooner or later.

We learn from this book that these shares have been transferred by the stockholders to the founder, and the question of ownership is soon to be decided by the courts. The voluntary opinions of the best jurists agree that a great error has been committed, that the State of New York has no legal right to the asylum, and that the board of management are responsible with the State for this injustice.

This story of Binghamton as an inebriate asylum, and the court and official records of its change to the State and then to an insane asylum, suggest to the reader a series of doubtful transactions that are unaccountable. In justification of this act the asylum was called a failure, a fact most flatly contradicted by the reports. From this work it is evident that, notwithstanding the errors and misconceptions, the early plan of the organization and principles of management were correct and thoroughly scientific, and at least half a century in advance of the times. Had they been carried out

ed the

nteres...

s char-

en dol-

w York donated building ong and ad to be asse was me print precerevailed, alenting aratoga, which

out the 1 Parker nization for one In 18

ng over

ed by a

practically, Binghamton asylum would have been the most complete hospital in the world, and the knowledge of the disease of inebriety would have gone on a half a century beyond the present time.

To the student of inebriety this work presents another sad repetition of the dense ignorance and bitter opposition which meet every advance of science. The sale of Binghamtom asylum and its absorption by the State was, in principle, the same fierce battle which assails every new truth.

The march of science has established the fact that the disease of inebriety is curable in hospitals, and the demand for such inebriate hospitals will not permit any organization or State to divert or hold an institution which should be used to meet this necessity.

This book will rouse the deepest interest, and is a chapter in the progress of asylum work for inebriates that should be read by every student of science.

INEBRIETY PRACTICALLY CONSIDERED.

Some time ago a physician wrote condemning very earnestly an article in which I asserted that inebriety was always preceded by a prodromic stage, from which prompt recognition and treatment would give the greatest promise of cure and restoration.

He saw in this statement errors that to him were infidel, and generally disastrous to all truth and progress. My silence and refusal to enter into any defense or argument to sustain these views, was construed as evidence of inability to do so, and he rushed into print in an essay that to-day he would gladly recall. A member of his family became an inebriate, and then for the first time he realized that a distinct chain of physical causes had been in operation producing this result. Had he recognized them before, he might have prevented a most calamitous disaster. The case in brief was this:

A young man of weak, nervous organization, with disor-

267

A noted divine of New York asserted "that inebriety could only be cured by making it odious and criminal to drink, and that the inebriate should be treated with severe punishment, rather than by mock sympathy as a sick man." Some time after, his only son, a professional man, became an impulsive inebriate, and was placed under my care. His father manifested great fear that he would be restrained against his will, and be treated harshly. The son recovered, and after an interval of nearly two years is well. The father still preaches the same dogmatic views of inebriety, giving the impression of mental aphasia, and incompetency to recognize the truth.

Another instance, of a journalist whose writings have spread false notions, that are considered authority, may be of interest. His father died insane during his infancy. His mother was an invalid and died of some brain trouble. He was brought up with a drinking uncle, became a clergyman, then an editor. He has drank at intervals to intoxication from the time of a sunstroke many years ago. These paroxysms of intoxication come on suddenly, and are concealed by going away and shutting himself up in a strange house. They last about two weeks, and are marked by free intervals of five or six months. During this interval he both writes and lectures, bitterly condemning the disease theory, and urging that all inebriates should be punished, and that the vice of inebriety deserves no sympathy, but must be met with severe repressive laws.

His views are often so intemperate as to suggest a very

close approach to insanity. To his friends and readers, who do not know him as an inebriate, these theories are often quoted as an authority. Thus inebriety, as seen through the theory of moralists and speculative dogmas, is found to differ widely when studied practically at the bedside.

A noted temperance lecturer was very anxious to discuss with me the reality of vice, and a wicked, willful propensity to drink in all cases, that could be controlled. It was agreed to test it clinically by a study of the first case we should meet on the street that was available. The result of this experiment was the following, the lecturer making the first study separately and at his leisure, with these conclusions:

B., sixty-four years old. Has drank thirty years. Began to drink while working for a circus and through the influence of bad company. Does not care for spirits, and can stop it of his own will power. Never drinks except when in bad company. If he had married a good wife and kept away from bad company, would have been sober. Is sure it is a vice, and thinks it a wicked sin. When recovering from intoxication, has very clear notions of his sin and strong desires to be better; but later forgets it all, and drinks again. The lecturer conceives this to be a case of vice, that the pledge and conversion only can remove.

My study revealed this side of his history:

A strong presumption existed that his parents were both insane and criminal. He was brought up in an orphan asylum, and was a bar keeper and hostler in a hotel up to an attack of the brain fever, which came on after a fall. He went with a circus, and drank to intoxication whenever he could get spirits. Was in the army two years. Had a succession of social disasters, and was sent to jail for drunkenness. From this time his career was marked by steady degeneracy of both mind and body. He was clearly incompetent to control himself, or abstain, and was fast merging on imbecility. His views of his case were mere delusions, which his whole life contradicted.

In all probability the brain fever produced some perma-

nent impairment of an already feeble brain power, and gave an inebriate form to an inherited diathesis. This was fostered by thirty years of more or less drinking, during which conditions of disease had begun that no art could reach, and no pledge or conversion would control.

The sequel of this was a good illustration of what is seen all over the country every day. This old man was taken into the church, signed the pledge, and claimed to be converted; also gave evidence of being a "shining light." The next day he relapsed, and stole a large sum from his benefactor, who, with inconsistent charity, had him sent to jail.

Thus, all over the country, theoretical notions of the vice and sin of inebriety result in the senseless efforts to cure inebriates by appeals to a diseased emotional nature. The energy and money spent in the gospel temperance work and other labors to pledge the victim to recover, is a sad commentary on the ignorance of its advocates. Practically, it is a failure, and always will be, for the reason that it ignores the actual state of the inebriate, and assumes the presence of another condition, which no study indicates.

Some years ago I advised a lawyer, who was drinking to great excess, to go under medical treatment, and urged that he was positively diseased, and should act on this basis. Some friends sneered at this notion, and urged him to trust in the pledge and conversion. The result of this is that he is now serving out a life sentence for manslaughter, committed while intoxicated. The failure of the church and pledge only increased his malady, and literally precipitated him into incurable states. Had he recognized his physical condition, and used the means for recovery, no such result would have followed.

Inebriety is a more positive disease than insanity, because the continuous use of alcohol is without motive or object, and contrary to every dictate of self-preservation.

Inebriety is a more stupendous evil than insanity, more widespread and disastrous, and yet its study is in the hands of moralists and reformers.

The legal treatment, by jails and fines, literally destroys the victims, precipitating them to lower levels and more incurable conditions. The only hope for the future is from a practical study by medical men, who have no other object except to find the facts and the laws which govern them. The excessive and poisonous use of alcohol, by a vast number of persons in this country, is most certainly a problem of absorbing interest, and can not be solved by theory speculation. Like cholera and yellow fever, it is no chance condition but comes from some specific causes; and from the medical profession must come the practical investigations which will reveal these causes, and the means to remedy and neutralize them.

TRANCE CASES.

The following trance cases are of more than usual interest. In both cases the victims were very intelligent and truthful, and all the facts are well attested by conclusive evidence.

A noted lawyer, engaged in the defense of the New York alderman, was astonished a few days after the close of the trial to find that he had no memory of any of the circumstances connected with it. The trial lasted nearly six weeks, and had been long and exciting. During this time he had drunk over a pint of brandy a day, and manifested more than his usual intellectual force. He had an exciting quarrel with a gentleman at a club house one evening, and was severely censured by his friends. When the trial was over he retired to his country residence to rest, and after a day or more gave up all use of spirits. He awoke one morning with no memory of what had taken place from the beginning, or first day of the trial. He could not recall the slightest incident from the first forenoon of the trial. His critical examination of witnesses and exceptions to the rulings of the judge, his final summing up, was all an oblivion, and his reading of the minutes of the trial was new, and in no way suggested anything in the past. This man had a marked

inebriate ancestry, and has drunk many years irregularly. During the trial he drank regularly, and appeared in no way different, only a little more irritable.

)VS

re

n a

ect

m.

эег

of

ıla-

on,

cal

vill

lize

ter-

and

sive

ew

e of

um-

eks,

had

nore uar-

was

ovet v ot

ung

ings

nest

tical

 $_{\rm S}$ of

h15

w1Y

rked

The second case was that of a banker in a Vermont village, who went to New York to invest some money for himself and friends, and awoke on a Liverpool steamer three days out from New York. He had important business interests at home, and expected to return on Saturday. Thursday evening before, he made some important engagements, and, although drinking moderately, went to bed that night, and not being able to sleep, drank more than usual. From this time he lost all memory of events up to Tuesday of the next week, when he awoke in mid-ocean. He had a ticket to Liverpool and all his papers and securities intact. It appeared that he had been drinking regularly for some time, but never seemed to be unconscious; also that he had transacted all his business correctly, and left the hotel to take the train home Saturday morning, when suddenly he went over to the steamer, bought a ticket for Europe under an assumed name. He went to bed and drank large quantities of spirits, but did not seem to be intoxicated. He came back on the next steamer, and could not recall the slightest circumstance or event of this trance state. This man had an inebriate ancestry, and was a moderate and only occasionally an excessive drinker.

REPORT OF INVESTIGATING COMMITTEE ON DEATHS FROM INTEMPERANCE.

The committee of the British Medical Association have recently published a report giving the results of an inquiry into the connection of disease with habits of intemperance. Printed inquiries were sent out, and two hundred and fifty answers were returned, giving the statistics of four thousand two hundred and thirty-four cases of deaths. These cases were divided into classes, then studied to ascertain the occupation, ages at deaths, causes of death, prevalence of gout,

Vol. X.—39

renal disease, phthisis, and other maladies. The following are some of the leading conclusions:

- 1. That habitual indulgence in spirits beyond a moderate amount has a distinct tendency to shorten life.
- 2. That men who have passed the age of twenty-five temperate live at least ten years longer than those who are intemperate.
- 3. That alcoholic excess more often produces cirrhosis and gout than other diseases. Beyond these diseases, its tendency is to general pathological changes.
- 4. That alcohol excess does not especially lead to the development of malignant disease or to tubercle, but rather tends to check and retard these diseases.
- 5. That apoplexy is not especially induced by such excess, nor the mortality of pneumonia or typhoid fever increased.

These barren conclusions point to the error of classification. The attempt to divide all persons who use spirits into habitually temperate, careless drinkers, free drinkers, and decidedly intemperate is to invite confusion and make it impossible to secure accuracy among reporters.

The care and thoroughness with which these returns are studied should yield better results for the labor; but the purpose of the investigation must be distinct and narrowed to a few lines of inquiry. The many questions which arise from the excessive use of alcohol cannot be answered from the vague notes of physicians whose knowledge is more or less uncertain on this topic. The sources of error are so numerous that the results of this study are practically worthless, but as an effort along the lines of exact inquiry, it is the certain promise of great advance in the future. This report occupies eleven pages in the *British Medical Fournal*, and indicates clearly that alcohol and the injuries which follow from its use or abuse have become medical topics. The great realm of inquiry, theory, and speculation concerning alcohol is occupied at last by the true explorer.

This report in the journal is followed by a paper on

"The Relation of Alcoholism to Inebriety," by Dr. Kerr, of London. This very suggestive outline paper and the report was discussed in a frank, admirable spirit.

ing

ler-

ñve

are

SIS

its

the

her

uch

ver

ica-

nto

and

e it

are

the

wed

rise

rom

or :

e so

rth-

1 15

his

nal.

(ol-

The

iing

on

INEBRIETY IN EUROPE.

Recently, a feeling of alarm has been manifest all over Europe at the rapid increased consumption of alcohol and an increase of the injuries which follow from it. Several countries have been making statistical inquiries, and many very suggestive papers have been read at medical meetings and congresses on this topic.

At the Hygienic Congress at Vienna this topic was a most important one. Among the causes upon which there was a general agreement of opinion was the low price of spirits, the excessive number of places for their sale, the poor condition, intellectually and physically, of the lower classes. The remedy suggested at Vienna was high license, stringent control of the dealers, and depriving the inebriates of liberty in asylums for that purpose. Also to provide coffee and tea houses for the safe resort of the lower classes.

In Switzerland, where the government took control of the sale of spirits, the quantity consumed was reduced from 33 to 27. In Vienna, the increase of brandy and beer from 1860 to 1885 was from 40 to 70 of beer, and from 65 to 86 of brandy. This was far beyond the increase of population. In Hungary and Austria the physical disability from alcohol in conscripts rose, from 1875 to 1885, from 38 to 56. The number of insane from alcohol in asylums, from 1884 to 1886, rose from 20 to 31.

