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OF

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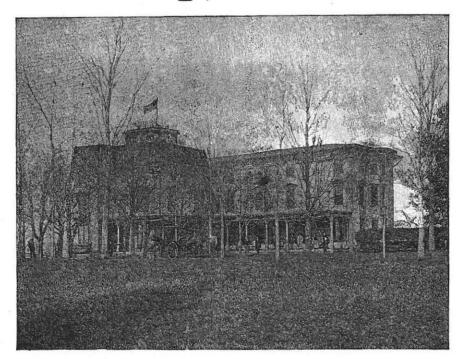
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THE

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

RISE AND PROGRESS OF THE MOVEMENT FOR COMPULSORY CURATIVE TREATMENT FOR HABITUAL DRUNKARDS IN BRITAIN.

BY NORMAN KERR, M.D., F.L.S.,

President Society for the Study of Inebriety; Chairman British Medical Association,
Inebriates Legislation Society; Consulting Physician Dalrymple Home for
Inebriates; Vice-President International Congress of Medical
Jurisprudence, etc.

The first reference to the diseased state of the habitual drunkard which I have found in England was in 1839, in the well-known prize essay, "Bacchus," by my lamented friend, Dr. Ralph Gaines Grindrod. This pioneer, in his scheme of temperance reform, including the recognition of constant drunkenness as an indication of a diseased condition, which should be treated by enforced residence with appropriate environment and under medical care. He says: "The habit of drunkenness is a disease of the mind." Again he writes, "Drunkenness is also a disease of the body." Accordingly, in commenting on treatment, with a view to cure, he lays down that "curative means, moral and physical, must be employed

in the restoration to health of reformed inebriates." Under therapeutic medicines Grindrod gives a prominent place to complete abstinence from all intoxicating liquors, to suitable hygienic conditions, to tonics and other simple medicines. Grindrod freely quotes from the works of the illustrious Benjamin Bush, so that we in Britain have really been indebted to the advanced medical mind of America for our earliest knowledge of the physical aspect of drunkenness and the tendency thereto. Thrice happy mother to be thus blessed by the brilliant scientific thought of her greatest daughter!

At a later period the great movement for compulsory therapeutic seclusion of the habitual drunkard, which has now attained to so great power and influence as to have received official endorsement from five different governmental commissions, and to have been embodied in a cabinet bill which passed a second reading in the House of Lords, was also the legitimate issue of a renewed American invasion of England. Dr. J. E. Turner of Maine, U. S. A., whose name should ever be renowned in the annals of medicine and of mankind as the name of the man who inaugurated the first home in the world for the remedial care and treatment of inebriates, in the course of his heroic twenty-nine years' struggle before the foundation stone was laid, visited Great Britain and conferred with British physicians on the subject so near his heart, some where about the year 1846. Dr. Turner aroused a keen interest in the minds especially of some Scotch medical men, who had already been having the subject under consideration.

Partly as a result of these conferences, there was a favorable reference in the Scottish Lunacy Report of 1857, followed, in 1858, by two papers of great value by Sir Robert Christison and Dr. Alexander Peddie of Edinburgh.

It ought to be here stated that in virtue of an excellent provision, not then existing in any part of the United Kingdom, except Scotland, which was there amended in 1866, it has been possible for an individual to enter an asylum for the insane on his own written consent, with the sanction of the Commissioners in Lunacy. In the five years prior to 1875, no fewer than one hundred and eighty-four patients had thus been received, a large number for so small a country as Scotland. Since the last Lunacy Act of 1891, a similar procedure has been legalized in England, and, though I never advise this course (as in my opinion it is unwise to mingle lunatics with inebriates, in the curative interests of both), unless the patient refuses to go to a hospital for the special treatment of inebriety, I have seen cases, mostly of morphinomania, in which some good had been effected.

From time to time, papers by medical men were read to medical societies, contending that habitual drunkenness was practically a disease, and that other forms of drunkenness were often the issue of diseased conditions, till the late Dr. Donald Dalrymple, M.P., a respected physican practicing at Norwich, crystallized these views in a bill, which he introduced in the House of Commons in 1870.

This bill provided for the scientific care and seclusion of inebriates, voluntarily and involuntarily. Patients applying of their own accord were to be admitted, on the receipt of a written application to the effect that they were inebriates and desired admission. Inebriates were to be compulsorily sent in on the request of a near relative, friend, guardian, or on the certificate of two duly qualified medical practitioners, and the affidavit or declaration of some credible witness. In this bill, there was provision also for the establishment of inebriate reformatories, sanitarians, or refuges, and for the maintenance of habitual drunkards therein, the cost to be charged on the rates; for the appropriation by boards of guardians of a special place for habitual drunkards; for the committal of an habitual drunkard, unable to pay, to a retreat, by a magistrate or justice, sitting in Petty Sessions, on the production of two medical certificates, for a limited period, and for the committal without certificate of any person convicted of drunkenness

three times within six months. During 1871 Dr. Dalrymple paid a visit to North America, where he inspected eight special institutions in the United States and one in Canada. So remarkable was the account which he gave of the results of treatment at these homes, that the House of Commons appointed a select committee to receive evidence, and report on the whole subject of habitual drunkenness. The committee consisted of fifteen members of Parliament, who chose Dr. Dalrymple as their chairman. Again, there was great indebtedness to American medicine in the weighty and skilled evidence of my lamented and revered friend, Dr. Joseph Parrish, then of Philadelphia, and of Dr. Daniel G. Dodge, then of Binghamton. On their testimony, which, in its leading features, was supported by English and Scotch medical evidence, the select committee recognized the existence of a diseased form of drunkenness, "uncontrollable by the individual, unless some extraneous influence, punative or curative, were brought into play," in which disease "self-control is suspended or annihilated, moral obligations are disregarded, the decencies of private and the duties of public life are alike set at naught, and individuals obey only an overwhelming craving to which everything is sacrificed, confined to no class, conditions, or sex, and hardly to any age."

The committee condemned the placing of inebriates in lunatic asylums (except during a brief period, as in a paroxysm of delirium tremens), as improper and not allowable, adding that "The presence of recovering inebriates in an ordinary hospital for the insane is prejudicial to the other inmates in various important particulars, while the discipline and diet needed for the insane is unsuitable for the convalescing inebriate." The committee, after stating their belief, founded on the evidence advanced, that there had been an average of at least 33 per cent. of permanent cures, recommended that after three convictions magistrates should be empowered to require a surety for the sobriety and good conduct of the

party for a fixed period, and, in default thereof, or if the surety be forfeited by a fresh offense, then to sentence the convicted to a considerable period of detention in an industrial reformatory for inebriates, the prisoner having been registered as an habitual drunkard.

The committee recommended that sanatoria or reformatories should be provided for those who, "notwithstanding the plainest considerations of health, interest, and duty, are given over to habits of intemperance, so as to render them unable to control themselves, and incapable of managing their own affairs, or such as to render them in any way dangerous to themselves or others."

Referring to the British witnesses, the committee remark that a large proportion were members of the medical profession, and that the medical evidence proved clearly that the mania for drink often arises from cerebral disease, that, in sober and sedate men, cases of "dipsomania" were caused by falls on the head and sunstroke.

Owing to the resignation of the ministry and the ensuing adjournment of the House of Commons, and to the death of Dr. Dalrymple, that gentleman's bill was not proceeded with.

Three years later, after papers read by Drs. Peddie and Boddington to the Public Health Section of the British Medical Association at the Edinburgh meeting of 1875, the association appointed a committee on legislative restraint for habitual drunkards, now known as the Inebriates Legislative Committee, of which the late estimable Dr. Alfred Carpenter, J. P., was appointed chairman for the first eight years, when he was succeeded by the writer, who has occupied the post for the past thirteen years.

A committee of the Social Science Association acted with the British Medical Association special committee, this joint action resulting in the formation of a new Association for the Promotion of Legislation for the Control and Cure of Habitual

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Drunkards, my devoted and able colleague, the late Mr. Stephen Alford, F.B.C.S., acting as honorary secretary.

Sir William Charley, M. P., Q. C., late recorder for London, drafted a bill for the last-named body, which, somewhat modified, received the royal assent in 1879, having been conducted through Parliament by Sir Charles Cameron, Bart., M.P., in the House of Commons, and by the widely-loved and philanthropic Earl Shaftesbury, in the House of Lords. bill, when originally introduced in 1877, contained provisions for the involuntary admission and detention of habitual drunkards whose will-power had been so broken down as to render them incapable of applying voluntarily for reception or seclusion (with the new feature of conceding to the alleged inebriate the option of appearing before a jury or a magistrate); but the opposition in Parliament to the enactment of compulsion was so resolute that, to save the bill, its sponsors were obliged to exercise every change relating to compulsion. In the passage of the bill we were greatly aided by the friendly officers of the House Secretary, now Lord Cross.

Though so shorn of its strength for good, the royal assent was the affirmation for the first time in English jurisprudence, of the great principle that a man has a legal right to surrender his liberty for a lengthened period, for curative purposes.

It may be amusing to refer to the difficulties which had to be surmounted, even at the eleventh hour. There was but one uncompromising opponent left in the Commons. He was an old and able lawyer, an independent and resolute man, and one whom every one said could never be got to alter his mind once he had "put his foot down." He had announced that he would "block" the bill as a deadly blow to the 'liberty of the subject,' who had committed no crime. This he reiterated to me when I "bearded the lion in his den," or, more accurately, in the lobby of the House, where, during the progress

of the bill, I had to spend many weary hours. After repeated discussions, he at length consented to cease opposition if the duration of the bill were limited to two years. Afterwards, he agreed to accept five years. The bill passed the Commons. A noble peer in the House of Lords undertook to propose a doubling of this term, which was agreed to. On the return of the bill from the Lords to the Commons, our old opponent yielded to the further extension of time (though he still strongly objected to compulsion on principle), on the ground that the experiment should have a fair trial. Were he alive now, he would, I am sure, be ready to grant that the result of the experiment has shown that his fears were groundless, this temporary act having been made permanent in 1888.