Equally startling statistics were given of the increase of consumption and production of spirits in all the European countries. In Belgium, one dram-shop existed for every 44 people. In Geneva, one for every 70. In Berlin, one for every 160. In Holland, the number of dram-shops are limited by law to one for not less than every 500 people.

Sweden and Norway have been notorious for a long time

for the excessive production and use of spirits. Recently from the operation of more stringent laws and the force of a higher public sentiment, the consumption of brandy in Norway has dropped from 16 to 3, and in Sweden from 54 to 8. Everywhere more stringent laws regulating the sale of spirits have produced the best results.

A summary of the views which have been urged and accepted by most authorities, with other facts, are condensed in the Pacific Record of Medicine and Surgery, as follows.

- I. The injuries caused by the excessive use of alcoholare more or less present in all civilized countries. Its effects are traceable, especially in infirmaries, insane asylums prisons, work and pauper-houses.
- 2. The causes of this great evil should be established by investigation.
- 3. Private action may promote this object and aid in its treatment by total abstinence societies, excluding all spirits and providing harmless substitutes, improving the homes, food, and conditions of the poor, and by asylums for their medical treatment.
- 4. The state should cooperate by strict license laws and regulation of the manufacture and sale, and by enforced confinement in special public asylums for the special treatment.
- 5. All alcoholists who are treated in public infirmaries and asylums should be discharged on parole, and be returned if they relapse, or should remain a long time in some special department or place where they could grow strong and have physical power of resistance.

It is evident from these statements that inebriety is awakening much interest, and its scientific study is increasing rapidly in all directions.

Dr. T. D. Crothers gave a course of lectures on "The Causation and Treatment of Inebriety" before the students of the University of Vermont, at Burlington, in June.

SIN OR DISEASE.

ntlv.

of a

Vor-

to 8.

irits

and

nsed

ects

pris-

shed

n its

irits

nes,

heir

and

rced reat-

ries

ned

cial

ave

y is

eas-

The

ents

s: ohol Editorial.

John B-came from a neurotic and feeble-minded family. His mother died in his infancy from consumption, and his father was a moderate drinker and a man of uncertain reputation. During early life John B--- was greatly praised for oratorical ability, and was educated for the legal profession. He served three years in the late war, suffered from great hardships and concussion of the brain, for which he was confined to the hospital for six months. He came out of the army, and began to use opium. Four years after, he was taking sixty grains a day. He then abandoned opium, and became an irregular inebriate, using spirits at intervals to great excess. He had the usual delusions of persecutions and capacity to abstain at will. He also manifested great pleasure in theorizing on the causes and treatment of his own case, always adopting the views of those he came in contact with, and posing himself as an example and illustration. In church and in company of clergymen he professed to be changed by prayer and conversion, and illustrated their views of treatment in a startling way. In the police court and in jail he asserted the value of punishment in these cases and its benefit to him. When sent to an insane asylum he demonstrated that inebriates were always sane and conscious of what they were doing, and could control themselves any time if they chose to. He was at last placed in an inebriate asylum, and endorsed the view of disease, and boasted of his irresponsibility, begging of his friends in the most pathetic way to permit him to stay long enough to recover. He claimed he was sick and could not control himself, and must have help. Later, he grew angry and ran away, and finally was returned to the insane asylum. Here he was the central subject of a medical clinic, where the idea was prominent that the inebriate was not sick or diseased, but vicious. He claimed that he had deceived his friends and the managers of the inebriate asylum, and had worked on their sympathies for his good. Later, he died from acute pneumonia.

This was not only an inebriate, but a reasoning maniac. who, after the paroxysm of drink subsided, displayed an insane cunning to take advantage of every circumstance which would make a hero of him and appeal to his selfesteem. For years he was an object of great interest, and furnished the text and illustration of two long papers, criticising and condemning inebriate asylums and those who supposed such cases were diseased. He was under the care of the late Dr. Gray, of Utica, and was discharged as not insane. He was a shining example at Mr. Moody's meetings, and at a large gathering in New York signed the pledge and thrilled the audience with the story of his restoration. During the drink periods he was heavy, stupid, and obstinate. When he recovered, his mind became very active to create sympathy in himself and rouse up inquiry. He was a literal maniac, only it was covered up and made to bend to circumstances. Any careful study would have made this clear. A noted physician of England reported his statement, as evidence against the disease of inebriety, and this has gone into medical literature. From such evidence and the failure to study these cases have sprung up the most erroneous notions of the inebriate and his malady. This case is a type of others, who are constantly misleading superficial observers, and are, beyond all doubt, insane inebriates. The drink paroxysm seems to be an outlet, which prevented insanity from developing beyond a certain point, but permitted a full play of all the moral degenerations and symptoms of changed character, conduct, and disposition. A field of most suggestive facts await discovery along this line.

Drs. Mairet and Combemal presented some experiments on the hereditary influence of alcohol before the Academy of Sciences of Paris. A previously healthy dog was made a chronic alcoholic, and gave birth to twelve puppies. Two were still-born, three died accidentally, and the remaining seven all died of epileptic attacks, enteritis, pulmonary and

aniac,

ed an

stance

s self-

t, and

, criti-

e who

e care

is not meet-

ledge,

ration

obsti

ive to

le was end to e this

state-

d this

e and

most

This

super-

riates.

rented

t per-

symp-

n. A

s line.

ments

my of

ade a

Two

aining

y and

peritoneal tuberculosis. The lesions found at the post mortem were thickening of the bones, fatty degeneration of the liver, adhesion of the dura mater, and other marked alcoholic degenerations. A strong dog was kept intoxicated on absinthe the last three weeks of gestation. Six puppies were born. Three died at birth, two were of defective intelligence; one grew up of defective intelligence and nervous organization, and was coupled with a strong dog. Of the three puppies born of this union, one died of marasmus, the other two were congenitally defective in bodies, having atrophy of the hind legs. One of the conclusions drawn was that the degeneration from alcohol was more prominent in the second generation than the first; also, that alcohol used by the mother always produced defective offspring.

THE Supreme Court of Montana appears to entertain rather liberal views as to what constitutes proper and improper conduct on the part of jurors. In a murder case which recently came before that tribunal, one of the questions presented was whether the court should not have granted a new trial because some of the jurors drank spirituous liquors while they had the case under consideration. In passing upon this question, the court says: "We cannot agree with the doctrine announced in certain cases in Kansas, Iowa, and Arkansas, that the verdict rendered by a drunken jury, or a jury, one or more of whose members were, during the trial, intoxicated, should not be in any case allowed to stand." In the Montana case, it appeared that while the jury were in charge of the bailiff they visited a hotel for the purpose of taking their meals, and some of them drank at the hotel bar at their own expense. They took only one drink each, and no resulting intoxication was shown. The court held, that inasmuch as it did not appear that the cause of the defendant was in any manner prejudiced by this indulgence in spirituous liquors, a new trial was refused.

Dr. Charles McCarty, the superintendent of the Melbourne Asylum and honorary member of our association, is one of the oldest active superintendents of an inebriate asylum in the world. He was born in 1814, and founded the Northcote Retreat in 1873, and has been in charge from that time. Our journal has published several of his papers, and our association takes pleasure in calling attention to his vigorous scientific writings, which have already attracted much attention.

Two centuries ago the truthfulness and reality of witch-craftry were sustained by overwhelming human testimony. To-day the vice of inebriety is sustained by a mass of evidence, that to many persons seems beyond question. On human beliefs and human testimony these supposed facts have been based. One has disappeared in the past as a great delusion. The other is rapidly receding before the march of scientific study.

"History of the New York State Inebriate Asylum, at Binghamton, N. Y.," by its founder. A few copies of this work, which contains five hundred pages, have been left at this office for sale, and will be sent to any address, post paid, on receipt of three dollars.

Drs. Wright and Crothers read papers on inebriety at the American Medical Association meeting at Cincinnati, in May last. Dr. Wright's paper was on the "Medical Jurisprudence of Inebriety." Dr. Crothers' paper was on "Alcoholic Automatism."

At the International Congress on Anthropology, held in New York city in June last, Dr. Kerr of London read a paper on "Hereditary Inebriety." Dr. Mann, the president, read a paper on "The Action of Alcohol on the Mental Faculties."

Dr. Fite's paper on "Prohibition, from a Medico-Legal Standpoint," published in this number, appeared first in the Southern Practitioner, a medical journal that leads the profession along the very front lines of science, no matter who follows.

The Electrical Engineer of New York, comes monthly, with a new history of the great march of electrical forces into the service of civilization and development. Send for a year's subscription to No. 11 Wall street, New York city.

HISTORICAL SKETCH OF THE AMERICAN ASSOCIATION FOR THE CURE OF INEBRIATES.

By Joseph Parrish, M.D., Burlington, N. J.

No. 2.

DEAR DR. CROTHERS,—The names of the persons who assembled at the first meeting of the Association should not be omitted from the history, and hence I begin letter No. 2, by naming them in the order in which they appear on the record, as follows: - Willard Parker, M.D., president, and D. G. Dodge, M.D., superintendent of the New York State Inebriate Asylum at Binghamton. Hon. J. S. T. Stranahan, president, T. L. Mason, M.D., Consulting physician, L. P. Mason, M.D., attending physician, J. Bennett, M.D., Brooklyn, director, and Rev. J. Willit, superintendent of Inebriates Home of Kings County, N. Y.; W. C. Lawrence, superintendent, Daniel Allen, R. K. Potter, Theodore Prentice, directors of Washingtonian Home, Boston, Mass.; P. J. Wardner, superintendent of Washingtonian Home, Chicago, Ill.; Albert Day, M.D., superintendent of Greenwood Institute, Mass.; Joseph Parrish, M.D., president of Pennsylvania Sanitarium, Media, Pa.; C. L. Ives, M.D., professor of Theory and Practice of Medicine, Yale College; Alonzo Calkins, M.D., author of a book entitled "Opium and Opium Habit." Joseph Parrish,

Secretary.

I shall present a brief analysis of the remarks made at this initial meeting on the several topics that were presented. In the opening remarks of Dr. Parker, he said that in the beginning of the present century "insanity was regarded as a visitation of God's displeasure, and not a disease," but to-day, we know that eighty per cent. of cases of acute

Vol. X .-- 40

Aeli, is isv-

the hat and

viguch

ch-

ny.

evi-On

cts

s a

the

, at

his

at

ıid,

at

, in ris-

lco-

in

] a

ent.

ital

gal

the

ro-

yho

niy.

ces or a

insanity treated are restored to health and usefulness. As insanity was regarded seventy years ago, so inebriety is regarded now. Alcohol is a poison as certainly as arsenic, corrosive sublimate, and prussic acid are poisons; and is capable of destroying life, and yet in small doses it acts as a stimulant and tonic. In larger doses it acts as an irritant poison and induces disease. Can the disease be cured? Inebriety can be cured. Our duty is to inquire into the best modes of dealing with it. What legislation, if any, is to be had? We must also impart scientific truth and enlighten the mind of the public, inducing it to move in its power, and demand protection against this disease.

Dr. T. L. Mason thought one great object of this meeting was to consider the question, "What can be done to procure legislation that shall recognize inebriety as a disease," as it does insanity, and make provision accordingly.

Mr. Stranahan arose to urge that intemperance should be announced to be a disease, that this fact being admitted, the next question should be, what can be done to cure and prevent it; by individuals, by law, and by common sentiment of the people; all of which should be declared by this body.

Mr. Willit referred to the King's County Home, which was conducted without written rules; and though some of the inmates belong to what are known as the "dangerous class," he had no difficulty in controlling them without bar or locks.

Mr. Allen had the same views about restraint and made an earnest appeal in favor of personal influence upon the inebriate. If he can be made to realize that efforts were for his own good, and not for mere punishment, he would be benefited.

Mr. Prentice said that in Massachusetts the people had already been educated up to the fact that intemperance was a disease; that it was so acknowledged in the courts, and inebriates were not treated as criminals.

Doctors Wardner, Day, T. L. Mason, and J. W. Willit, spoke again of legal punishment as demoralizing.

As

etv is

senic,

ind is

s as a

ritant

ured?

e best

to be

n the

, and

eting

ocure

as it

ld be

, the

pre-

nt of

ody.

hich

ie of

rous

ar or

nade

the

e for

i be

had

was

and

illit,

An interesting discussion ensued upon the treatment of men and women patients in the same building. Dr. Day reported having two ladies with seventeen gentlemen in his home, who eat at the same table, and participated in social amenities.

Mr. Willit spoke of the subject as one of great importance and gave his experience at the Kings County Home, where both sexes are cared for under the same roof with satisfactory results.

The general opinion, however, seems to be adverse to the practice of treating the sexes under the same roof, except in private institutions with very few patients.

Dr. Parrish called attention to the practice of some of the homes of holding "experience meetings," in which inebriates are in the habit of relating in each other's presence, and in the presence of invited guests, their experiences. He had heard them tell of their debasement, of their cruelty to wives and children, of their arrests by police, and their prison life, and had been unfavorably impressed by such displays. With his own patients he had discouraged such allusions, even in ordinary conversation. He feared the tendency of such practice was to create caricature and merriment. He preferred that they should forget the past, and look forward to a better life. He had known earnest and sincere temperance advocates to caricature inebriates before public audiences, and to make stories and jokes out of their misfortunes. He felt sure that public sentiment was sometimes influenced by such displays to look upon inebriates with disgust and contempt, and he hoped the influence of this association would be against such performances.

Dr. Day's experience in his own home led him to favor such practices, and it had become an established part of the disicipline and treatment of the institution.

At Binghamton it had never been adopted. Mr. Lawrence found it to work well. He believed that where the institutions were located in cities, and the old inmates who remained steadfast came to the meetings, told of their strug-

gles and their triumphs, the tendency was to strengthen the hearts of the weaker ones. Neither he nor Dr. Day discovered anything like merriment or caricature, though they believe that earnest appeals of the inmates to each other based upon experience were useful.

Dr. Wardner called attention to the influence of a uniform system of statistics, and a resolution offered by him passed calling upon all superintendents of asylums and homes to keep a table of facts to be gathered from his patients covering their history and conditions upon entering into, and discharge from institutions, and as far as possible follow them up by correspondence and otherwise after discharge.

The subject was considered at some length,—how inmates of institutions should be employed, etc. The directors of the Chicago Home have had the subject under discussion, but were at loss to know how to proceed, and were waiting the action of this meeting.

Mr. Willit reported, that at the home on Long Island there were several means for mechanical occupation, including a printing-press. He said that labor of some kind could be required of inmates of the dependent class, but the difficulty was with those who paid for their treatment, and especially those who had never been used to manual work.

Mr. Prentice said that in Boston he had received persons from the city who were inebriated at the time, got them sobered and fit to resume their avocations, when he allowed them to continue their work, while they boarded at the home, so that they were enabled to pay their board from their earnings, and returning every evening to lodge. They were kept under supervision, which served as a protection to them. This plan could only be effected with persons who could find employment near to the institution.

Dr. Parrish thought that for other classes of patients there might be a system of mental training that would be pleasing, as well as valuable, in cultivating the judgment and strengthening the mind, and he hoped that something would be evolved from our experience that would meet and satisfy the want.

One of the most important and deeply interesting topics that claimed the attention of the meeting was introduced by Dr. T. L. Mason, in the form of resolutions, which I give in full:

Resolved, That the question of the cure of inebriates is one which depends largely upon the sentiment and practice of the community.

Resolved, That when inmates of inebriate asylums leave the care of such asylums, it is the duty of their families, of the church, and of the people at large to receive them without reproaches for their past lives, and give them couragement and protection.

They were fully discussed, and a number of instances related of men who had left institutions with great promise of usefulness, but, for want of a reception from family and friends that was in accord with their temperament and need, had become discouraged and relapsed. Reference is made to this feature of the case in the address of inebriates, which will be noticed hereafter.

Dr. Parrish called attention to a very common statement made by temperance advocates, which he thought contained an error, and he wished to have an expression of opinion from his associates. It is, that alcohol taken in any quantity is a poison. From the rostrum and from the pulpit it is declared that "a person who takes a teaspoonful of an alcoholic drink is a teaspoonful drunk," etc. And the doctor further said, that while he believed in the toxic quality, and effect of alcohol, he also believed that it was useful as a medicine, and he thought that such unguarded statements were misleading. He had tried alcohol in cases of great prostration, and believed that it did enter into the process of reparation in some way that he was not prepared to explain. One patient, while confined to his bed, had taken a pint of alcohol per day, for three consecutive days, with no nourishment other than a very small allowance of tea and soft toast. During this time, his physician had failed to discover any race of alcohol in the exhalations or dejections, and he was

quite confident that the alcohol contributed to his support, and was an important factor in his recovery. The speaker believed that the fusel oil that was found in whisky did a great deal of injury — perhaps more than the alcohol. He had recently obtained a quantity of fusel oil, with which, in combination with water and a few aromatics and glycerine, he manufactured a whisky which an expert could hardly distinguish from the genuine article, though it did not contain a single drop of alcohol other than might be found as a solvent for the other articles.

Dr. Calkins considered this a very remarkable scientific experiment, and hoped it might be published in some permanent form. Dr. Calkins cited the example of a boat-load of wrecked seamen, one of whom used opium in small quantities as an antidote for hunger and thirst, and after several days' tossing about on the ocean, he was the only one able to stand on his feet. He argued that any poison may be taken in limited quantities with positively good effects in certain conditions.

Dr. T. L. Mason was quite prepared to endorse the sentiment, that in some conditions of the system alcohol acted safely and beneficially.

Dr. Dodge did not believe that alcohol in small doses acted as a poison, but that these small doses, frequently repeated, might awaken desires that were characteristic of the alcohol appetite.

Dr. Willard Parker said that opium, arsenic, or any other poison, taken in certain conditions and quantities is healthful and proper, but, beyond that, acted as a poison. He believed it was the same with alcohol. It was good for the stomach in certain disordered conditions, but not good for the head. The discussion was animated and in the best of spirit, and there were no objections to the views as above expressed.

How to bring the proceedings of the society before the public was an important subject, that claimed the attention of the closing hour of the session, and the following minutes were agreed upon as the unanimous vote of the meeting.

Dr. T. L. Mason moved that the secretary be authorized to arrange the minutes and prepare for publication in pamphlet form, and that five thousand copies be published, the expenses to be borne by the different institutions represented. The secretary was also authorized to state that the association holds itself responsible only for the declaration of principles, resolutions, and motions agreed to and reported upon its minutes.

The first edition of five thousand copies of a volume of eighty-four pages was distributed *pro rata* to the different institutions, and from these, were again circulated among the leading citizens and public libraries in their respective States or districts.

The daily newspapers took up the proceedings as narrated, and the dogma of disease was barely referred to, except favorably. The temperance and religious weeklies, however, assailed the doctrine with zeal, and a remarkable feature of their opposition was sometimes displayed in language which was not born of the dignity and fairness which should characterize such publications. The writer of this sketch was denounced by name in some instances, and made to rank with the enemies of temperance. They were ignorant then, but have learned better now.

NEED OF STUDY.

In an address before the section of medical jurisprudence of the American Medical Association, Dr. Quimby, the chairman, remarked as follows:

"Let this numerous and representative body of medical men, in whose hands are the issues of life and death, and who have so often in times past sounded the alarm of impending danger, rise to the importance of the danger by sounding the alarm against this Goliath of crime. Let the medical profession in its national capacity issue a new proclamation and, if necessary, put new sentinels upon the watch towers to

pport, eaker did a He

ch, in erine, y disontain a sol-

entific ermaoad of uantieveral ble to taken

sentiact**ed**

ertain

acted eated, lcohol

other

He or the od for est of above

e the ention inutes

warn the people of the rapid and perceptible inroads that alcoholic beverages are making upon the human race.

Let the medical profession proclaim the fact that modern science and the latest investigation have sufficiently proven that alcohol destroys the natural forces of the body; that it retards and prevents the development of the nervous system. which effect is even extended to the unborn infant; that it perverts and deteriorates the red corpuscles of the blood. that it is not a preserver or conserver of mental or physical powers; that it does not and can not, per se, form true natural tissue or good blood. At the rate drunkenness is increasing in civilized communities, it is estimated by good authorities that in a little over one hundred years the Caucasian race will degenerate to the level of the Mongolian, and become subject to all kinds of immoral practices. In proof of this I may cite the "result of the anthropometric examination of fifty habitual prostitutes, who had been inmates of brothels for not less than two years, reported by Dr. Tarnovskaia at at the first congress of Russian alienists at Moscow." For the sake of comparison the doctor examined in the same way fifty peasant women of the same age and as far as possible of the same intellectual development, etc.

"The result of this unique investigation may be summed up as follows:

- "I. The prostitutes presented a shortening, amounting to half a centimetre, of the anterior, posterior, and transverse diameter of the skull.
- "2. As many as 84 per cent. of the habitual prostitutes showed various signs of physical degeneration, such as irregularity in the shape of the skull, a symmetry of the face, anomalies of the hard palate, teeth, ears, etc.
- "3. In 82 per cent. of the prostitutes the parents were habitual drunkards.
- "Can any physician, can any thoughtful person, after reading this appalling statement of facts, close his eyes to the true modus operandi of alcholic stimulants, or deny its deteriorating and destructive influence upon the human system?

"Formerly the medical profession, through lack of experimental and practical knowledge of physiology and chemistry, but little understood the action of alcohol upon the human system, and therefore they recklessly and indiscriminately prescribed alcohol to their patients in season and out of season, which has resulted in inculcating much of the habit of inebriety among the people.

"Hence the medical profession should be first to voice the results of the modern investigations which point unmistakably to the destructive action of alcohol upon all the tissues of the body, and especially upon the nervous tissue. And the sooner professional, personal, and public effort is exercised in exposing its nakedness and its destructiveness, and making it odious and punishable, instead of apologizing for it and making it excusable, either in the manufacturer, seller, or the drinker, the better for society and for the human race."

AN URGENT DEMAND.

Advice is asked in a daily paper where to place fifty thousand dollars to be the greatest charity. Dr. Waugh, editor of the *Medical Times*, answers this as follows: After mentioning the inebriate as an object of the greatest pity, he writes:

"There is no place or retreat for him; the House of Correction alone affords a place of detention. Here he is herded with tramps, petty thieves, and criminals of the most contemptible classes. It is a matter of common observation that a man confined in the House of Correction for drunkenness comes out far worse than he went in. The association with criminals is not so bad as the palpable fall from the plane of respectability, which sweeps away one of the strongest barriers to unbridled indulgence.

"For the inebriate, then, we may say, without fear of contradiction, that no adequate means of treatment have as yet been devised. The State provides for her deaf-mutes, her blind, her idiots, and her insane. There are jails for the

Vol. X.-41

that

dern

oven

at it

tem

at it

lood,

sical.

tural

sing

ities

race

ome

is, I

n of

hels a at For

way

e of

med

g to

erse

ites

as

ace,

ere

fter

. to

it5

ian

wicked, hospitals for the sick, alms-houses for the poor, but no suitable place for the drunkard, though the need is great. It is unnecessary to demonstrate the value such an institution would possess were it conducted upon the proper plan. The legal difficulties, the erection of safeguards about the personal liberty of the citizen, are not more complex than those pertaining to mad-houses.

"Such an institution should be in the country, away from the temptations and from the excitement of a great city. Country life and rural pursuits are best suited to these cases. It should emphatically be a work-house, where the inmates must earn their bread before they eat it, and, if possible, should contribute to the support of their families at the same time. The chief of the establishment must be a physician, and every inmate should be looked upon as a case of disease, to be treated and managed as any other nervous affection would be, with reference to its cure. There would be no lack of suitable patients for such a hospital; and if its success were demonstrated, the State could easily be induced to follow up the experiment. Thus, the good effects would far exceed those directly due to the sum originally expended. There are many tracts of wild land in the mountainous parts of Pennsylvania or of West Virginia which could be purchased for a trifle, and where the necessary seclusion could be secured."

ABSORPTION OF ALCOHOL.

Mesnets, as quoted by Taurdat, in La Temperance, reports the case of a wine merchant, who was intoxicated every night from the fumes or vapors of brandy, which came up into his bedroom. He drank no spirits at any time, and was abstinent, but slept over his wine-cellar, which ventillated through his room. Every night after returning he was intoxicated and stupid. He died from alcoholic paralysis. During life he seemed pleased with the effects of spirits at night, and would not change his room, although warned by the physician.

out

at

tu-

ìn.

he

an

m

ty.

es

le,

he

y-

of

us

ld

ts

ed ld d.

r-

ld

d

e

]-

Dr. Thorn of London, reports a case of a man and wife who both had delirium tremens, although they rarely used spirits, and then in very small quantities. They kept a gin saloon, and slept over the bar, being constantly exposed to the fumes of spirits night and day. Both died from the effects of chronic alcoholism, which was absorbed by the lungs. Dr. Scott of Edinburgh, reports the case of a strong, healthy man from the country, who was employed in a wine store and slept near the casks, rarely going out, spending most of the time in the vaults. He was intoxicated and stupid, and remained in this condition until taken to the hospital, where he died a few months later a chronic alcoholic, the alcohol coming entirely from absorption.