The Habitual Drunkards Act of 1879 defines an habitual drunkard as a person who, "not being amenable to any jurisdiction in lunacy, is, notwithstanding, by reason of habitual intemperate drinking of intoxicating liquor, at times dangerous to himself, or herself, or to others, or is incapable of managing himself or herself, and his or her affairs."

Under the provisions of the act an habitual drunkard may be admitted into a retreat licensed by the local authority, to which retreat is attached a qualified medical practitioner, on the production of a statutory declaration by two persons that the applicant is an habitual drunkard, and on his own application for admission, for any period not exceeding twelve months, which application must be attested by two justices, who shall have satisfied themselves that he is an habitual drunkard, and has understood the effect of his application for admission and detention. The applicant, when so admitted under the act, unless discharged or legally authorized by license, is not at liberty to leave the retreat until the end of the period for which he has surrendered his freedom. On a patient's escape the licensee is bound, under penalty, to apply to a justice or magistrate for a warrant to retake and convey the escaped person before the issuing authority. Without the authority of the licensee it is a penal offense to introduce into a retreat and supply to any inmates any kind of intoxicant or sedative narcotics, or stimulant, drug, or preparation.

For the protection of the patients and the prevention of abuse there is a Government Inspector of Retreats, with power of appeal to any judge or secretary of state, who can at any time order special visitation and discharge, and who has power to close unfit retreats.

In 1884 the British Society for the Study of Inebriety, of which I have had the honor to be president ever since, was inaugurated by a luncheon, at which the toasts were honored in non-intoxicating wines, in the rooms of the oldest medical society in the British metropolis, the Medical Society of London, at which among the company were the presidents of the medical society and of three other medical corporations; the late eminent Dr. W. B. Carpenter, F.R.S.; one hundred medical men, among whom were Sir Charles Cameron, Bart., M. P.; Sir Spencer Wells, Sir Edwin Saunders, and Dr. Farquharson, M.P.; besides the Bishop of Ripon, the Dean of Hereford, Lords Shaftesbury and Claude Hamilton, and an Indian judge, Sir Patrick Colquhoun. The quarterly "Proceedings" have comprised some important papers, conspicuous among which was a report of the first International and Colonial Congress on Inebriety, held in London in 1887, which was attended by representatives from England, Scotland, Ireland, Wales, Canada, Australia, New Zealand, the United States of America, France, Germany, Russia, Austria, Holland, Belgium, Sweden, Norway, and Italy. At that congress I had the great privilege and high honor of welcoming a brilliant delegation from the United States, composed of the late distinguished Dr. T. L. Wright of Ohio and Dr. Joseph Parrish of New Jersey, Mr. Schermerhorn, secretary to the delegation, and the accomplished editor of the "Quarterly Journal of Inebriety" and high authority on inebriety, my esteemed friend, Dr. T. D. Crothers of Walnut Lodge Hospital, Hartford. These gentlemen contributed largely to the eclat and usefulness of the congress.

The Dalrymple Home for the Treatment of Inebriety was established at Rickmansworth, in Hertfordshire, in 1883, with a disinterested proprietary, as a scientific experiment under conditions believed to be the most likely to insure a fair trial of the provisions of the Habitual Drunkards Act. No secret alleged "cures," from the great profusion of which commercial speculation has reaped enormous financial returns, as for ages have been gathered in by the "cancer curers" and their congeners, are employed; but each case is made a careful study of, and all the honest resources of scientific medicine and hygiene, with the highest mental, moral, and religious influences, are brought to bear in treatment. The results have been very satisfactory, though these are not characterized by the sensational figures which are so often paraded. The after history of the 377 patients who have been discharged from this hospital shows that 122 have been permanently restored to sobriety, reason, and the capacity to resume the fulfilment of their varied duties in life. I may be here allowed to utter a note of warning against too credulous a belief in wondrous tales of universal, or nearly universal, "cures." A lengthened experience has taught me, when stories of the alleged "cure" of from seventy to one hundred per cent. of cases of inebriety are thrust upon me, to waste no time on the miraculous draught, but live on in the hope of one day being entertained with the fable of 101 per cent. of such "cures"!

There have been other homes in England, some of which have been unsatisfactory, others have been satisfactory; but, unfortunately, the latter have not, as the Dalrymple Home has always done, published tabular records, so that I am unable to make any practical or scientific use of what they have issued.

The Government Inspector has issued his thirteenth annual report, in which he has reported favorably on the condition of the patients.

The question of pauper habitual drunkards, who are perpetually going into a workhouse when prostrate after a debauch and claiming their discharge as soon as they are patched up again, and thus are recapacitated to renew their excessive indulgence, has been freely ventilated. In 1881 the Inebriates' Legislative Committee of the British Medical Association issued three circulars to English Boards of Guardians, inquiring if the boards were in favor of being empowered to detain habitually drunken paupers for treatment, or to pay for their treatment at a special institution. The first circular was sent out in 1881, with a total of eighteen replies, fourteen being favorable, two unfavorable, and two neutral. In 1882, to a second circular there were forty-nine replies, twenty-seven being in the affirmative, eight in the negative, with fourteen neutral. In 1889 there were 229 responses, 131 for, fifteen against, and eighty-three neutral. The guardians are now practically all of one mind on the subject, and are anxious for general compulsion as well.

Scotland has always been more advanced and more unanimous, in favor of legislation for compulsion than England. In 1888 a striking memorial to this effect was presented to the Marquis of Lothian, Secretary for Scotland, signed by noblemen, clergymen, lawyers, physicians, and others. In legal circles most of the opposition has been met in England; while to the Scottish memorial the names were appended of judges, as well as of officers of the leading legal corporations.

In 1895, after having taken an enormous amount of skilled evidence, a Scottish Government Departmental Committee recommended thoroughgoing legislation, which had also been as strongly recommended shortly before by an English Government Departmental Committee. The British Prisons Committee and the Canadian Royal Commission on Intoxicants about the same time condemned the existing penal incarceration of inebriate offenders, and strenuously urged the claims of curative treatment.

So weighty has all this evidence been, that Mr. Asquith, the late Home Secretary, brought a bill before the House of Commons as a government measure, which provided for the remedial seclusion of every grade of habitual drunkard, criminal and non-criminal. This was a noble redemption of the promise which he had made to a joint deputation from the British Medical Association, Inebriates' Legislative Committee, the Society for the Study of Inebriety, and the Homes for Inebriates Association.

Unfortunately, with the fall of the late ministry of Lord Rosebery, that excellent bill expired. The present Home Secretary, Sir W. M. Ridley, gave us a courteous reception, and expressed his opinion that amended legislation was urgently called for. He, however, pointed out the practical difficulty in the way of dealing with non-criminal inebriates, owing to a fear that the liberty of the subject might be imperilled, and that such a law might be abused in the sequestration of sober rich persons by their interested relatives; but he thought that there would be little opposition to the substitution of curative detention, instead of prison discipline, for such inebriates as had come before the courts and lost their liberty judicially. He has intimated that he hopes to introduce a bill with the latter object in the next parliamentary session.

While we shall persist in pressing the obvious need for legal therapeutic seclusion of non-criminal diseased habitual drunkards, we, in Britain, shall cordially support the government in giving us this installment of better law, the results of which more scientific, humane, and just treatment will further and further deepen in the public mind the conviction that inebriety is a true disease, which can be cured if dealt with on sound therapeutic principles.

A word on British colonies. In Victoria and South Australia the law is right, but homes are lacking. In Canada a good beginning has been made in the establishment of homes with ample powers, and in Cape Colony an act similar to the English Habitual Drunkards Act of 1879 has just been passed.

With the existing laws and institutions in some Swiss cantons, with the special Asylum for Inebriates now being reared in the neighborhood of the Seine in France, with the governmental proposals in Austria-Hungary, and with the splendid record of your magnificent provision, law, and work in the United States, we in the old country will steadily persevere in the earnest hope and confident anticipation that success will ultimately crown our efforts, and that every civilized community on the face of the earth will ere long redeem the injustice of the past and of the present day by the enactment of righteous legislation, and by the provision for the poorest of inebriates of the most effectual means whereby these sorely afflicted ones may be enabled to be delivered from the appalling tyranny of a disease, the utter misery of which has never been surpassed by the most abject bondage which the world has ever known.

An exhaustive report by the well-known physiological chemist, Prof. R. H. Chittenden of Yale, would seem to justify the claims set forth by the American Ferment Company regarding their new vegetable digestive agent Caroid. This report shows the digestive activity of Caroid in various mediums and in comparison with other well-known digestive agents. It would seem that Caroid, which is a highly concentrated extract from the Pawpaw plant, is not restricted as to class of food, medium, or combination with other drugs so far as its activity is concerned. This is a matter of decided interest to medical practitioners. We are glad to see that the price of this new ferment does not make its general use prohibitive.

The Arethusa Spring Water Company of Seymour. Conn., will send some trial bottles to any physician who wishes to test it. We commend it as a valuable water.

ACUTE ALCOHOLIC INTOXICATION IN A YOUNG CHILD, FOLLOWED BY CONVULSIONS AND PARALYSIS OF CEREBRAL ORIGIN, AND BY MULTIPLE NEURITIS.

BY C. A. HERTER, M.D.,

Visiting Physician to the City (Charity) Hospital; Neurologist to the Lying-in Hospital, etc.