This fact is sustained by a great variety of proof, and shows that alcohol can be absorbed in toxic quantities by the lungs. Also that inebriety can come from persons who never drink, but who live in an atmosphere of alcoholic vapors, where it is taken up by the lungs.

FURFURAL.

M. Bacchi read a paper before the French Academy of Medicine on this alcoholic compound. He thinks it the special dangerous element of alcohol from grains. It is obtained from oats, rye, and barley, and is a colorless liquid, changing to a brown color under the influence of the air. The odor is that of the oil of cinnamon or bitter almonds. When administered to animals a rapid toxicity, of a tetanic or epileptic type, comes on. The respiration is soon arrested and paralyzed.

He believes that in cases where strange convulsive actions follow the use of old spirits, this furfural may be present. In Ireland and Scotland, the frequency of convulsive symptoms among inebriates suggests the same cause, and especially as they are found to use spirits from grains. The strange, unknown symptoms which appear in inebriates may be due to this adulteration of spirits, or rather the

attempt to improve their flavor, and bought regardless of the chemical compounds produced and their physiological effects.

REPORT ON INEBRIATE ASYLUMS.

A committee of the corporation of the City of Toronto, have lately made an elaborate report urging the city to establish an asylum for inebriates, from which we extract the following:

"Your committee have spared no pains and neglected no opportunity to gain as full and wide a knowledge of the whole subject as is possible—from a medical, social, economic, and philanthropic point of view; and the research in which it has been engaged has resulted in the following conclusions:

"1st. That confirmed inebriety exists in our midst to an alarming extent.

"2d. That the varied labors of philanthropists and the means used by them to lessen inebriety or reform the inebriate have proved inadequate to the end sought.

"3d. That the legal methods usually employed, and the attempts made to cure inebriety by fines and imprisonments have not only proved a complete failure, but are universally acknowledged to be irrational, unwise, and unchristian, as it is evident that the punishment of an inebriate by placing him among criminals in bad physical and worse mental surroundings, in which nothing but alcohol is withdrawn, removes him farther from hope of recovery and precipitates him lower in the scale of humanity.

"There can be no longer any doubt that the present system assists the unfortunate inebriate on the downward gradient until he becomes irretrievably sunk in the lowest depths of social degradation, a pest to society, and a costly burden upon the country. The same amount of money necessarily expended in producing the above results could be employed in making an intelligent effort to permanently cure the poor victim by a course of scientific and medical

treatment, which experience has shown may be successful in a very large percentage of the cases.

ts.

to, ib-

ħе

no ole

nd

as

an

he

ri-

he

nts

lly

s it

im

nd-

iim

'n

ent

ard

est

κIJ

ney

uld

itly

ical

"4th. It has been proved on the best authority and by statistics that inebriety, directly and indirectly, is the cause of more than fifty per cent. of all the diseases, premature deaths, insanity, and idiocy, as well as of the crime and pauperism of this country, consequently causing a continuous gravitation to our hospitals, asylums, and prisons, and imposing a corresponding burden of taxation upon the people, and it is safe to assert that had the same unfortunate victims in the earlier stages of their course been placed in an institution with the best sanitary surroundings, intelligent watchfulness, firm but kindly supervision, under skillful medical treatment, and above all, under those Christian influences which alone are capable of lifting weak humanity above itself, elevating it to a higher level and renewing and exalting its whole nature, a large number at least would have been arrested in their downward course and restored to their family circle, fitted for the ordinary duties of life, and to become useful members of society.

"5th. The statistics of our police courts and our goal reports abundantly prove that a very large proportion of the whole number of cases brought before them are charged with the crime of drunkenness and condemned to confinement. From the reports of the inspector of prisons for 1886 we find that out of 3,200 commitments for all causes, in the City of Toronto alone, 1,705 were for drunkenness, or more than fifty per cent., and nearly fifty per cent. of the commitments for drunkenness in the Province; many of those were committed over and over again.

"6th. That in a large number of cases inebriety ceases to be a vice and becomes a disease as unmistakably such as any other disease, and which is usually described as a form of insanity, or having a close affinity to it, requiring for individual and social interests a course of physical, mental, and moral treatment under personal control which can only be accomplished in an asylum set apart for that purpose, where

the patient is under constant watchfulness and medical care. The superintendent is able to make a special study of each case in its peculiar phase, symptoms, and history, which is indispensable to successful treatment, and which could not be attained elsewhere.

"7th. That the experience of other countries, especially the United States, where inebriate asylums have been in existence for a number of years past, yields abundant proof that inebriety in its chronic form can be cured as effectually and as permanently, in the same ratio, as any other disease, and that this can be accomplished without involving serious outlay. In fact, this mode of treating the inebriate is, in the end, an actual saving in dollars and cents to the city and province. This can be shown by the comparison of the cost of arrest, trial, and support in goal of the unfortunate victim, and that which is incurred in the process of permanently curing. These facts, coupled with the knowledge of the immense advantages, both temporal and spiritual, it must bring to the unfortunate habitual drunkards and their families, ought to stir up the most lethargic community to take prompt action in establishing an institution for the treatment and cure of this dreadful disease. In addition to this it might be stated that experience has shown that wherever inebriate asylums have been established they are largely if not wholly selfsupporting, partly from the surplus from paying patients and partly from work done and wages earned by non-paying inmates.

"8th. It must be admitted that under the present system the objects and purposes of the law are defeated, and a class of inebriates is raised up that is a perpetual menace to all law and order, involving in the process a monstrous waste of public money without one compensating circumstance in return.

"Your committee therefore beg to report that in its opinion it is within the province as well as the bounden duty of municipal and legislative bodies to endeavor to remedy and ameliorate such evils, and the advisability and necessity

of establishing a home or retreat for the cure and treatment of confirmed inebriates being so evident, recommend that active and immediate steps be taken to secure suitable premises in a central position, equip and furnish them with all requisite means and appliances necessary for the successful treatment of dipsomania."

ANTAGONISM OF COCAINE AND CHLORAL.

According to Mosso's observations cocaine has a stimulating effect on the psychic and motor nerve center, increases the rapidity of breathing, quickens the heart action, and increases chemical change going on in the tissues. Its action on nerve centers is such as to render it, in his opinion," the best of known stimulants." In this respect it stands in full antagonism to chloral, which depresses the functional activity of these centers. An animal deeply narcotized by a fatal dose of chloral can be roused in a few minutes by the injection of a small dose of cocaine. Only in one particular does this antagonistic action fail, viz.: in regard to temperature. Chloral, as it is known, tends to lower the body temperature, whereas cocaine on the other hand tends to raise it, sometimes as much as 4° C. in the course of half an hour. Nevertheless after poisoning by chloral, this effect of cocaine is not seen. Otherwise the antagonism between the two drugs is of a very complete nature, large fatal doses of chloral being readily borne after the previous administration of a small dose of cocaine. It would always be desirable, however, in cases of chloral poisoning to perform artificial respiration for a short time after the administration of cocaine, since, although it is ultimately a stimulant, the first effect of the action of the drug may be rather depressing on the respiratory function. Cocaine is also antagonistic in its action to ether and chloroform. The convulsive seizures induced by the action of poisonous doses of cocaine can be at once allayed by the inhalation of either of these agents. In cases of cocaine poisoning in man he therefore recommends that ether or chlo-

al care.
of each
hich is
ild not

pecially been in

t proof ctually lisease, serious in th and procost of m, and curing, mense to the

action ure of stated ylums y selftients paying

ght to

ystem class to all ste of

n its duty medy essity

roform should be administered to allay the first and severer symptoms, chloral being afterwards given in small doses to keep up the effect. Conversely, in cases of poisoning by chloral, opium, and other narcotic agents, causing great depression, especially of the respiratory and cardiac centers, cocaine should be similarly employed. As a therapeutic agent, cocaine is well qualified entirely to replace strychnine, possessing as it does all the therapeutic activity without any of the marked poisonous qualities of the latter drug.—Arch. J. exp. Pathol. u Pharmak.

KNOWLEDGE FOR THE MILLIONS.

The fourth volume of Alden's Manifold Cyclopedia contains 122 illustrations, and extends from Baptism to Bilberry -637 pages, large type, handsome cloth binding, for 50 cents. or in elegant half morocco binding for 65 cents! Is that not truly bringing knowledge within reach of the millions? The great merit of the Cyclopedia is its adaptation to practical use giving under each proper head the information most likely to be needed, and in concise, easily available form. Careful examination impresses one with its accuracy, as well as the remarkable fullness of its information. For actual use it abundantly answers the needs of all save those whose pursuits require exhaustive study of certain subjects. The combination of Unabridged Dictionary and Cyclopedia is a wonderful convenience. Each volume, as it comes to the reader's hands invariably renews the surprise felt that a book so well got up can be afforded for a price so low. Whoever wants a Cyclopedia—and who does not?—would do well to order at least a specimen volume, which may be returned if not wanted. Reduced prices are offered to early subscribers for complete sets, which are to consist of thirty or more volumes, the volumes being issued at intervals of about a month. The work is not sold either by agents or by booksellers, but only by the publishers direct, which in some measure accounts for the wonderfully low prices. John B. Alden, Publisher, 393 Pearl St., New York, or 218 Clark St., Chicago.

ALCOHOLIC PARALYSIS: OBSCURE HYSTERIA.

(From Professor Charcot's Clinic.)

The diagnosis of alcoholic paralysis is especially difficult from the fact that patients generally make every effort to conceal its origin: and this is peculiarly the case with women, who are precisely the individuals most often attacked by it.

Alcoholic paralysis is usually a paraplegia, though the arms are often involved. Paralysis first affects movement: the extensor muscles are the earliest attacked. As a result we have peculiar appearances caused by the flacidity of the lower members and a dragging of the feet. The same is true of the hands, though in a lesser degree, and this attitude is entirely analogous to that of saturnine paralysis; but in alcoholic paralysis the hands and feet are attacked simultaneously and the flacid effects of the malady are always more marked in the latter.

Another sign of these paraplegias is that they are painful. The pain is manifested on pressure, and this is to be especially noted, there being no other form of paraplegia in which this sign is observed as arising from the same cause. It may serve of itself to point out the direction in which to look for a diagnosis. In one case the slight pressure necessary to move a paraplegic patient in bed caused acute pain; this sign, joined to the "foot-drop," led to close investigation as to the alcoholic cause — a fact which was soon substantiated. In locomotor ataxia even, in which the pains are often violent, the pain on pressure is not present except there be hyperasthesia of the skin; even then it is seen that the localization is entirely different, for in alcoholism it is the pressure of the muscles and tendons which determines the pain, and not pressure upon the cutaneous surface.

Pain in this form of paraplegia shows itself spontaneously, especially at night — and diminishes during the day. Patients feel a sensation of heat, sometimes of burning, in the extremities. But there also may be shooting pains

Vol. X.—42

which would render differentiation from ataxia very difficult.

Certain troubles of sensibility are also observable; at first these are manifested by more or less retardation in the transmission of sensations, and afterward by anæsthesia to cold or to pain. The rotulian reflex is wanting, which constitutes another similarity to ataxia. But alcoholic paralysis is accompanied by rapid muscular atropy with diminution of volume, and even degenerative reaction—symptoms which are not observed in tabes.

Finally, trophic and vaso-motor troubles are very marked in alcoholic paralysis; the skin is warm and shining and of a violet color; there is also some peri-malleolar cedema—an aspect very different from that observed in ataxia. Again tendonous retractions are easily induced; this is an important point because there comes a time when—in order to effect a cure of alcoholic paralysis—it is necessary to divide the tendons thus attacked.

Such are the principal signs of alcoholic paralysis, whose etiology is almost always misunderstood. When not of too long standing it may be cured easily enough, even when there are trophic troubles due to peripheric neuritis. The main difficulty, of course, is to get the patients to renounce their drinking habits.

Obscure Hysteria. This boy (æt. 14) presents symptoms of an hysterical nature which are almost always unrecognized because of the singular form in which they appear. Of well-developed intelligence, this child does not seem to have had nervous antecedents as far as his family is concerned; nor does his own past life present any salient points. Cryptor-chidism is not present, a fact which should always be verified, because this condition is sometimes an originator of certain nervous symptoms. He was continuing to develop—after convalescence from a somewhat long attack of post-rubeolic bronchitis—when he was seized one morning with a sort of suffocation accompanied by violent constriction of the throat. This symptom soon passed off, but reappeared three times in

very

; at

the

a to

con-

lysis

n of

hich

rked

ıd of

- an

zain.

ort-

er to

vide

hose

too

vhen

The

unce

oms ized

well-

had

nor

otor-

fied, tain

ıfter

olic

-t of

oat.

s in

eight days and at the same hour (4 A. M.). Soon afterward the symptom was repeated oftener — sometimes three times a day—and was accompanied by convulsive phenomena during which the body assumed the position of the arc of a circle. Well, when the latter sign appeared there was a certainty that the phenomena belonged to the hysteric order.

The important point in this case is, that the attacks were followed by a sort of somnambulism during which the child's actions were very whimsical. But there are cases of hysteria in which the hysteric element is manifested in none of the phenomena of the attack, and in which the phenomena of the final period exist only by themselves. The child would, in this period, suddenly change expression and strike or insult persons around him toward whom, an instant before, he had shown his usual politeness. This state would continue for three-quarters of an hour or longer, after which the patient returned to his normal condition. These phenomena will sometimes be thus continued during two or three months, reappearing every three or four days.

When we study attentively the form of attack we observe that it begins with sobbing, after which the physiognomy undergoes complete transformation. From the time of this appearance the patient is suffering from acute mania with hallucinations of short duration. During this period the patient is to a certain degree controllable and replies to questions. When he returns to consciousness we find that he has no remembrance of what has passed. This particular patient imagines he is in a gymnasium and seizes the objects before him supposing them to be gymnastic apparatus. At other times he thinks he is drinking wine instead of water; or thinks that daylight is present although the lamp is lighted. In talking with him during this period we find that his mind is clear enough; he is able to avoid accidents, and But he has no memory of an make his way in the streets. attack which has terminated.

These phenomena may be compared to those we observe in epileptic vertigo. Nevertheless there are great differences, and the prognosis is different, for the condition we describe may be quickly modified — especially if we practice isolation. Although there is no question here of simulation, we find that in these cases — as in all of those dependent upon hysteria — the removal of family influence, and the use of treatment directed by a stranger are liable to have considerable influence upon cure.

of

de

B

ur

fo

It ar v∈

ha

w

u:

F

m

A final point is, that the time of the appearance of the attacks is in this case exceptional, for it is a general rule that hysterical crises occur oftenest at night, while those of an epileptic character takes place generally in the morning.

Briefly, this is a hysterical case with crises of a peculiar form followed by a particular condition which may be compared to somnambulism, but must not be confounded with it. The diagnosis here is relatively easy because there is present the rough outline of an hysterical attack. But we must bear in mind that the condition may be produced in a wholly isolated manner without our being able to recognize the vestige of an attack—and this would of course, render the diagnosis extremely difficult.—N. Y. Medical Abstract.

When Pinel, in 1794, began his work of convincing the leading men of France of the necessity of establishing a hospital for the insane, the very first argument against his grand project was that the insane person is a devil, a demon, a criminal who should be locked up in dungeons, and loaded with chains; and that the well being of society demanded this treatment.

Twenty years after Pinel's appeal to France in behalf of his humane enterprise, the good people of Massachusetts began to agitate the subject of building an insane asylum. The leading journals of that day opposed the undertaking, arguing that the building of insane asylums would have the tendency to increase lunacy and to multiply crime. Such was the intelligence of the editors of Massachusetts seventy years ago! — Dr. Turner.

Dr. Lewis of St. Louis, performed tracheotomy on a case of collapse from morphine poisoning, and four days later delirium tremens came on and the patient died. Dr. Fell of Buffalo, in two cases of similar character, used forced respiration by a bellows, and the patients recovered. The author urges that in all cases of opium, narcosis, tracheotomy or forced respiration by a bellows be resorted to.

Although Ireland can find no money to pay its rents, it can add one-eighth to its expenditure for whisky, as it did in the year 1887, and also one-sixteenth to its outlay for beer. The national maximum expenditure for drink in England was reached in 1876. It was then £4 9s. per head. From that time it has declined, showing that the drink wave is ebbing.

We have used with the best results the Lactopeptine Elixir, prepared by the New York Pharmacal association. It is composed of phosphate of iron, quinia, and strychnia, and in all cases of dyspeptic disorders, particularly of a nervous origin, it is a most valuable remedy. This association has combined with Lactopeptine many standard remedies, which are invaluable to the active physician, and when once used are found indispensable ever after.

The conditions formulated by the Committee on Infants' Foods, at the American Medical Association, are approximated more nearly by *Carnrick's Food* than by any other with which we are familiar.

Valentine's Beef Extract is a meat stimulant of great value, and one that can be used in all climates and at once.

The Diet Tables, issued by Reed & Carnrick of New York, are most excellent helps for the busy physician.

The Elixir Paraldehyde, by Robinson, noted in our advertising pages, is a very pleasant and most satisfactory remedy for the insomnias from alcohol and opium inebriety.

The Liquid Essence of Beef is a heavy amber liquid that is given with the food, for both a nutrient and stimulant effect. It is of great value in all cases of nerve and brain exhaustion, and should be always used in such cases.

Papine and Bromidia, by Battle & Co., of St. Louis, are standard preparations, used by the regular profession with the best results.

Horsford's Acid Phosphate is probably the most widely sold proprietary article in the market. Both laymen and profession use it with great satisfaction.

The Lactated Food, prepared by Wells, Richardson & Co., of Burlington, Vt., has proved of great value in many cases of inebriety. We urge its trial as a medicinal food for disorders of the brain and nerves,

Parke, Davis & Co., of Detroit, Mich., have placed on the market a preparation of *Casara Sagrada*, which has come in great popularity as a remedy for rheumatism. Many very prominent physicians have used it with the best results, and have recommended it most enthusiastically.

The *Elixir Native Coca* is another of their most excellent preparations, which should be used in all cases of nerve and brain exhaustion.

Fellows' Hypophosphites has been tried as a substitute for alcohol and opium in several cases with the best results. It is more nearly a specific than any of the advertised nostrums on the market. As a remedy in these cases it should be used in all cases.

Marks' Adjustable Chair of New York city is one of the most practical luxuries that can be placed in any home. Send for a circular,

The International Cyclopedia, of Dodd, Mead & Co., New York city, J. H. Boles, General Agent, is the most complete library a professional man can have. The plan of the work and the execution and price are without rivals.

London Essence of Beef

(LIQUID).

Not for making Beef Tea.

Pure expressed Beef Juice, concentrated. Nothing more, nothing less. We use only fine beef. Come to our

factory-any time. See for yourself.

For twenty-five years past—and now more than ever— Essence of Beef has been used in the Hospitals and by the Physicians of Great Britain. See Pavy "Food and Dietetics," London, 1874, pp. 450 and 515.

Useful in all Diseases of the Intestines and Stomach.

Nourishing in Marasmus.

that

lant rain

are vith

lely and

8:

any

for

the

e in

ery

and

ent

and

ute

lts.

os-

uld

the

ne.

ew

ete

ırk

Stimulating in Cases of Prostration.

Strength Supporting in Wasting Diseases.

Physical characteristics. A heavy amber liquid. Delicate in flavor. When placed on ice becomes a jelly. Administered in that form, is grateful and refreshing in fevers. Is taken just as it is from the can. No further preparation needed.

Not for making beef tea. Don't confound with it.

The stomach retains Essence when rejecting all else.

Note.—Add a teaspoonful of Essence to each pint of babies' food; it will prevent intestinal disorders.

In 4-oz. tins, 50 cents.

All druggists don't sell it. Many do. Any can get it.

Gaunt & Janvier New York

ROBINSON'S ELIXIR * PARALDEHYD.

HYPNOTIC, SEDATIVE, ANODYNE.

Paraldehyd C₆ H₁₂ O₃ is a therapeutical agent which has been in use for the past few years only. It is formed by the action of mineral acids upon Aldehyd, C₂ H₄ O.

"In doses of 45 grains it is said to calm restlessness and insomnia, and procure unbroken sleep of from 4 to 7 hours' duration, and to leave behind neither languor, nausea, nor digestive disorders. It also acts as a diuretic. It has been found efficient in the INSOMNIA of various acute diseases, and also in acute MANIA and the excited paroxysms of chronic insanity and dementia. It is proposed as possessing the good without the evil qualities of chloral. (Nat. Dis., 3d Edit., p. 151.)"

It is also claimed to be a valuable antidote to Strychnine.

In Delirium Tremens and Morphiomania it has been used with good results. Our Elixir contains forty-five grains of the Paraldehyd in each fluidounce, dissolved in an aromatic menstruum, whereby the objectionable taste of the Chemical is, to a great extent, disguised, and the preparation rendered palatable.

DOSE-2 to 8 fluidrachms.

Pint Bottles, Retail Price, \$1.50.

Physicians are respectfully requested to specify "ROBINSON'S"

PREPARED BY

R. A. ROBINSON & Co.

Manufacturing Pharmacists,

ESTABLISHED 1842.

LOUISVILLE, KY.

MANUFACTURERS ALSO OF

ROBINSON'S HYPOPHOSPHITES,

ROBINSON'S LIME JUICE AND PEPSIN,

ROBINSON'S WINE COCA,

ROBINSON'S PHOSPHORIC ELIXIR,

ROBINSON'S COLORLESS HYDRASTIS,

ROBINSON'S FLUID EXTRACTS, ETC.

FOR SALE BY DRUGGISTS.

THE HIGHLANDS.

A FAMILY HOME FOR NERVOUS AND MENTAL DISEASES.

WINCHENDON, MASS.

This "Family Home" is conducted by Dr. Ira Russell and Dr. Frederick W Russell, both of whom have made the study and treatment of mental and nervous diseases, physical and nervous exhaustion, opium and alcoholic inebriety a specialty. The Home is not an institution or asylum. It is to all intents and purposes a "Family Home," where everything is made as homelike as possible. Patients are not subjected to the care of common nurses, but are provided with companions. Intelligent gentlemen are employed as attendants and companions of the male patients, and educated American women of experience are the attendants and companions of the lady patients.

The feeling of social degradation that is commonly felt by patients in Retreats and Public Institutions, who are subjected to the control of uncultivated nurses, is not experienced here. The utmost possible liberty is permitted, under suitable guardianship, to all the patients, and each one is regarded and treated as a member of a private family. Each case receives the attention and study given to private practice, and when needed the ablest medical talent in the country is called into consultation.

The Highlands, so called, is a pleasant mansion with cottages annexed, situated in the midst of ample grounds, on an eminence overlooking the town of Winchendon and the valley of Millers River. From the windows a superbrange of hills and mountains can be seen, reaching from Wachusett in the southeast to Monadnock in the northwest.

A piano room, billiard room, bowling saloon, and ample stabling are provided on the grounds. The drives in the vicinity are considered delightful, and for healthfulness of location the Highlands are unsurpassed.

Dr. Ira Russell is the founder and superintendent of the Home, and letters of inquiry can be addressed to him, or to Dr. F. W. Russell, the assistant superintendent. For information we are permitted to refer to the following gentlemen:

- C. F. Folsom, M. D., Prof. Mental Disease, Harvard College, 15 Marlboro St., Boston.
 W. C. Williamson, Esq., 1 Pemberton Sq., Boston.
- J. H. Hardy, Esq., 23 Court St., Boston. Rev. G. J. Magill, D.D., Newport, R. I.
- Wm. A. Hammond, M.D., 43 West 54th St., New York.
- S. G. Webber, M.D., 133 Boylston St., Bost'n.
- G. F. Jelly, M.D., 123 Boylston St., Boston.
- C. H. Hughes, M.D., editor of Alienist and Neurologist, St. Louis, Mo.
- E. C. Spitzka, 130 E. 50th St., New York, N. Y.
 W. W. Godding, Superintendent National Insane Asylum, Washington, D. C.
- Clark Bell, Esq., editor of the Medico-Legal Journal, New York City.
- T. D. Crothers, M.D., Hartford, Conn.

Vol. X.-43



SUGAR OF MILK THE BASIS.

No Cane Sugar.
Free from Starch.
Highest Value in Nutrients.
Easily Assimilated.

IT IS A COOKED FOOD,
A PRE-DICESTED FOOD,
A NON-IRRITATING FOOD.

A regular size package of Lactated Food will be sent, charges paid, to any physician who is not yet acquainted with its merits. Correspondence solicited. WELLS & RICHARDSON CO., Burlington, Vt.



is better than ever, and should be in the hands of every person contemplating buying it contains 3 Colored Plates, thousands of Illustrations, and re to get it, and naming lowest prices for honest goods. Price of ood for 10 cents worth of Seeds PLANTS "BULBS pearly 150 pages, telling what to buy, and GUIDE only 10 cents, including a certific od for to cents worth of Seeds.

JAMES VICK, SEEDSMAN, Rochester, N. Y.

RICHLY

REWARDED are those who read this and then act; they will find honorable employment that will not take them from their homes and families. The profits are large and sure for every industrious person, many have made and are now making several hundred dollars a month. It is easy for any one to make £5 and upwards per day, who is willing to work. EITHER SEX, young or old; capital not needed; we start you. Everything new. No special ability required; you, reader, can do it as well as any one. Write to us at once for full particulars, which we mail free.