Acute alcoholic intoxication is so rare an occurrence in very young children that the condition and its consequences have as yet been but imperfectly studied. The following instance deserves to be placed on record as an instructive illustration of the severe and prolonged nervous disturbances that may follow a single large dose of alcohol. Although it was disappointing not to be able to determine the precise anatomical basis of these disturbances, there is some compensation in the observation of the clinical fact that such grave symptoms may be followed by what is to all appearances a complete recovery:

Charlie O'N., aged three years, admitted December 13, 1895, to Dr. Holt's service in the Babies' Hospital. Father and mother healthy. One other healthy child. Patient never nursed. He had chicken-pox; no other contagious disease. Father of patient is a barkeeper, and the child is accustomed to small drinks of whisky. Patient perfectly well until three weeks ago, when he is said to have drunk twelve ounces at least of pure whisky one afternoon. He fell at once to the floor, cried for about two minutes, then went into a stuporous condition which lasted fourteen hours. He gave evidence of intoxication, laughing and singing, dozing

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at times throughout the night until eight o'clock in the morning, when he had a convulsion. Previous to the convulsion there was no paralysis. The entire face twitched, and both legs were drawn up. Convulsions recurred in five or ten Patient was given a mustard bath and castor oil. He had a movement and was apparently relieved, and went to sleep for about half a day. Was in a drowsy, stupid state the greater part of the time for a week; then the effects of the whisky seemed to wear off, and he was for a time brighter. During the next ten days he was still sleepy and irritable. There was perfect motion in the extremities during these ten days, which make seventeen days from the time the whisky was taken. Four days ago he gave evidence of pain upon urinating. From the time of intoxication until four days ago he spoke at times.

Status Praesens, December 13, 1895. — Both pupils respond to light. Very slight rigidity of the neck, if any. Ap-

parently entire loss of sensation over the upper extremities. There is some apparent loss of power in the upper extremities. The feet are cold. The left leg is spastic. Sensibility is present in both lower extremities. The extensor longus pollicis is tightly contracted, lifting the great toe to nearly a right angle. The left leg is held slightly lifted from the bed. The right leg is lax and can be moved slightly. There is entire absence of patellar reflex on the right side; it is present on the left side, but diminished. Phimosis is present. Pulse, 150; temperature, 99.5 degrees. He passes water with diffi-The bladder is apparently full. Heart negative. Spleen and liver not enlarged. Right kidney enlarged; left

kidney felt.

14th. The patient vomited everything in the afternoon. Pulse 160, regular, fairly strong. Respiration 32, regular. Abdomen not retracted. Liver felt just below the border of Spleen not felt. Since admission he has lain most of the time in a condition of semi-stupor, making no signs for anything. Last night for a few hours he was extremely irritable. Pupils are slightly dilated, and there is slight vertical nystagmus. Very slight rigidity of the neck. The feet are dropped; knee-jerks lost. During examination he had a convulsion lasting about ten minutes. It began in the right arm and face, then it affected the right leg, the face subsiding

first. He was given chloroform for the convulsions, and an

eighth of a grain of morphine hypodermically.

15th. — Vomiting has ceased. There is constant drowsiness. Pulse 150, regular, fairly strong. Respiration regular. Slight rigidity of the right hand and forearm. Pupils nor-

mal in size and respond to light.

16th. — Two slight convulsions this morning of the same character as those on December 14th. Stupor not quite so deep. Marked general rigidity, a little more marked on the left side than on the right. Very slight stiffness of neck. Pupils dilated, but respond. Abdomen slightly retracted. At 4:40 P. M. a convulsion occurred, lasting five minutes. Convulsive twitching all night. Swallowing difficult.

17th. Rigidity continues, and is most marked on the left side. Right leg completely paralyzed. Left leg and arm weak. Pupils alternately contracted and dilated. Respiration slightly irregular. Frequent slight convulsive seizures on the left side. Continues in stupor. During the night

he moans occasionally as if in pain.

18th. — Rigidity continues, but is variable. Stupor less marked. Pupils dilated. The contracture of the extensor of the great toe on the left side seems permanent.

20th. — Rigidity continues, left leg still remaining flexed.

21st. — Great restlessness during early morning.

22d. — Vomited twice.

23d. — Stupor and rigidity still more pronounced. He is fed with difficulty. At 10:30 P.M. severe general convulsion occurred, especially of the left side. Extreme conjugate deviation of the eyes to the right occurred before and during the convulsion. During the past three days there has been slight, but increasing flexion of the left thigh. The leg is now so extremely flexed that the heel is fixed firmly against the buttock. The right foot is extremely extended. Both hands are tightly clinched. There is some oedema of the dorsum of the left hand. There is fibrillary twitching of the tongue. From time to time there is a rapid coarse tremor of the left sidt. During the night he has little or no sleep. His head is rolled almost constantly.

24th. — Tremor continues to occur. Pulse and respiration regular, but pulse very weak. Skin covered with miliaria eruption. There is conjugate deviation of the eyes to

the right.

25th. — Repeated convulsions for two hours, of the same character as before. Chloroform is necessary to control them. Left side is in tremor most of the day and night.

27th. — Tache cerebrale pronounced.

28th.— Has considerable cough. Signs of hypostatic

pneumonia behind.

During the following week the condition of the child remained practically unchanged, except that signs of consolidation of the right lower lobe became pronounced. By January 2d the convulsions began to be less frequent and the general rigidity somewhat less. The pupils at this time were very small, equal, and did not react to light. There is slight varying strabismus. The stools continued to contain considerable mucus.

January 8th. The patient lies in a stuporous condition, the right arm paralyzed, right leg weak, left leg in extreme contracture, and the hand in typical bird-claw-hand position. Pupils medium, about equal, react to light. Slight varying strabismus. Knee-jerks not obtainable, perhaps owing to contractures.

10th. — Mental condition somewhat improved. He can be roused.

11th. — Ophthalmoscopic examination: edges of discs somewhat hazy; vessels radiating from disc abnormally full. No distinct signs of optic neuritis.

13th. — The child is very restless, with constant rolling of the head. Has repeated slight convulsions, chiefly on the left side. There is pronounced wrist-drop. The left wrist is extremely flexed. The right foot extended. The left foot

slighty flexed.

14th. — Face and neck are flushed. On the hands and knees are numerous erythematous spots of about the size of a penny, which disappeared after a few hours. There was no marked change in the condition of the child until Jan. 23d, when the mental condition seemed much improved for a time. He recognizes his father. Contractures unchanged. Wasted muscles are tender to pressure. Vasomotor disturbances are frequently noted, especially flushing of the face. He continues to roll the head from side to side. Pupils dilated, but respond to light. Signs of complete consolidation of the right lower lobe continue.

29th. — He vomited once at 10:30 curds and mucus.

30th. — There is a moderate purulent discharge from the right ear.

February 1st.— He was very restless during the night;

coughed considerably.

2d and 3d.— The condition of the patient is bad; he has lost four pounds and four ounces since he has been under observation. He is weak and looks pale. There is considerable cough. The most striking thing about the appearance of the child are the contractures of the mucular atrophy. The right arm is rigid, slightly flexed at the elbow, and the wrist is flexed and rigid. The first phalanges are well extended, the second and third flexed. There is slight return of power in the upper arm muscles. The right thigh, leg, and foot are moderately flexed, the muscles of the anterior tibial group are completely paralyzed. The left arm and forearm are very rigid and the wrist is markedly extended. The left hand is clinched and adducted. The left thigh and leg are in extreme flexion, very difficult to extend, the thigh is adducted, and the foot extremely extended. The extremities are everywhere considerably atrophied, the wasting being more pronounced on the right side, where the forearm is one-fourth of an inch smaller than the left, and the thigh three-fourths of an inch smaller in circumference. There is considerable atrophy of the right dorsal interessei and muscles of ball of thumb. Knee-jerks are not obtainable. Sensibility normal. No rigidity of neck; no strabismus.

6th. — Left leg and thigh give no response in any of the muscles to a strong faradaic current. In the right leg there is no response to faradaism above the knee; below the knee there is no response except in the tibialis anticus and extensor longus pollicis. No response in any of the abdominal muscles to the faradaic current. On the left side the deltoid and pectoralis major contract feebly to faradaism; triceps very feebly; biceps, no reaction; extensors of wrist, fair contraction; flexors of wrist, very feeble contraction. The interoses still react on the left side. In the muscles of the ball of the hand there is very feeble contraction. Muscles of the neck are normal. Contraction of the left side of the face feeble, but distinct.

On the right side, the deltoid gives fair contraction, but rather feeble.

The pectoralis major very feeble. The triceps fair; biceps good, rather slow. Extensors of wrist, good contraction.

Flexors of wrist, feeble. Supinator longus, fair reaction. Interossei, good reaction. Muscles of hand, little finger, fair reaction. Right facial nerve and muscles, fair reaction, rather feeble.

Upper Extremities. — All muscles react fairly well to galvanism; some muscles rather sluggishly. In every case the cathodal closure contraction is stronger than the anodal closure contraction, but in some muscles, especially on the left side, the former is very little stronger than the latter.

Lower Extremities. —Leg contraction everywhere obtainable with galvanism, to some extent. Cathodal closure contractions somewhat stronger than anodal closure contractions.

The child continued to lose weight until March 2d, when he weighed five pounds and twelve ounces less than on admission. Up to this time there was occasional twitching about the eyes and mouth, and occasional vomiting. In other respects considerable improvement was noticeable at this time. The contractures were less marked, and there was considerable recovery of power in the right arm, including the hand. By March 18th, some power of speech had been recovered, and from this time on recovery was rapid in every direction. By April 6th he was able to use his hands freely and to move his legs about, but was still unable to stand. The contractures had disappeared, and the muscles had begun to regain their loss of volume.

April 28th. — The child has apparently entirely recovered. He walks well. There is no contracture anywhere, and the measurements of corresponding parts are the same on both sides. The knee-jerks are present. The muscles everywhere react promptly to a faradaic current of moderate strength, except the left quadriceps extensor, which reacts feebly. The child speaks fairly well, but stammers very much. He is said to have stammered before the onset of this illness. He is bright and fairly intelligent, and there is no evidence that his mental condition has been impaired by his sickness.

Briefly stated, we have here a child three years and a half old, who, after a large drink of whisky, went into stupor varying in depth and lasting more than two months; had a large number of convulsions, partly general and partly limited to the left side; developed right-sided paralysis, which was especially marked in the arm; extreme contractures, especially of the left side, and loss of faradaic irritability with wasting, and during the first two months had pupillary symptoms, strabismus, and repeated vomiting. During six weeks there were the signs of complete consolidation of the right lower lobe. From December 13, 1895, until February 7, 1896, there was an irregular fever, which was not usually very high.

When the patient first came under the observation of the writer it was thought doubtful whether the draught of whisky could be held responsible for the symptoms. The paralysis, the stupor, the repeated convulsions, and the fever, persisting as they did, made it likely that the case was one of meningitis, implicating especially the convexity. When strabismus, vomiting, and irregular breathing became prominent, it became difficult to resist a strong suspicion that the condition was one of tubercular meningitis. With the development of marked contractures in the extremities, with considerable muscular atrophy, loss of knee-jerk, and tenderness of the muscles to pressure (when the mental condition was such as to permit a reaction to painful sensations), it became highly probable that the child had developed a multiple neuritis of alcoholic origin. The alcoholic origin of the symptoms was made very probable, if not certain, by reliable information (not at first obtainable) as to the quantity of whisky taken.

When the symptoms of multiple neuritis became fully developed and their dependence upon alcohol became clear, it was evident that the cerebral symptoms which marked the early stage of the illness were likewise the consequence of intoxication by alcohol.

As to the nature of the anatomical changes, which we must assume to underlie the persistent cerebral symptoms, we have no information. A somewhat extended search through the modern literature of acute alcoholic poisoning has failed to discover a similar case in which the histological findings throw light upon the conditions present in our case.

Although it is necessary to use the greatest caution in transferring to man the results obtained by the experimental study of alcoholic intoxication in lower mammalian forms, the recent observations of Berkley are of considerable interest in connection with the case under discussion. This observer made a careful study, by means of the Nissl method and the silver-phospho-molybdate method, of the brains of three rabbits which had been fed during three weeks with considerable, slowly increasing doses of alcohol. All the animals showed a marked loss in weight, and two of them died in convulsions. Sections from the cortical portions of the cerebra showed that the cell bodies of the nerve cells failed to give their stichochromic structure. They stained imperfectly; there was beginning swelling of the nucleoli, and there was swelling of the branches of certain dendrons, while in other cases the dendrites were apparently atrophic.

The axons and collaterals were not implicated in the degenerative process noted in the dendrites. The cell bodies of the vascular neuroglia cells appeared increased in size, and their protoplasmic extensions were thick and knotty. In the blood vessels pronounced changes were detected. arteries and intermediary vessels of the neuclei of the endothelial cells were everywhere swollen and in places fragmented. The alterations in the muscular protoplasm of the vascular walls were especially distinct, and indicated that the cells were undergoing a retrogressive process. In the perivascular spaces were large numbers of leucocytes in various stages of degeneration, often a number of large granular protoplasmic bodies without nucleus, and a quantity of finely granular detritus. There seems little doubt that the alterations in the nervous structures are chiefly dependent on the vascular changes which were observed.

It is not unlikely that acute alcoholic intoxication in man gives rise to alterations in the vascular and nervous elements of the cerebral cortex similar to those just referred to. Future studies will positively determine whether this is true. It is certainly unnecessary to assume the presence of a gross cerebral lesion like meningitis to explain the symptoms in our case, and a slight cortical encephalitis would probably account for both the paralytic and the irritative manifestations. The writer recalls the case of a child with pneumonia, in whom there developed a persistent paralysis, chiefly unilateral in distribution. The autopsy revealed no coarse lesion; but a microscopic examination of the motor cortex showed the presence of slight vasculitis and perivasculitis.

COMPARATIVE EFFECTS OF DIFFERENT ALCO-HOLIC DRINKS ON MEN.

Lanceraux has investigated the changes taking place in the nervous system due to abuse of different alcoholic drinks, wine, beer, absinthe, essences, etc. Some of his conclusions are as follows:

"In excessive use of alcoholic drinks of high percentage of alcohol, the tactile and thermal sensibilities do not seem to be greatly altered, while sensibility to pain seems exaggerated. In those that use absinthe and similar drinks to excess, the plantar reflexes are increased, light tickling causing movement, while slight stroking of the knees, legs, or abdomen causes pain severe enough to cause the patient to complain.

"Similar results, although less marked, are to be observed in the upper extremities. In wine drinkers, this sensitiveness of the skin is much less in the lower extremities; above there may be a zone of hyperaesthesia, while still higher in the body normal skin sensation is the rule. Psychical symptoms by absinthe drinkers are stated to be fewer than is generally supposed and taught in the ordinary text-books. Wine and alcohol drinkers are prone to attacks of acute delirium, while in those that drink alcoholic essences, forms of dementia are more liable to follow."

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THE EFFECTS OF NICOTINE.

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The tobacco plant is well known by botanists as one of a large family, the Solanacae, and a peculiarity of them all is the production, in larger or smaller quantities, of some narcotic drug, nicotine being the principal one of the group. This drug is found in the plant to the extent of from three to nine per cent., the latter being an excessively large amount. The larger part of the product put upon the market contains from three to five per cent. The last census report shows that the export to foreign nations is about \$40,000,000 worth. and that we produce 500,000,000 pounds per year. It becomes as important a subject with us as that of bread and butter, for our community spends about as much for tobacco as for flour. But its greatest importance relates to the possible physical effects it may have, especially as used by the young people in the community. Somebody has said that in the combustion of tobacco in smoking the nicotine is entirely destroyed, broken up into oils and acids, and that the nicotine itself is not taken into the system. The combustion of tobacco, under ordinary conditions, does not destroy the drug. Kissling recovered 52 per cent. of it from the smoke of a sample containing 3.75 per cent. of nicotine, and from a lower sample 84 per cent.

I speak of nicotine as a drug because, if you take up any book on materia medica, you will find that tobacco is discussed in the same way as opium, quinine, or any of the drugs that are in common use by physicians, and that its physiological effects are stated there without prejudice. The amount of nicotine derived from a cigar in smoking is somewhere in the neighborhood of one per cent., if we presume that one-half is destroyed by the process of combustion and the other half drawn in with the smoke; and this is especially true in the use of a pipe, where the tobacco is completely burned out. As to absorption, it is a very volatile oil-like material, soluble in water, glycerine, oils, alcohol, etc., so that that part which touches upon the mucous surfaces passes into solution and is pretty largely picked up. White tells us that a dose of onethirtieth of a grain will produce toxic symptoms in the body, so that we need absorb only a small proportion of the amount actually taken in during the process of smoking of a cigar or a pipeful of tobacco to reach the limit of easy toleration by the system. Looking upon the matter from this standpoint, we can appreciate the fact that there is an immense amount of drugtaking in the community, and we might expect that there would be such physical effects as could be readily determined and stated.

All through the history of the use of tobacco, which goes back some 300 years, different writers have abused it and praised it, until one who might attempt to gain information would be at a loss to come to a definite conclusion as to its merits or demerits. Burton, in the "Anatomy of Melancholy," probably gives it its due when he says: "Tobacco, divine, rare, super-excellent tobacco! which goes far beyond all the panaceas, potable gold, and philosophers' stones; is a sovereign remedy in all diseases; a good vomit, I confess; a virtuous herb if it be well qualified, opportunely taken, and medicinally used; but, as it is commonly abused by most men, which take it as tinkers do ale, 'tis a plague, a mischief, a violent purge of goods, lands, and health."

Now, this is one of the peculiar drugs — opium is another — which, while they are to a certain extent harmful, have certain influences that are favorable, consequently a balance

must be drawn between the good and bad influences. I wish to be fair in this matter, and say that the use of tobacco does not pass as entirely an evil, because we have plenty of people who are willing to bear witness to the fact that they get a certain amount of nervous comfort from it. Let us look upon it as it influences the human body, especially in the period of growth.

It has been my privilege to spend the active part of my life in working with young men, and I naturally am interested in that particular animal. The boy is always inclined to follow out those instincts to which we refer when we say that "he apes his elders." That is, if there is any act which he is in the habit of seing a grown person do, the boy (or girl) wishes to imitate it, be it good or bad; and I fancy this is the reason why we find so many boys smoking, hoping thereby to gain a certain reputation for maturity among their mates. This desire to be mature is common to all of us. We did not lay aside the idea with our knickerbockers.

Among boys in secondary schools the tobacco habit has become very general. In these schools the boys are for the first time away from home, and they are allowed to mature somewhat too rapidly for their future keeping qualities. I have spoken to the principal of one of our largest preparatory schools within a year regarding the health of students who smoke, and, while he does not use tobacco himself, and says that "it is the bane of the school, and more boys break down in health and are sent home from its influence than from any other," yet there is no effort to control this use of the drug by the pupils. Unfortunately, in very many of these institutions there is an unpleasant condition of being dependent for financial income on the tuition of the students. In very few of these schools is there direct personal supervision of the health of the students, and the physical influences that have affected their growth or health are not recorded until the young men reach college, where it is possible, by comparing the measurements

and tests of large numbers of young men, to determine in a fairly exact manner what influences have tended toward physical deterioration, and what have tended toward growth and improvement.