Address, STINSON & Co., Portland, Me.

\$ 25 - 26 15 DR. ALLAN MOTT-RING.

will receive a limited number of cases of Nervous Disease in either sex at his Institution, Arlington Heights, Mass., eight miles from Boston. A few cases of Mental Disease and patients afflicted with Dissomnia, and the Opium Habit are cared for in a Sunny Cottage adjacent to the main building.

No institution of which we have knowledge is so well located or so well adapted for the class of patients we treat as this Home. The rooms are large, airy, most of them sunny, well furnished and lighted by gas, and heated by steam. The Music Room and Parlors are large and cheerful. The treatment and Bath-rooms are the largest and most complete of any private institution in the country, and the Turkish, Electric, and Miscellaneous Bath-rooms are fitted with all modern appliances. The Gymnasium 30 × 30 is well equipped.

Everything is done to give the institution a homelike atmosphere, and there is almost an entire absence of the hospital, asylum, or invalid air about it. While enjoying all the advantages of being near Boston, which it overlooks, it is sufficiently distant and so situated as to afford the privacy and quietness of a private residence. For particulars, address

ALLAN MOTT-RING, M.D., Medical Superintendent.

ALLAN MOTT-RING, M.D., Medical Superintendent.

HOME FOR HABITUÉS.

Opium.

Chloral.

Cocaine.

Dr. MATTISON

continues to receive at his residence,

314 STATE STREET, - - BROOKLYN, N. Y., a limited number of OPIUM HABITUÉS, also, CHLORAL and COCAMB cases, to whom he devotes his exclusive professional attention. Patients, six, and select. No alcoholics. Attractive apartments, liberal cuisine, desirable privacy, cheerful society, and personal professional attention, based upon several year's experience in the treatment of this disease.

Details at command.

ELEGANT PRESENT. AN

THE MARKS ADJUSTABLE CHAIR.



Look on this picture of solid comfort and go at once to 930 BROADWAY

and purchase one for your father, mother, brother, stater, sweetheart, or dearest friend. Think of a chair with so changes of position which will form a Parlor Library. Reclining, or Invalid Chair, Lounge, Full-length Bed of Child's Crib.

IT MUST BE SEEN TO BE APPRECIATED!

CHAIR COMPANY, 920 BROADWAY, 21st and 22d Sts.

THE PRIVATE INSTITUTION FOR FEEBLE-MINDED YOUTH.

AT BARRE, MASS.,

ESTABLISHED JUNE, 1848,

Offers to parents and guardians superior facilities for the education and improvement of this class of persons, and the comforts of an elegant country home.

GEORGE BROWN, M.D., Superintendent.

N.W.AYER & SON ADVERTISING AGENTS BUILDING PHILADELPHIA

Cor. Chestnut and Eighth Sts.
Receive Advertisements for this Paper. ESTIMATES at Lowest Cash Rates FREE Send 10c, in AYER & SON'S MANUAL

-THE-

CHICAGO MEDICAL JOURNAL AND EXAMINER.

EDITORS:

S. J. JONES, M.D., LL.D. W. W. JAGGARD, A.M., M D. H. N. MOYER, M.D.

A Monthly Medical Journal, 52d Volume. SUBSCRIBE FOR IT. \$3.00 PER ANNUM.

THE JOURNAL AND EXAMINER contains NINETY-SIX PAGES of reading matter, exclusive of advertisements, and is issued on the first of each month.

The matter consists of Original Articles from the pens of some of the best known members of the Profession, Foreign and Domestic Correspondence, Reports of Societies and Associations, Reviews and Editorials, Items of interest to Physicians.

🖅 Send in your Subscriptions now and we will send you back numbers to make present volume complete without extra charge.

Advertising Rates or Specimen Copies sent upon Application.

SUBSCRIBE NOW.

\$3.00 PER ANNUM.

CLARK & LONGLEY, Pub's, CHICAGO, ILL. 163 & 165 Dearborn Street,

KIRKBRIDE.

Dr. N. ROE BRADNER'S VILLA, near Burlington, N. J., FOR THE PRIVATE TREATMENT OF THE INSANE.

The profession is notified that this establishment is now open, and ready to receive patients in any stage or form of mental disease.

The location and equipment are perfect, and our aim is to allow no place in America to offer

better accommodation for the wealthy insane.

Dr. Bradner, recently of Philadelphia, was formerly at the Pennsylvania Hospital for the Insane, associated with the late Dr. Thomas S. Kirkbride, in whose memory our Villa s named, and has made a specialty of mental diseases, during his whole professional careernearly twenty years.

Your correspondence and visits are solicited.
Address BURLINGTON, N. J.,

N. ROE BRADNER, Jr., A.M., M.D.,

Physician in Chief.

3 Worcester's and 3 Webster's Diction-**\$250 IN CASH!** Holders, worth \$15.50, given as PRIZES for the best essays answering the question 'Why should I use a Dictionary Holder?" For full particulars send to La Verne W. Woyes, 99 and 101 W. Monroe Street, Chicago, the maker of Dictionary Holders. Or inquire at your Bookstore.

THE MEDICO-LEGAL JOURNAL A QUARTERLY DEVOTED TO THE SCIENCE OF MEDICAL JURISPRUDENCE,

Published under the Auspices of the Medico-Legal Society of the City of New York

MEDICO-LEGAL PAPERS. SERIES 3.

This is a volume of 530 pages, issued by the Medico-Legal Society of New York containing certain of the papers read before that Society, from January 1, 1875. It contains papers and articles by Dr. A. O. Kellogg, Mr. Clark Bell, Mr. R. S. Guernsey, Dr. Georg M. Beard, Dr. J. J. O'Dea, Mr. Morris Ellinger, Mr. Jacob F. Miller, and many others.

It has portraits of Mr. Clark Bell, Judge Charles P. Daly, Wm. G. Davies, Dr. Beck, Dr. R. Swayne Taylor, E. W. Stoughton, Geo. M. Beard, M. D., Dr. Connolly, Judge Beach, and

Price, Cloth, \$3.50.

Paper, \$2.50.

Address the Publisher,

LEON P. KUHL.

or CLARK BELL No. 57 Broadway, N. Y.

No. 817 Broadway, N. Y.

HOMEWOOD RETREAT, Guelph, Ont., Canada.

JOSEPH WORKMAN, M.D.,

STEPHEN LETT, M.D.,

Consulting Physician. Medical Superintendent.

A PRIVATE ASYLUM FOR THE CARE AND TREATMENT OF THE INSANE, INEBRIATES, AND THE OPIUM HABIT.

This admirably appointed and salubriously-situated retreat, whilst possessing all the advantages of a larger institution, enjoys the privacy and quietness of a gentleman's residence.

THERE ARE A FEW VACANCIES FOR BOTH MALE AND FEMALE PATIENTS.

FOR PARTICULARS ADDRESS.

DR. LETT, GUELPH, ONT.

TO BE MADE! It is said that dull times are not known by the agents for the great publishing house of Grorge Stinson & Co. of Portland, Maine. They need many more agents in all parts of the country. Those who need profitable work should apply at once. Women do as well as men. It should be remembered that an agent can do a handsome business without being away from home over night. Full particulars will be sent free to those who address the firm; their full address is given above.

MALTINE.



WALTINE is far superior in nutritive and diastatic value to any Malt Extract manufactured in the world. There is no reconstructive that excels Maltine in Phthisis and many wasting Diseases.

MALTINE, in its different forms, is the only Malt Preparation we now employ, being so palatable, digestible, and easily assimilated. Of its efficiency in appropriate cases there is no more doubt in our minds than there is of the curative power of Quinine, Cod Liver Oil, the Bromides, and the Iodides.

It deserves to stand in the front rank of constructives; and the constructives, by their preventive, corrective, and curative power, are probably the most widely useful therapeutical agents that we possess.

Prof. L. P. YANDELL.

MALTINE is a valuable food, a food of priceless value at times of emergency. In fact in very grave gastric cases, it is a food which may often be resorted to when at one's wits end what to do.

J. MILNER FOTHERGILL.

Out of 14 trade samples of Malt Extract examined by Messrs. Dunstan & Dimmock, only three possessed the power of acting on starch. These brands were Maltine, Corbyn, Stacey & Co.'s Extract, and Keppier's Malt Extract. WILLIAM ROBERTS, M.D., F.R.S.

I have subjected "Maltine" and "Trommer's Extract of Malt" to an exact quantitative comparison of their diastatic activity.

The results demonstrate conclusively the far greater diastatic value of Maltine, and enable me to state, without any qualification whatever, that it far exceeds in diastatic power any of the six preparations of Malt which I have examined.

R. H. CHITTENDEN,

Professor of Physiological Chemistry in Vale College,

At the International Health Exhibition held in London, England, the only gold medal and the highest award of merit were given to Maltine by a jury composed of the best chemists in Europe; and recent analyses made by the most reliable authorities in Europe and America prove conclusively that Maltine—in nutritive and diastatic value—is superior to all other Maltpreparations now in the market.

NOTE. — Physicians will observe that Maltine, as now prepared, is not so viscid as formerly made, being of a more fluid consistency; and, while retaining the nutritive and diastatic value, which has given it precedence over all other Extracts of Malt, it is rendered entirely agreeable to the taste of the most fastidious, and is more easily administered. As now prepared we positively guarantee that Maltine will not ferment or congeal in any climate or at any season of the year.

COMPLETE LIST OF MALTINE PREPARATIONS.

MALTINE (Plain).
MALTINE with Alteratives.
MALTINE with Cod Liver Oil.
MALTINE with Hypophosphites.
MALTINE with Peptones.
MALTINE with Pepsin and Pancreatine. MALTINE with Phosphates, Iron, Quinia, and Strychnia.

MALTINE Ferrated. MALTO-YERBINE. MALTO-VIBURNIN. MALTINE with Cascara Sagrada.

Send for Pamphlet giving comparative analyses by twenty of the best Analytical Chemists n this country and Europe.

We will be happy to supply any regular practitioner with eight ounces each of any three Maltine Compounds that may be selected from our list, providing he will agree to pay express

THE MALTINE MANUFACTURING CO., 182 FULTON ST., N. Y. LABORATORY, Yonkers-on-Hudson.

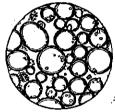
Peptonized Cod Liver Oil and Milk.



Peptonized Cod Liver Oil and Milk 200 Diameters.

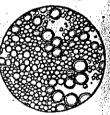
The finest division of oil globules reached in any emulsion or preparation of Cod Liver 0il.





200 Diameters.

All preparations of Cod Liver Oil, but the plain, in the market, are Emulsions, in some form, regardless of the names given them. Their value and easy digestibility over the plain Oil must con-sist in the division of the oil globules. Any physician who has a microscope of any power can compare Cod Liver Oil and Milk with



200 Diameters,

the various preparations of 200 Diameters.

Cod Liver Oil, and he will find that the oil globules of Cod Liver Oil and MILK are from 10 to 100 times finer than any preparation of Cod Liver Oil in the market, and 25 per cent. finer than in nature's Emulsion, milk. This should be the guide in the use of Cod Liver Oil with every practitioner.

Messis. Rhed & Carnrick, New York City.—Dear Sirs: I have examined your Priton IZED Cod Liver Oil and Milk microscopically, with the following results:

This preparation shows extremely minute oil globules suspended in a clear solution. The mean diameter or these globules is rather less than 0.003 m.m. (about 1.8000 inch), and the largest are not over 0.006 m.m. (about 1.4000 inch). For comparison it may be stated that their average diameter is from one-third to one-half that of the red blood corpuscles. These photomic crographs show their size as compared to milk, and Emulsions of cod liver oil in the market. They have all been photographed under exacty the same conditions. In some of the specimens, the globules, when spread out in a very thin layer, gather in clusters, giving an uneven field, but not affecting their size. Very truly yours, JAMES R. DUGAN, M.D., Ph.D. Feb. 26, 1885. Fellow in the Johns Hopkins University, Sec'y Baltimore Micros'l Society.

ANALYSIS OF PEPTONIZED COD LIVER OIL AND MILK, by Prof. ATTRIBLD Ph.D., F.C.S., Etc., author of a Manual of General Medicine and Pharmaceutical Society.

I have analyzed Peptonized Cod Liver Oil and Milk, and find that it is exactly what the makers state it to be. The sample submitted to me has all the properties of a specimen prepared by myself except that their machinery has produced a more perfect emulsion than my hand labor can effect. Indeed, I find by aid of the microscope, that as regards perfection of emulsion—that is, admixture of a fatty with a non-fatty fluid—the oil in Peptonized Cod Liver and Milk is in a finer state of division than the butter is in ordinary milk.