A tabulation of the records of the students who entered Yale in nine years, when all of the young men were examined and measured, shows that the smokers averaged fifteen months older than the non-smokers, but that their size — except in weight, which was one and four-tenths kilograms more — was inferior in height to the extent of seven millimeters, and in lung-capacity to the extent of eighty cubic centimeters. The observed rate of growth at this age would lead us to expect that the smokers, from their greater age, would surpass the others by one kilogram in weight, two millimeters in height, and one hundred cubic centimeters in lung-capacity.

The difference in age in the two groups points to an age limit to parental restraint, and raises the inquiry as to what might supplement this influence. The wide variation in lungcapacity demonstrates an influence on lung tissue that is also illustrated below.

The study of drugs on the muscular and nervous systems has led to certain valuable conclusions. Dr. Foster, in his "Physiology," speaks of the influence of nicotine on the nervous tissues, especially on the vagi, as paralyzing their activity, thus allowing the heart muscle to wear itself out. With this information we can easily understand how, in the beginning of the habit of smoking, the influence of nicotine causes so much disturbance to the circulation, for the vagus is the great controlling nerve of the heart, and that organ first gives obvious response to the poison. The influence of nicotine may be counteracted by the administration of powerful heart stimulants, like strychnine, caffeine, alcohol, etc. The whole nervous system is affected to some extent by even moderate doses of nicotine. This may be seen by its effect upon the pupil of the eye, where there is temporary dilation, followed

by prolonged contraction of the pupil, which behaves very much as it would under the local influence of pilocarpine, or under the systemic influence of full doses of morphine. Where there is prolonged use of the drug the bad effects are disclosed in the optic disk, which is the end of the optic nerve, readily seen in an examination of the fundus of the eye, and which is the only large nerve that is laid bare to ocular observation. There appears to be less irritation of the brain structure and the efferent (motor) nerves than of the afferent (sensory) nerves, but the power of fine coördination is decidedly lowered by the drug. The muscle cells are also apparently only slightly affected by it, but, the nerve supply to the muscles being affected, the practical motor ability is greatly impaired. This has been thoroughly demonstrated by experiments carried out by Dr. W. P. Lombard of the University of Michigan, who has shown that the administration of even moderate amounts of tobacco in the form of smoke lowers the working power of the human muscle by a high percentage, and there seemed to be no compensation for lowered temporary ability in increased duration of it. His experiments were made with Mosso's ergograph, and his results may be crudely summarized as follows: In from five to ten minutes after beginning to smoke an ordinary cigar muscular power began to diminish, and in an hour, when the cigar was burnt, it had fallen to about 25 per cent. of its initial value. The total work of the time of depression, compared with a similar normal period, was 24.2 to 44.8.

So far as the alimentary tract is concerned, there is a decided stimulation of the flow of peptic fluids. For this reason tobacco has been recommended as a sort of gastric stimulant after eating, and it undoubtedly acts in this particular way. If this be true, however, the ordinary use of the drug must be extremely destructive to the digestive process. We have all chewed gum before dinner until, when we came to eat and tried to chew dry food, there was no saliva to mix with it, and

we ate with discomfort. In this case exactly the same thing happened to the salivary glands that would happen to the peptic glands if one were to smoke before meals during the period of rest for the stomach, for the gastric glands would be depleted, the fluids poured forth into the stomach under the stimulation, not being retained in that organ by food to be digested, would pass on into the intestinal tract, and when food was finally taken the peptic cells would be unable to pour forth adequate solvents for the proteid mass, and digestion would be delayed until such solvents could be formed by cellular metabolism. Meanwhile, the food would be retained in the stomach in a warm and moist condition, favorable for the development of decomposition germs, which must always be present in the food we eat. The result of the decomposition process is the production of acids that are extremely irritating and cause the discomforts that are so familiar to the dyspeptic. Not only has the food been manufactured into chemicals hostile to the organism, but, so far as future nutrition is concerned, it is actually lost, for the physiological cost of reducing these decomposition products to available forms for absorption and use is more than the available heat that can finally be produced in their oxidation.

Regarding glandular activity, it may be said that nicotine stimulates secretion in general, as is illustrated by the influence upon the mucous glands of the mouth and general alimentary tract. This over-stimulation of the mucous area would naturally lead to the development of catarrhal affections, and it would seem that this drug was contra-indicated in all forms of tendency to catarrhal diseases. This must mean, if the popular estimate of the condition of the New England nose is correct, that few Yankees, at least, should use tobacco.

Now I ought to speak of one quality of tobacco smoke that seems to be sanitary to a certain extent, and that is, that it has a considerable antiseptic value. If a person is so slovenly that he does not care for his teeth as he ought, it may be a preservative of them; and in certain catarrhal conditions one could almost be pardoned for the offensive fumigation on this same ground. I speak of this because I wish to give whatever credit is due, and this seems a fair statement of the result of experiments in the matter.

What is known of the influence of nicotine upon the blood may be briefly summarized. Some physiologists have claimed that the blood corpuscles seemed to assume a notched appearance; but this is believed now to have been due to the handling of the corpuscles while on the microscopic slide, and the influence of nicotine upon the blood corpuscles is believed to-day to be comparatively slight, although the spectrum of the blood is altered, showing that they are affected in some way. It is true that anaemia is a constant accompaniment of chronic nicotine poisoning, but this is due to the disastrous results of the poison upon the digestive system, which does not prepare abundant nutriment for the blood current, and the anaemia should therefore be referred to starvation rather than to corpuscular degeneration.

Another proof of the physical deterioration produced by chronic nicotine poisoning is found in a report by R. L. Mc-Donnell, regarding the family life of cigar-makers in New York city. He reports that in 337 families there was an average of but 1.63 children to a family. The conclusions to be drawn from this need not be pointed out.

The effect of nicotine on growth is very measurable, and the following figures are presented as a fairly satisfactory demonstration of the extent of the interference with growth that may be expected in boys from 16 to 25 years of age, when they are believed to have reached full maturity.

For purposes of comparison the men composing a class in Yale have been divided into three groups. The first is made up of those who do not use tobacco in any form; the second consists of those who have used it regularly for at least a year of the college course; the third group includes the irregular users. A compilation of the anthropometric data on this basis shows that during the period of undergraduate life, which is essentially $3\frac{1}{2}$ years, the first group grows in weight 10.4 per cent. more than the second, and 6.6 per cent. more than the third. In height the first group grows 24 per cent. more than the second, and 11 per cent. more than the third; in girth of chest the first group grows 26.7 per cent. more than the second, and 22 more than the third; in capacity of lungs the first group gains 77 per cent. more than the second, and 49.5 per cent. more than the third.

These results are essentially the same as those obtained by Dr. E. Hitchcock of Amherst College, who observed a similar group of young men in a manner entirely independent. He says: "In separating the smokers from the non-smokers, it appears that in the item of weight the non-smokers have increased 24 per cent. more than the smokers; in growth in height they have surpassed them 37 per cent., and in chest girth 42 per cent. And in lung capacity there is a difference of 8.36 cubic inches [this is about 75 per cent.] in favor of the non-smokers, which is three per cent. of the total average lung capacity of the class."

The widely differing growth in capacity of lungs points to the influence of tobacco on respiration. Inspiration is essentially a muscular act, and as such would be seriously impeded by nicotine. But even farther than this must act the irritating substances of a smoke which readily causes inflammation and soreness of any mucous membrane. Now, to fully expand the lungs under such conditions is uncomfortable, if not impossible, and respiration degenerates into an incomplete act.

I do not know how we can compare the work of the users of tobacco with that of the non-users in mental lines as we can in physical lines. I can tell you absolutely whether a man has gained a pound in weight during the year, but I cannot tell you by any such definite means the mental progress that has

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gone on in that time. We must always be exceedingly careful in handling statistics of the mental process. Out of our highest scholarship men only a very small percentage (about five) use tobacco, while of the men who do not get appointments over 60 per cent. are tobacco-users. But this does not mean that mental decrepitude follows the use of tobacco, for we may read the results in another way, viz.: the kind of mind that permits its possessor to become addicted to a habit that is primarily offensive and deteriorating is the kind of mind that will be graded low on general intellectual tests.

If the whole period of physical growth be divided into seven or eight year periods, according to the physiological phases of our development, we should have the third period, devoted to the rounding-out processes, begin at about the time when the most strenuous mental application is begun, and when the opportunities for outdoor recreation are decidedly curtailed. It is at this period that the tobacco habit usually is begun, if it is begun at all. This is the period of the development of high muscular coördination, and it is well to note that in mental processes it is the period of the development of the logical faculties. Whether we believe, with some psychologists, that there is a direct relation between muscular ability and mental power, or not, we must believe that any curtailment of the activity of the great blood-containing and heatproducing tissue (the muscles) must react unfavorably upon the nerve structure, which depends so largely upon outside sources for its material for work, if not for its method of work. Furthermore, the young animal seems to be especially susceptible to this poison, but the system can adjust itself so as to counteract the ordinary influence of it, and go on with comparatively little interference. As a machine that is obstructed to a certain extent can nevertheless apply a part of its energy to the sweeping away of the obstruction, so the organic machine can divert a certain amount of its energy to the elimination of this poisonous element, but only the residuum is available for normal processes of growth and functional activity.

Whenever it is desired to secure the highest possible working ability by the organism, as in athletic contests, where the maximum of effort is demanded, all motor-depressant influences are removed as far as possible, tobacco being one of the first substances forbidden. As a large part of the functional activity during the rounding-out period pertains to growth, would it not seem logical to remove from the system all motor depressants, in order that this line of activity may find its highest resultant in increased size and improved activity? This position has been taken by the directors of government schools, not only in this country, but in Europe, where the highest efficiency of the pupils is made the object of the schools, and where efficiently trained inspection, freed from personal appeals and special considerations, leaves the directors at liberty to manage the pupils upon the most approved scientific principles. It is satisfactory to note also that many private schools have taken this advanced position within the last ten years. May we not believe that, with a higher grade of intelligence among the patrons of schools, the same higher standard will be demanded soon in all similar institutions?

A case of some interest to physicians and chemists was recently tried in the United States Superior Court at Dedham, Mass. The charge was against a druggist in Quincy of maintaining a common nuisance by the sale of malt extract. The district attorney prosecuted, and the trial lasted three hours. The sale was admitted. Analysis showed that the extract contained over 5 per cent. of alcohol. Professor Sharples called it "porter" and a "beverage." The defense was that it was a medicine and not a beverage. A verdict of guilty was returned. Mr. H. H. Fayon, on whose complaint the government took action, states that he has the analysis of 17 samples of malt extracts containing from 3.35 to 8.88 per cent. alcohol, and 11 others showing from 3 to 9.86 per cent.

THE PRISON TREATMENT OF INEBRIATES.*

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The statement that summary convictions for drunkenness, especially amongst females, have not shared in anything like a proportionate ratio in the general shrinkage of crime that has marked the last two decades, would to a society such as this contain little of novelty; but having had nearly ten years' experience of the question as a prison surgeon, I propose to discuss it from the point of view of the prison officials — especially the medical ones.

Large as is the number of drunkards of both sexes in our prisons, the proportion in the case of the females is simply appalling. Female crime, if by "crime" we understand offenses against the persons and property of others, does not account for much more than ten per cent. of the gross female prison population. It follows then that our prisons are swollen to repletion by the slaves of the most imperious and degrading vice known to mankind. Personally, I cannot remember to have met more than ten or a dozen male drunkards whose convictions exceeded or even reached a score; but the records of the police courts conclusively show that "once a drunkard always a drunkard" is almost an axiom in the case of females.

The greater number of women whom I have questioned have told me that they began to drink in comparative youth, the majority having first made the acquaintance of prison before the age of twenty. It is obvious that such an early familiarity with prison must be objectionable on every ground. To

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the young at least a prison should wear an air of severe mys-To many its idea is usually associated with darkness, chains, and such physical discomforts as Dante pictured in the Inferno. But how different is the reality! The prisoner finds herself treated with kindness, is warmly clad, fed amply if plainly, works to a considerably less degree than when at liberty, and sleeps amid good and sufficient bedding in a warmed and ventilated chamber. As the late Sir B. W. Richardson put it : - " Epidemic disease is shut out from our prisons, drink shut out, exposure to cold and wet shut out, the destructive kinds of mental worry shut out, the hungry strain for to-morrow's bed and board shut out." When we remember the class from which the drunkard as seen in our prisons is usually drawn, their precarious food, their insanitary homes, their scanty clothing, and their frequent exposure to the weather, can it be wondered at that in a couple of visits prison is deprived of all its deterrent terrors? I have watched a previously healthy girl gradually lose all her youthful freshness and attraction, and become in the course of a few convictions a confirmed inebriate with the air of a drink-sodden virago.

It is notorious to every intelligent prison official that the most troublesome of all female prisoners, and those least amenable to discipline, are the drunkards. While the felons are perfectly contented so long as they receive what they consider to be their rights, the drunkards would appear to pride themselves on the fact that although technically criminals they are not actually felons, and to expect a leniency of treatment which the law does not prescribe, and which its administrators have not the power to concede.

Committed to prison in a large proportion of cases in a condition of latent alcoholism if not one of actual delirium tremens, as is by no means rare, they are perforce treated as invalids throughout their entire sentence of so-called "hard labor." The prison is thus in great part an infirmary or asylum, for neither of which purposes was it ever intended,

however well it may serve them. Similar treatment could not be obtained by the drunkard when at liberty, since no hospital would admit a patient to its wards who was recovering from such an event as a drinking bout. In prison, on the other hand, they are treated medically and dietetically, and in a short sentence such as seven days are scarcely recovered before the time comes for their discharge. Having been noneffective for all purposes of prison employment, the expenses of their maintenance and treatment cannot be debited against the value of that productive labor which all prisoners are expected to perform. Not only are they in this manner an expense to the imperial taxpayer during their imprisonment, but the costs of their prosecution and conveyance to prison being, except in London, a local charge, fall similarly upon the local ratepayer.

As a result of their treatment the prisoners are discharged in a sanitary condition of mind and body, fit and craving for further excess, to be in its turn followed by a further committal to prison.

This cycle of events is neither an exceptional nor an imaginary one. It is repeated daily throughout the kingdom unnoticed except when the recital of some hundreds of previous convictions revives the public interest in what is simply a nuisance and a scandal. As a typical case here is a list of summary convictions, of a woman: — 1895, Sept. 2d to 6th, 8th to 21st, 24th to 30th, Oct. 1st to 21st, 25th to 31st, Nov. 4th to Dec. 3d, Dec. 4th to 10th, Dec. 12th to March 11th, March 15th to April 21st, May 14th to 27th, May 28th to June 27th, June 29th to July 11th, July 29th to Aug. 28th. Thus during the 365 days ending Aug. 31, 1896, this woman has barely spent forty-eight out of custody.

Another woman I have heard of, whose state of bodily health necessitates treatment in the prison hospital, is such an incorrigible drunkard that it is the custom to preserve a bed for her accommodation even after her release, as it is considered inevitable that she will return after the lapse of a few days, or even hours, to the only home which she possesses. The case of the notorious Jane Cakebread called forth as much comment as if she had been the rarest production of the century; but in truth she belonged to a type the most common. There are hundreds, nay thousands, of Jane Cakebreads in existence, who only differ from the original in the absence of an eccentricity which was really due to senile dementia.

Homeless and usually destitute, it is only natural that the outcast class from whose ranks the habitual drunkard is largely recruited, should regard the prison as a species of infirmary, supported by the taxpayer for the benefit of the thriftless and dissipated. On remonstrating with several whose miserably slender earnings as hawkers or flower-girls would scarcely suffice to buy food, let alone drink, I have been repeatedly met with the reply: — "People will always stand you a drink when they won't give you food," which no doubt accounts for the ease with which many of the most abjectly destitute become drunk.

I cannot imagine a more pitiable spectacle than that which may be seen before nine a. m., outside the gates of any large prison. At that hour the females whose sentences have expired are discharged. The average number is about thirty, and they are of all ages, ranging from girls "in their teens" to quite old women, who can scarcely totter from the gate on their way to the breakfasts provided by the Prisoners' Aid Societies. Their clothes, restored to them on their discharge, are dilapidated and filthy to a degree, and the neighboring thoroughfares are usually strewn with the rags and tatters they tear from them in the endeavor to conform to the not very exacting standard of decency of their native haunts, and to obliterate the evidences of their drunken struggles in the hands of the police. The majority of them know the road to the mission house only too well, but there is one peculiarity to which there are no exceptions. Shameless and brazenfronted they walk from the prison gates, drink having destroyed all sense of self-respect or of womanly modesty. The majority of these social pariahs have, time and again, been assisted by one or other of the numerous philanthropic institutions for the benefit of discharged prisoners, until the hopelessness of effecting any reformation in them has dried up the fount of charity, and they have no prospect but to return again and yet again until death closes the scene in the prison hospital.

These women are persons of almost no education at all, those young enough to share in its benefits having apparently escaped the operation of the Elementary Education Act. Few know any trade except coarse laundry-work, and it is rarely that they can even be got to perform the ordinary rough duties of a char-woman with any degree of thoroughness, so slipshod and careless have they become as a result of the sordid surroundings among which they live.

On the other hand, the prison authorities have always been handicapped in their efforts to provide prisoners with any employment, except oakum-picking, by the strenuous opposition of the various trades unions. These bodies, apparently, cannot see that prisoners when at liberty are apt to compete with other members of the working-classes in the struggle for existence to a much greater degree than can possibly be the case under the comparatively low standard of industry which. is exacted from them while in custody. Under these circumstances, it is clear that any length of confinement in prison is useless, in so far as it is intended to increase the self-respect and elevate the moral sense of a woman lacking these qualities by concentrating her thoughts on an occupation, which shall demand some exercise of intelligence, or degree of responsibility on her part. Tentative experiments would seem in some measure to have solved this problem, as simple but congenial employment is stated to have been attended so far with the most gratifying results.

The eloquent eulogy of the prison system which I have already quoted from Sir B. W. Richardson, would appear to

weigh largely with some who continue to support the prison treatment of inebriates. Sir John Bridge is, I believe, in favor of long terms of imprisonment, in default of finding sureties for good behavior, which sureties, in the case of the class of persons I am considering, are seldom forthcoming. Although the opinion on such a matter of the senior policemagistrate of the metropolis must naturally command the greatest respect, I feel bound to say that practical experience of the working of this plan directly negatives its success. Over and over again have I seen habitual drunkards undergo a sentence technically known as "six months' surety," and immediately after their release resume their dissipated habits with increased vigor. It is the commonest occurrence for such a prisoner to be discharged, say on a Saturday morning, only to return to prison on the Monday, having been out of custody for but a few hours.

But the paramount objection to this system lies in the fact that persons imprisoned, in default of finding sureties, enjoy special privileges over other prisoners. They are required to perform no task of labor, they do not wear the criminal uniform, they are fed on a superior class of diet, and can receive visits and correspond with their friends at frequent intervals. Hence the most troublesome and refractory women, who are the very ones usually selected by the magistrates for this system of sureties, receive the most lenient treatment, while the less aggressive but equally incorrigible drunkards undergo the full measure of prison discipline.