(Signed)

Peptonized Cod Liver Oil and Milk is also combined with Hypophosphites of Lime and Soda.

* Of the preparations of Oil on the market No. 1 contained the largest and No. 2 the smallest oil globules next to Peptonized Cod Liver Oil and Milk, in comparison with all the other preparations of Cod Liver Oil in the market.

Samples sent on application by REED & CARNRICK. 6 HARRISON ST., NEW YORK.



A FREE COPY

OF THE

AMERICAN NEWSPAPER DIRECTORY,

WILL BE SENT,

CARRIAGE PAID;

то

ANY PERSON

WHO IS

A PATRON

OF

GEO. P. ROWELL & CO'S

NEWSPAPER ADVEKTISING BUREAU

TO THE AMOUNT OF

FIFTY DOLLARS.

Geo. P. Rowell & Co. have just issued a new edition (the 165th) of their Book called "Newspaper Advertising." It has 272 pages, and among its contents may be named the following Lists and Catalogues of Newspapers:

DAILY NEWSPAPERS IN NEW YORK CITY, with their Advertising Rates.

DAILY NEWSPAPERS IN CITIES HAVING more than 150,000 population, omitting all but the best.

DAILY NEWSPAPERS IN CITIES HAVING MORE than 20,000 population, omitting all but the best.

A SMALL LIST OF NEWSPAPERS IN which to Advertise every section of the country; being a choice selection made up with great care, guided by long experience.

ONE NEWSPAPER IN A STATE. The best one for an Advertiser to use if he will use but one.

BARGAINS IN ADVERTISING IN DAILY Newspapers in many principal cities and towns, a List which offers peculiar inducements to some Advertisers.

LARGEST CIRCULATIONS. A complete list of all American papers issuing regularly more than 25,000 copies.

THE BEST LIST OF LOCAL NEWSPAPERS, covering every town of over 5.000 population and every important county seat.

SELECT LIST OF LOCAL NEWSPAPERS, in which Advertisements are inserted at half price.

5,472 VILLAGE NEWSPAPERS in which Advertisements are inserted for \$41.40 a tile, and appear in the whole lot one-half of all the American Weeklies.

A copy of this book will be sent free by mail to any address on receipt of THIRTY CENTS

HOW SHALL I PROVIDE

MYSELF AND WIFE and children a little sure accessible knowledge of everything: so that neither I nor they need ever content ourselves with ignorance of any thing, but rather refer to a book and find there what we want to know, as we look for a word in a dictionary?

"We shall like to be able to know a little something about whatever subject comes up.

"Is there a handy book of knowledge, a book with the same relation to facts that a dictionary has to words? It has got to be easy and handy and quick, or I shouldn't use it. Of course it can only give the outlines; make us intelligent, not expert. How much there is to know!"

Such a book is the International Cyclopedia.

There are several cyclopedias. Some are better adapted to general use than others. The International is the latest, therefore, of course, the most correct, explains the largest number of subjects (49,649), and treats very many of the subjects from both the English and American points of view.

Although it is the most comprehensive, it costs less than any other of anywhere negitive contributions.

points of view.

Although it is the most comprehensive, it costs less than any other of anywhere nearly equal rank (\$3.00 a volume), and is sold on an easy payment plan.

First-rate agents wanted, not necessarily experienced. The sale is very ready, and has scarcely more than begun. We know of no equal opportunity for a man out of business. Inquiries promptly answered.

Address JAMES 1. BOLLES, General Agent,

Care of DODD, MEAD & CO., Publishers,

753 and 755 BROADWAY,

NEW YORK

To Young Housekeepers!

FREE TO ALL BRIDES.

 $N^{\,OTICE} \ \ is hereby given to all the readers of this paper and to all their triends and acquaintances throughout the United States and Canada, that$

The Household

will be sent one year as

A WEDDING PRESENT

To every newly married couple whose address — and to cents to pay postage — is sent to the publisher within one year from the date of their marriage.

Persons sending for this present are requested to send a copy of a paper containing a notice of their marriage, or some other evidence that will amount to a reasonable proof that they are entitled to the magazine under the above offer. Address,

THE HOUSEHOLD, BATTLEBORO, VT.

A PRIVATE HOME FOR NERVOUS INVALIDS.

NEW JERSEY, AT BURLINGTON, -

By Joseph Parrish, M. D.

THE HOME is for the care and treatment of persons who suffer from such morbid conditions as result from physical or mental strain and worry. For those, who, by self-indulgence and the unauthorized use of drugs, have impaired the powers of thought and will, and contracted habits for which special treatment is required. Sometimes symptoms appear which threaten serious mind-troubles, or it may be that during convalescence from mild mental disturbance, or from acute sickness, it is a decided advantage to remove patients from home. They do not need an Asylum or public Hospital life, but they do need change of scene, of environment, and social influences where, with the privacy and freedom of a home they may have the care and oversight of physicians who apply themselves especially to the study and treatment of such cases.

APARTMENTS.—Large, well furnished, convenient, and cheerful.

BATHS. - Russian or Vapor, Medicated, and Electric.

NUMBER OF PATIENTS.—Limited to seven.

For further information address

JOSEPH PARRISH, M.D.,

BURLINGTON, NEW JERSEY, U.S. A.

Edwin Alden & Bro.

For cost of advertising in any paper or list of papers published in the United States or Canada, send to the Advertising Agency of EDWIN ALDEN & BRO.,

Cincinnati, New York
Oor. 5th & Vine Sts., 140 Nassau Street.

**Our "Newspaper Combinations," a book of
150 pages, containing prices of advertising, full
instructions, etc., sent on receipt of 10c. Our "Am
Newspaper Catalogue" containing names of every
newspaper published in the U.S. and Canada,
sent on receipt of price, \$1.50. Estimates free.

Advertising Agency.

*BRIGGS PIANOS. *

UNIVERSALLY ADMIRED. ENDORSED BY MUSICIANS AND CRITICS.

Send for "Latest" Edition of Catalogue,

C. C. BRIGGS & CO.,

5 APPLETON STREET,

BOSTON, MASS., U. S. A.



"HOME EXERCISER"

For Brain-Workers and Sedentary People.

Gentlemen, Ladies, and Youths; the Athlete or Invalid. A complete gymnasium Takes up but 6 inches square floor-room; something new, scientific, durable, comprehensive, cheap. Send for circular. "HOME SCHOOL FOR PHYSICAL CULTURE," 16 East 14th Street, N. Y. City. Prof. D. L. Dowd.

Wm. Blakie, author of "How to get Strong," says of it: "I never saw any other that I liked half as well."

THE HUMBOLDT LIBRARY OF POPULAR SCIENCE.

Price 18 Cents Per Number.

To Subscribers, One Year (12 Numbers), -

This LIBRARY comprises many of the best popular scientific treatises of the day. The works are well printed, on good paper, in convenient octavo form - the size of the North American Review. Seventy-six numbers have already (January, 1886) been published. Write for a Descriptive Catalogue to the Publisher.

J. FITZGERALD, 393 Pearl St., New York City.

DEFP SEA WONDERS exist in thousands of forms, but are surpassed by the marvels of invention. Those who are in need of profitable work that can be done while living at home should at once send their address to HALLET & Co., Portage, and receive free, full information how either sex, of all ages, can earn from \$5 to \$25 per day and upwards wherever they live. You are started free. Capital not required. Some have made over \$50 in a single day at this work. All succeed.

ARCHIVES OF PEDIATRICS.

A MONTHLY FOURNAL

DEVOTED TO THE DISEASES OF INFANTS AND CHILDREN.

Subscription Price \$3.00 per Year.

The publishers take pleasure in announcing that, in addition to the regular contributions, the following valuable series of scientific articles will be published in the Archives of Pediatrics

I, THERAPEUTICS OF INFANCY AND CHILDHOOD,

by A. Jacobi, M.D., Clinical Professor of Diseases of Children in the College of Physicians and Surgeons, President of the New York Academy of Medicine, etc.

The plan and scope of these articles are given in the following extract from Prof. Jacobi's

"I will prepare an essay of ten or twelve pages for every monthly issue of your journal. The subjects will be therapeutical. The first paper will probably contain general principles in their application to the disorders of early age. The following will treat of the therapeutics of the diseases of the newly-horn, of developmental and infectious diseases, those of the organs of circulation and respiration, genito-urinary organs, stomach, and other abdominal viscera, muscles and bones, skin, nervous system, etc. Other subjects which will be treated of afterwards are certain classes of remedies, such as anæsthetics, narcotics, anti-febriles, purgatives, absorbents, roborants, stimulants, etc. If there be time and room, the most interesting diseases, such as epilepsy, chorea, whooping-cough, and growths, may become the subjects of special papers."

**Begin in Tanuary and way themat. The subjects of special papers."

Begin in January and run through the Year.

THE SYPHILITIC AND GENITO-URINARY DISEASES OF INFANTS AND YOUNG CHILDREN,

by F. R. Sturgis, M.D., Professor of Venereal and Genito-Urinary Diseases in the New York Post-Graduate Medical School and Hospital, etc.

These articles will cover the following, especially, viz.:

- General considerations of syphilis in children and the methods by which it may be acquired.
 Lesions of the skin and mucous membranes in syphilitic children.
 Lesions of the bones, viscera, and nervous system in syphilitic children.
 Affections of the eye, ear, and teeth in syphilitic children.
 Treatment of infantile syphilis and its sequelæ.
 Diseases of the bladder and urethra in children.
 Functional disorders of the genito-urinary organs.
 Medico-legal aspects of venereal diseases in children.

Begin in January and run to August.

III. THE MEDICAL DISEASES OF THE MOUTH IN CHILDREN,

by F. FORCHHEIMER, M.D., Professor of Diseases of Children in the Medical College of Ohio, at Cincinnati. Begin in September and run through the Year.

J. B. LIPPINCOTT COMPANY, Publishers,

715 and 717 Market Street, Philadelphia.

WASHINGTONIAN HOME,

No. 41 Waltham Street.

BOSTON, MASS.

This Institution is the first of its kind ever formed for the treatment and cure of Intemperance, and was instituted in 1857, and incorporated in 1859.

Up to January, 1884, nearly EIGHT THOUSAND PATIENTS have been treated, and while many have been entirely and permanently cured. all have been more or less benefited and improved.

The elegant and commodious building recently erected at

No. 41 Waltham Street,

A few steps from Washington Street, embraces every modern improvement, and will pleasantly accommodate from forty to fifty patients.

Any man who honestly desires to reform his intemperate habits will find at this establishment every aid and accessory that science, sympathy, and long experience can possibly bring to his relief; and while under treatment, which is simple and pleasant, will at the same time be surrounded with all the comforts of home, and strengthened by congenial associations and agreeable entertainment.

The charges for board, etc., will be moderate-not to exceed the price paid for similar accommodations in any private family. For further particulars, reports, circulars, methods of treatment, etc., address or apply to

ALBERT DAY, M.D.,

SUPERINTENDENT AND PHYSICIAN.

has revolutionized the world during the last half century. Not least among the wonders of inventive progress is a method and system of work that can be performed all over the country without the work; either sex, young or old: no special ability required. Capital not needed; you are started free. Cut this out and return to us and we will send you free, something of great value and importance to you, that will start you in business, which will bring you in more money right away, than anything else in the world. Grand outfit free.

Address True & Co., Augusta, Maine.

MONE.

Fortunes are almost daily made by

SUCCESSFUL OPERATORS IN STOCKS, GRAIN, AND OIL.

These investments frequently pay from \$500 to \$2,000 or more on each \$100 invested. It is always a good time to operate. Chances are daily and hourly presented for realizing exceedingly large profits, without risking more than the amount of money invested.

I buy and sell Stocks, Grain, and Oil on commission, in any amount, on margins to suit customers. Stock Privileges a specialty.

Address for circulars.

WILLIAM E. RICHARDS,

BANKER AND BROKER, 38, 40, and 42 Broadway, New York.



ence is unequaled and their facilities are unsurpassed.
Drawings and specifications prepared and filed in the Fatent Office on short notice. Terms very reasonable. No charge for examination of models or drawings. Advice by mail free.
Fatents obtained through Munn CO. are noticed in the SCIENTIFIC AMERICAN, which has the largest circulation and is the most influential newspaper of its kind published in the world. The advantages of such a notice every patentes understands.
This large and splendidly illustrated newspaper is published WEEKLY at \$3.00 ayear, and is admitted to be the best paper devoted to science, mechanics, inventions, engineering works, and other departments of industrial progress, published in any country. It contains the names of all patentees and stile of every invention patented each week. Try it four months for one dollar. Sold by all newsdealers.

If you have an invention to patent write to Munn & Co., publishers of Scientific American, 561 Broadway, New York.