It has been repeatedly shown that a period of six months' forcible abstention is inadequate to overcome the morbid craving for alcohol, while on the other hand it is well known among prison officials that female convicts, that is to say women undergoing sentences of three years and upwards, notwithstanding previous habits of intemperance, are as a rule completely cured of the morbid propensity. It will be observed that I say "as a rule," and that brings me to the pith of my argument, which is that prison is the very last place Vol. XIX.—23

where such cases should be treated. The necessary restrictions and discipline are apt to press unduly on many persons of this unfortunate class, whose mental stability has been impaired by the abuse of alcohol, and earlier in this paper, I dwelt on the contempt for prison developed in the drunkard by the familiarity bred of scores of previous convictions.

The treatment of our criminals is far more logical than that of our drunkards. If a man by repeated convictions affords evidence that he has definitely chosen the career of a criminal, or in other words, has declared war upon society, the law protects us from his depredations by longer, and still longer, terms of imprisonment, for the same reason that we deprive an escaped lion or tiger of the opportunity for further ravages. In the same manner the advocates of imprisonment for drunkards to be strictly logical should progressively increase their sentences. But were this done, so great would be the accumulation of drunkards, among the women at any rate, that at least half a dozen extra prisons, that is to say, half a dozen special establishments for their treatment, would be required. But surely there is very little difference between this course and the result which we all wish to attain.

When it is remembered that quite nine-tenths of habitual inebriates have never placed themselves within the reach of the criminal law for other offenses, it must be clear to the most unjudicial mind that the present system of punishment is a failure. If we accept Crabb's definition that "crime" is injurious to others, while "vice" is injurious to one's self, drunkenness, though far-reaching in its results and baneful enough when its effect on the relations of the drunkard to society at large is considered, must be regared as a vice, and not as a crime. Even were the present mode of dealing with it less futile than it is admitted to be, the application of the machinery of the criminal law to such a fault is very much like using a Nasmyth steam hammer to crack a nut. Were it desired to bring the administration of the law into contempt, it would be difficult to conceive a more effectual means of doing so. Again,

to argue from the point of view of the drunkard, whose ultimate welfare I judge to be the main object of this Society, is it just to the victims of a vice to treat them as criminals and to house them with the burglar, the coiner, and the footpad — those avowed enemies of civilization?

When, in 1895, the turning point in the history of the question was reached by the introduction of the government bill for the establishment of compulsory inebriate retreats, the chief opposition to the measure was aroused by its alleged interference with the *Habeas Corpus* Act. But, as I have endeavored to show, the dipsomaniac is himself the suspender of the act, in so far as it applies to his own drink-sodden personality.

I have already told the prison history of the woman who was only forty-eight days out of custody during one entire year. Now to talk of civil rights or the liberty of the subject in the case of such a persistent recidivist is simply ridiculous. Moreover, can it be seriously contended that a single prolonged detention under the mitigated discipline of the proposed act would have a more baneful effect upon body and mind than these repeated short imprisonments, punctuated as they are by debauches?

It is difficult to exaggerate the responsibility which must attach to the legislators who continue to oppose this salutary reform. There can be no question that, apart from its other drawbacks, the existing system tends to induce insanity. Dipsomaniacs, being generally persons of unstable mental balance, and being accustomed to drink immoderately the moment they are released from prison, cases of dementia or mania are often seen with little or no warning after a series of sentences for drunkenness. It is customary with a certain class of writers to credit the prison system itself with the production of this insanity. As a matter of fact, it is really due to the repeated attacks of acute alcoholic poisoning, which the dipsomaniacs are at present allowed to sandwich between their short sentences.

In the words of the great French authority, Legrain:—
"The question of the radical sequestration of inveterate drinkers is forced upon us. It will be useless for the medical profession to struggle against drunkards who enjoy their freedom. Social, anthropological, and humanitarian considerations plead for the suppression of a freedom which is abused." These premises are incontrovertible. None but the most superficial observer can deny that the habitual inebriate is one whose loss of self-respect and impaired moral sense have lessened his responsibility to the law, necessitating the regimen of an asylum, not the discipline of a gaol.

DISCUSSION.

Mr. Aydon Smith said his experience had led him to believe that women drank mostly spirits, and men mostly beer.

Surgeon-Major Dr. G. K. Poole was of opinion that the present system of treating inebriate male prisoners was totally inadequate. There were thousands of such prisoners who spent more time in than out of prison. Compulsory curative treatment for a long enough time, was the proper treatment of these criminals, not punitive imprisonment for a moral crime. To agitate for amended legislation was the work of the Society. They must urge on all that inebriety was a disease demanding appropriate treatment and care.

Mr. A. J. Madison said they were hoping for something being done in the Houses of Parliament during the coming session, and they ought to be unanimous in the length of the period for which inebriate prisoners should be treated. Six months appeared to be too short. Should it be one or two years? If only inebriate prisoners were to be legislated for at present, the results might be so good as to lead to the application of curative treatment to non-criminal inebriates.

Mr. H. M. Riley was of opinion that a short term was of no use. Hardly any were cured in six months, and a few in a year.

Mr. Brock thought less than a year was useless. Two years was better.

Dr. Longhurst said that to commit inebriate offenders over and over again was an absurdity. They must keep at the

government for better laws.

Dr. Paramore spoke of a notorious police-court female inebriate as having been a Band of Hope girl; and of another case, whose husband, after 47 years of misery, expressed himself as the grandest thing having happened to him when she died. Another case, the child of abstaining parents, remained abstinent for twelve years, and then relapsed.

Mr. Clark gave an instance of a habitually drunken son, whose father had been a teetotaler of long standing. He asked if there was any difference in the treatment of inebriate prison-

ers.

Mr. Gandy asked if Dr. Pitcairn had found any harm arise from sudden withdrawal of intoxicants.

The President said that no less than five official inquiries (the Parliamentary Committee of 1872, the English and Scottish Departmental Committees on Inebriety, the Departmental Prisons Committee, and the Royal Canadian Commissions on Intoxicants) had reported in favor of the special therapeutic treatment of habitually drunken prisoners. One of the most remarkable delusions current among the British was that the European Continent was as sober as Britain was drunken. The baseness of this erroneous belief was gradually being detected. Only the other day a Parisian hospital physician had practically a third of all his female patients habitual drunkards. In his opinion, the period of detention under special curative seclusion should be from one to three years. Dr. Kerr concluded by proposing a resolution thanking Mr. Pitcairn for his most valuable and suggestive paper, which was passed by acclamation.

Mr. Pitcairn, in replying, agreed that women generally drank spirits and men beers. He had seen no injury from the sudden cessation of alcohol. There was, at present, no difference in the treatment of inebriate prisoners as such. All were treated alike dependent on their condition, apart from drinking.

MORAL CHARACTERISTICS AND TYPES OF THE INEBRIATES.

BY CHARLES F. PALMER, M.D.

It may seem odd to many persons to speak of the difference in the moral status of inebriates.

With these a drunkard is nothing but a drunkard, and there is no good in him. But the moral habits and characteristics of the individual, outside of drink, vary in accordance with his constitutional tendencies and the character of his previous education, training, and situation in life. Until the moment of intoxication he may be either a weak good man or a thoroughly vicious one.

Subsequently when he emerges from it, he returns to what he was previous to his debauch, but always with a declension in point of resistance not only to drink, but to every vice which his surrounding and distempered mind incline him to.

Fortunate is the man who can then return to a moral-intellectual environment; not so much for what it will do to cure his intemperance, but what it does accomplish in preserving him from the worst feature of it, the acquisitions of vices, with the ultimate possibilities of crime. In the foreground we have the blackguard drunkard of our streets, big of limb, broad of chest, low of brow, and black of visage; born of the gutters; the braggart and bully of his less offensive neighbors, evil triumph in his eyes; with strong assumption of physical power, but cowardly by instinct; thief and murderer by inherent qualities, and only needing an accident to make him either or both; at times politic with the lowest form of animal cunning; the woman-bruiser by nature and nurture; his language as polluted as his mind, which reverences nothing but the brute force which overcomes him; always the concentrated living spawn of the accumulating growth of generations of depravity. The accidents of life sometimes make him the successful politician and the petty magistrate or alderman of our cosmopolitan cities, where he carries on his debauchery with immunity from the laws which he himself dispenses in unjust, arbitrary, and cruel decisions and sentences against his less fortunate contemporaries in vice.

In another class of inebriates we recognize the spoiled boy that is born of those social upheavals in which men without education, excepting that which business life developes, become suddenly well-to-do and are inspired with an ambition to elevate their sons into a more refined and cultivated social positions than they themselves can hope to occupy.

With an active mind born of the parent who has, perhaps, enriched himself without much scrupulous regard for the rights of others, with inherent tendencies in the direction of animal indulgences, an ill-regulated mind, ample means, and favoring environment, he very early absorbs the genius of the street more readily than that of the intellectual schools of life.

His later education is of billiard halls, concert saloons, dance houses, gambling dens, and brothels, his conversation is altogether of these, and nothing in life is worth the living unless spent "as a tale that is told," amid pleasures which appeal directly to the largely developed animal side of his brain. Although not devoid of a thin veneering of refinement and polish, it is not unlike that attributed to the Russian: "Scratch him and the Tartar appears." He is an imperfect development, imperfect at birth and made so by the character of his after training and surroundings. Spurred on by the necessity which impelled his father, Le might not have differed greatly from him in the character of his success.