Handbook about patents mailed free.

GREEN SPRING SANITARIUM AND WATER CURE

FOR THE TREATMENT OF

NERVOUS AND MENTAL DISEASES,

Including the Alcohol and Opium Habit; also diseases incident to women, Skin Diseases, Chronic Rheumatism, and Dyspepsia.

Seventy miles west of Cleveland, in a natural grove of ten acres. Sixteen years successful operation. Means and appliances complete. Treatment by Baths, Electricity, and Massage a

One of the largest Medicinal Springs in America. Elegant apartments. Terms Moderate.

For particulars, address

JOHN S. MARSHALL, M. D., Superintendent, GREEN SPRING, OHIO.

AIGIMORE

The Hypnotic.

FORMULA. -

Every fluid drachm contains 15 grains EACH of pure Chloral Hydrat, and purified Brom. Pot., and one-eighth grain EACH of gen. imp. ext. Cannabis Ind. and Hyoscyam.

One-half to one fluid drachm in WATER or SYRUP every hour until sleep is produced.

INDICATIONS.

Sleeplessness, Nervousness, Neuralgia, Headache, Convulsions, Colic, Mania, Epilepsy, Irritability, etc. In the restlessness and delirium of Fevers, it is absolutely invaluable.

IT DOES NOT LOCK UP THE SECRETIONS.

Papine

The Anodyne.

PAPINE is the Anodyne or pain relieving principle of Opium, the Narcotic and Convulsive elements being eliminated. It has less tendency to cause Nausea, Vomiting, Constipation, etc.

INDICATIONS. -

Same as Opium or Morphia.

DOSE.

(ONE FLUID DRACHM)-represents the Anodyne principle of one-eighth grain of Morphia.

XOXXXA The Alterative and Uterine Tonic.

Formula.

IODIA is a combination of active Principles obtained from the Green Roots of STILLINGIA, HELONIAS, SAXIFRAGA, Menispermum, and Aromatics. Each fluid drachm also contains five grains Ion. Potas. and three grains Phos-Iron.

Dose.

One or two fluid drachms (more or less as indicated) three times a day, before meals.

Indications. -

Syphilitic, Scrofulous, and Cutaneous Diseases, Dysmenorrhea, Menorrhagia, Leucorrhea, Amenorrhea, Impaired Vitality, Habitual Abortions, and General Uterine Debility.

. Specify (BATTLE) when Prescribing Our Preparations.

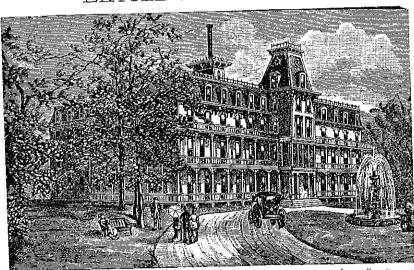
BATTLE & CO.,

Chemists' Corporation,

ST. LOUIS, MO.

76 New Bond Street, LONDON, W. 5 Rue de La Paix, PARIS.
9 and 10 Dalhousie Square, CALCUTTA.

BATTLE OREEK, MICH



THIS institution has for nearly eighteen years enjoyed an increasing patronage from all parts of the United States and Canada, during which time

MORE THAN TEN THOUSAND PATIENTS

have enjoyed the benefits of its UNRIVALED FACILITIES for the treatment of all forms of Chronic Diseases, including special treatment for the EYE, EAR, THROAT, and LUNGS, together with diseases peculiar to each sex.

Special Attention Given to Nervous Diseases.

The managers have spared no expense to perfect the appliances of the establishment to the highest degree, and regardless of cost; and a personal acquaintance with the leading Sanitariums of both this country and Europe enables us to say that no where else in the world can the invalid in search of health find so great an assemblage of means and appliances for combating disease as are to be found here, including Galvanic, Faradic, and Static Electricity; Masage, Swedish Movements, Manual and Mechanical Turkish, Russian, and Roman Baths, and all forms of Water Baths.

The Buildings of the institution consist of two main buildings, one of which is shown in the accompanying cut, and fourteen cottages. Increasing patronage has made necessary the erection of another large structure, a portion of which will be ready for occupancy by July 1, 1884, making the total length over 430 feet. To these advantages are added.

A SALUBRIOUS LOCATION,

a Water Supply, pronounced by an eminent chemist to be of "Extraordinary

a Water Supply, pronounced by an eminent chemist to be of "Extraordinary Purity," buildings constructed expressly for the purpose, and fitted with all modern conveniences, including elevator, electric call, etc., thorough ventilation, the most perfect system of sewerage which can be devised, making contamination impossible, a full corps of competent and experienced physicians and well-trained assistants; in fact, EVERY CONVENIENCE AND COMFORT for the invalid which money or ingenuity can provide.

Address, for circulars and further information, inclosing stamp,

J. H. KELLOGG, M. D., Superintendent, or, SANITARIUM,

BATTLE CREEK, MICH.

Vol. X.-45

FELLOWS' HYPO-PHOS-PHITES.

(SYR: HYPOPHOS: COMP: FELLOWS.)

Contains The Essential Elements to the Animal Organization — Potash and Lime;

The Oxydizing Agents - Iron and Manganese;

The Tonics - Quinine and Strychnine:

And the Vitalizing Constituent - Phosphorus,

Combined in the form of a syrup, with slight alkaline reaction.

It Differs in Effect from all Others, being pleasant to taste, acceptable to the stomach, and harmless under prolonged use.

It has Sustained a High Reputation in America and England for efficiency in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs, and is employed also in various nervous and debilitating diseases with success.

Its Curative Properties are largely attributable to Stimulant, Tonic, and Nutritive qualities, whereby the various organic functions are recruited.

In Cases where innervating constitutional treatment is applied, and tonic treatment is desirable, this preparation will be found to act with safety and satisfaction.

Its Action is Prompt; stimulating the appetite and the digestion, it promotes assimilation, and enters directly into the circulation with the food products.

The Prescribed Dose produces a feeling of buoyancy, removing depression or melancholy, and hence is of great value in the treatment of MENTAL AND NERVOUS AFFECTIONS.

From its exerting a double tonic effect and influencing a healthy flow of the secretions, its use is indicated in a wide range of diseases.

PREPARED BY

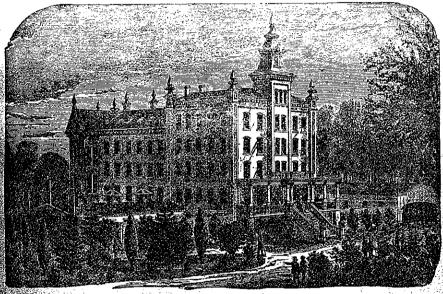
JAMES I. FELLOWS, CHEMIST,

48 VESEY STREET, NEW YORK.

CIRCULARS SENT TO PHYSICIANS ON APPLICATION.

FOR SALE BY ALL DRUGGISTS.

The Inebriate's Home, Fort Hamilton, N.Y.



A HOSPITAL for the TREATMENT of ALCOHOLISM and the OPIUM HABIT

resident, Hon, GEORGE G. HERMAN. Frasurer, Hon, WILLIAM M. THOMAS. Iddical Supt., J. A. BLANCHARD, M.D.

Vice-President, SAMUEL A. AVILA. Secretary and Auditor, J. W. RICHARDSON. Consulting Physician, L. D. MASON, M.D.

HR BUILDINGS are constructed for this special purpose, and they are more complete and better conformal to the treatment of Dipsomania and the Opium Habit than those of any similar institution in fine. They are situated on one of the most attractive points on the Bay of New York, and stand on the Bay of the House of the Narrows, commanding a full view of the whole Eastern Shore are island, also the broad expanse of the Upper and Lower Bay, dotted with the representative sails effactions, and enclosed on the horizon by the blue outlines of the Jersey Coast to the North and the fit Ocean to the South. There are separate dining rooms, lodging rooms and parlors, billiard and coms. There is also a lecture room for religious services, readings, concerts, etc. All the New York and other newspapers and periodicals are regularly taken.

HE MANAGEMENT is systematic thorough and adequate. There has been no change in the staff.

THE MANAGEMENT is systematic, thorough and adequate. There has been no change in the staff edical officers since the inauguration of the Home.

HE CLASSIFICATION of patients originated with and is peculiar to this institution. Being deter-is and regulated upon a strictly commercial basis, it is made to depend upon the character of the lodg-eard and other accommodations which the patients or their friends are willing to pay for.

By this equitable arrangement we are enabled to offer board, washing and medical attendance at rates surving from \$10 to \$40 per week. Those paying \$16 and upwards, according to size and situation of quarters selected, are provided with a single apartment and a seat at table in private dining-room—the accommodations in the select rooms and the table being in every respect equal to those of a first-class hotel. Rooms in suit may be had on terms to be agreed upon.

THE RESTRAINTS.—Our system of restraint is compatible with the fullest liberty for each boarder patient to avail himself of all the recreation, amusement and enjoyment which the billiard-room, park and ball grounds, readings, lectures, concerts, musical exercises, etc., afford

THE DISCIPLINE.—The established code of discipline is comprehended in the observance of THE LAW OF PROPERTY, as universally understood by gentlemen and ladies in the guidance of well-regulated family and social relationships.

Patients are received either on their application or by due process of law. For mode and terms of admission apply to the Superintendent, at the Home, Fort Hamilton (L. I.), New York.

Two daily mails and telegraphic communication to all parts of the country.

How TO REACH THE INSTITUTION FROM NEW YORK.—Cross the East River to Brooklyn on Fulton Ferry boat and proceed either by Court street or Third ave. horse cars to transfer office; or, cross from South Ferry on Hamilton Avenue boat and proceed by Fort Hamilton cars to transfer office thence by steam cars to the Home. Request conductor to leave you at the Lodge Gate.

- Potash

to tas'

Englana onchitis, various

, Tonic, iited. nd tonic ety and

stion, it he food

moving ment of

v of the

ST,

ELIXIR * NATIVE * COCA.

(LORINI.)

AN ELIXIR OF BOLIVIAN COCA LEAVES (ERYTHROXYLON COCA)
PREPARED EXCLUSIVELY FOR PARKE, DAVIS & CO., IN
THE LOCALITY WHERE THEY ARE GROWN,
FROM LEAVES FRESHLY GATHERED.

Each fluid ounce represents 60 grains fresh native coca feaves

This clixir of Coca leaves, prepared in the mative habitat of the drug differe from all other preparations of coca in containing all the original constituents of the native leaves. It has now 6-coca well-known that coca leaves suffer very extensive changed metausportation, 155 that there is a means by which these changes can be prevented. That the loss begins as soon as disleaved habet collected is shown by the fact that the Indians themselver teluse to accept the Pavis aforedies have been dried for a few weeks. (Coca as Home, in Dr. 16, 11, Rushy, Cherngerich, Capital Rush, 1881, 7, 165.)

The precise chemical nature of the change has not been fully made out, but it is known that the volatile alkaloid hygrine, of which only a minute quantity is found in the exported leaves, exists in them in large quantity in the recent state, and can be obtained in abundance from this clixir. That if exerts a profound influence on the nervous centres, is indicated by the experiments of Prof. Ralph Stockman, of the University of Edinburgh. (Pharm. Journ. and Trans., April 23, 1887; 16., Feb. 25, 1883).

Experience has shown that from cocaine, the only appreciable constituent of exported leaves, the characteristic effects of coca-chewing cannot be obtained in any degree. Obviously, these effects are to be obtained only by the use of a preparation of the recent leaves. This clixit, made for us from carefully selected leaves immediately after they are collected, represents their full strength; and possesses the stimulating and supporting powers of the native drug. Representing only 2 oz. of dried leaves to the pound, each fit oz. contains only about ½ gr. of cocaine, so that its continued use is free from the objectionable features of that drug.

from the objectionable features of that drug.

Of the therapeutic effects of coca-leaves in their original condition our knowledge is limited, as their use has been heretofore necessarily restricted to the country where grown. But trials that have been made with this preparation by leading practitioners, and its extensive use in Bolivia fully warrant us in recommending it in the following conditions:

- r. In exhaustion due to excessive physical or mental strain, or resulting from disease
- 2. In pneumonia and kindred diseases involving difficult respiration.
- 3. In dyspepsia, either gastric or intestinal, of the stonic type.

The dose is a fluid ounce and should be taken immediately after eating.

IF It is earnestly requested that physicians should make known the results of their trials of this entirely new preparation.

PARKE, DAVIS & CO.,

MANUFACTURING CHEMISTS,

DETROIT, MICH.

NEW YORK:
Office, 60 Maiden Lane.
Warehouse and Shipping Department, 21 Liberty St.
Crude Drug Warehouse, 213 Pearl St.