In the third marked type of intemperate men we find the

educated man of refined and intellectual instincts and habits, who obtains no gratification from the past times of the brutish or ignorant, does not indulge in profanity, card-playing, gambling, etc., because the bent of his mind from the beginning, predetermined by the organic superiority of the intellectual qualities over the physical, possibly through a long line of cultured progenitors, is not in the direction of such enjoyments, and his surroundings have not inspired him with a habit of mind that can obtain even surcease of suffering from such practices. He has no great vices outside of his indulgence in drink, because of the weakness of his desires, and he exercises no moral strength in resisting these, although he is apt to affect a reputation for his exemption from the common vices of ordinary drinking men. In his alcoholic inebriation he indulges in the intellectual form of pleasure rather than the animal, and often feels more moral when drunk than when sober. He is known frequently during his drinkingbouts to have been intellectually at his best, up to the time that his excessively stimulated brain gave way, by increasing intoxication, to the impossibility of putting his thoughts into an intelligible and coherent shape. At such times, if he happens to be of a classical or moral bent of mind, he will express himself with a purity and correctness that almost equal a Cicero, a Marcus Aurelius, or a Tacitus; if he is idealistic and sentimental, in poetry that makes Homer, Dante, or Dryden seem closer to us than ever before; if humorous and witty, the brilliant sallies and bonsmots which his highly stimulated imagination conjures up to transport us into an atmosphere breathing of a Sheridan, or a Curran; and if patriotic, the fire and vehemence of dead orators and eloquent statesmen become renewed and living under the stimulated forces of the intoxicated brain of the nervous intellectual man. This type, as well as the succeeding one, is the product of hereditary dis-

Then, again, we have the quiet, domestic youth, who has

been brought up among virtuous women, who loves reading and the refined pleasures of home life. He is reserved, modest, and cleanly in his habits, has little, if any, ambition, but has the character of mind and nervous organization which would make life sweet to him as a village curé or a country parson, where his small egoism would receive its necessary aliment through the sense of being useful to his fellow-men in a quiet, non-exciting field of labor, rather than in a world of competitive ambitions, struggles, and cares. He has an appreciative sense of honor and probity, qualities which he has inherited along with his liability to indulge in stimulation. To him periodical attacks of intoxicative mania seem to come as a resultant of his quiet, non-combative existence, his soft and yielding nature, and disturbing influences of uncongenial living, and as a corrective medicine for his mental and physical weakness. He is a congenital neurotic.

THE INEBRIATE CRIMINAL IN JAILS AND PENITENTIARIES.

These are the types that stand out more boldly than others, which are simply modifications of the foregoing specimens. With the first class referred to, where the brutal instincts are encouraged by street training and education, and are accompanied by a love for and faith in depravity as a material basis of human existence, it would seem as if nothing short of being made all over again would be of any benefit in converting these into decent members of society. What we have to do in their case is not the reformation and restoration of men who have at one time led respectable and socially correct lives, but the working up of the polluted raw material into a shape resembling humanity, with some sense of utilitarian morality. They require new minds and new bodies to begin with, before the ordinary processes of secular and moral education can be made available. The discipline and teachings of the church cannot be made effective through her customary methods, for the brains of these defective specimens of humanity are

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so structurally disorganized, through many succeeding generations of ignorance, degradation, and wrong-doing, that even the sensations of pleasure or pain are in them as quiescent as in a rhinoceros, and are excited only through the There is nothing for religion to take hold stomach. of, and it is only by remedying the morbid organic conditions within their brains that they can be reached through the perceptive faculty. There is a constitutional restraint of the intellectual faculties and a mental hygienic discipline and training is required to do away with this, and allow of a partial development at any rate. As this would have to be done through compulsion, and by the state, the jails and workhouses might be diverted from their present position as iniquitous, legalized schools of vice and crime into a useful purpose, the conversion of the bad stock of animal men into human men. But this will never be done until the ridiculous fallacy that criminality or viciousness is a moral infraction, a voluntary transgression, rather than a mental deformity, is laid aside, along with the other old moral lumber of past civilizations. It is no new theory to believe that all wickedness and weaknesses arise from organic perversion of the brain, to begin with, and from this being continually stimulated and encouraged by a wrong education and training all through life; but we have also convincing proofs that these constitutional tendencies toward evil have been subverted, and the innate degeneracy corrected, from the fact that a large number of our morally healthy citizens of to-day started life with everything against them in this respect, and, undoubtedly, owe their conversion to a rightful and proper training.

The economic principle involved in turning our prisons and jails into schools of mental hygiene for the building up of moral manhood on a stern and rigid mental discipline, however appreciable, would, undoubtedly, call out the usual protests of the moral school of gadgrinds, who would see nothing in it but awards and encouragements of crime where there

should be nothing but punishment; who, in the same spirit that burned Protestant reformers as a prevention to the further spread of the crime of Apostasy, would deal out blows rather than specifics. But there is little fear that this sort of discipline would ever be regarded by the prisoner as a pleasure, or that persons would commit crimes in order to avail themselves of the prison education. No one will ever go to jail to accomplish his healthful education in life. Schools and hygiene are not popular with criminals; they have too decided a preference for the old ways.

The entire economy of prison organization is worked on the principle of fear as a ruling motive in conduct, and the sound of the gong carries with it the instant obedience of every inmate. Its rules are as immutable as the laws of the Medes and Persians are said to have been. In no other way can such material be handled with safety, for kindness and indulgence are largely thrown away on these undisciplined men; but if prison life fails to accomplish any good but that of ready obedience to discipline, harsh, cruel, and oppressive as it is, and as, under any change of beliefs, it will always remain, it performs that which is of appreciable value to them and to the state. Unfortunately, however, the worth of this to the prisoner is more than counterbalanced by the poisonous influences unceasingly at work, through the admixture of perverted minds in various stages of cunning, evil ingenuity, and wrong-doing. The contagious example through this compulsory association is the immoral education the prisoner is now receiving, and this always affords the stimulus to make weak men more vicious and criminal and stronger in evil continually, while the hardened criminal, through the improvement in his physical, although not in his mental and moral, health, is becoming more dangerous to the future safety and security of society, and continually depreciating in possible value as an economic factor in civilization.

The value of such a system of correction to society, if it

could be successfully put into operation, would be almost incalculable. It is open to doubt if even the trade schools of our country could turn out, when their period of education terminates, more serviceable men than these rigidly disciplined, experienced, and systematically-worked inmates of our prisons, if their perverted mental organizations were prepared by rightful training and treatment during incarceration to work healthfully, to the best advantage for themselves and for the state.

In closing this little treatise, it seems imperative upon us to call attention to the mischief wrought by the use of intoxicating liquors upon the hidden spiritual sources of man, and we cannot do this better than by quoting an article which appeared some years ago in "Harper's Monthly Magazine," on that subject:

"The curse of drunkenness on the side of its physical devastations has been abundantly depicted by the advocates of the temperance reform. The amount of grain consumed in the manufacture of intoxicating liquors; the number of men whose labor is worse than wasted in producing and in vending them; the number of lives destroyed by them; the number of paupers and insane persons whose woes are traceable to this source; the effects upon the healths of individuals—all of these things are frequently set forth with sufficient fullness in impressive rhetoric. Some allowances must be made for the overstatements of zealous advocates, but there are facts enough of an appalling nature in these representations to call for the most serious thought.

"But the worst side of drunkenness is not that which appears in these familiar figures. The most frightful effects of the drink habit are not those which can be tabulated in statistics and reported in the census. It is not the waste of corn, nor the destruction of property, nor the increase of taxes, nor even the ruin of physical health, nor the loss of life, which most impresses the mind of the thoughtful observer of ine-

briety. It is the effect of this vice upon the characters of men as it is exhibited to him, day by day, in his ordinary intercourse with them. It is in the spiritual realm that the ravages of strong drink are most terrible.

"Body and mind are so closely related that when the one suffers the other must share the suffering, and the injury to the physical health resulting from intemperate drinking must, therefore, be accompanied by similar injury of the mental and moral powers. But the inclination of the popular thought is so strongly toward the investigation of the physical phenomena that the spiritual consequences of drunkenness are often overlooked. Degeneration of tissues is more palpable than degeneracy of spirit, a lesion of the brain more startling than a breach of faith; but the deeper fact, of which the senses take no note, is the more important fact, and it would be well if the attention of men could be fixed upon it.

"The phenomena to which we have referred often report themselves to the quickened perceptions of those who stand nearest to the habitual drinker. Many a mother observes, with a heart that grows heavier day by day, the signs of moral decay in the character of her son. It is not the flushed face and the heavy eyes that trouble her most, it is the evidence that his mind is becoming duller and fouler, his sensibilities less acute, his sense of honor less commanding. She discovers that his loyalty to truth is somewhat impaired, that he deceives her frequently and without compunction. fect is often observed in the character of the inebriate. fulness is the fundamental virtue; when it is impaired the character is undermined, and strong drink makes a deadly assault upon it. Coupled with this loss of truthfulness is that weakening of the will which always accompanies chronic alcoholism. The man loses, little by little, the mastery over himself; the regal faculties are in chains. How many of his broken promises are due to a debilitated will, and how many to a decay of his veraciousness, it would be impossible for the

victim himself to determine. Doubtless, his intention to break off his evil habit is sometimes honest, and the failure is due to the paralysis of his will. The loss of self-respect, the lowering of ambition, and the fading out of hope are signs of the progress of this disease in the character. It is a mournful spectacle, that of the brave, ingenious, high-spirited man, sinking steadily down into the degradation of inebriety; but how many such spectacles are visible all over the land! And it is not in the character of those alone who are notorious drunkards that such tendencies appear; they are often distinctly seen in the lives of men who are never drunk. Sir Henry Thompson's testimony is emphatic to the effect that the habitual use of fermented liquors taken to an extent far short of what is necessary to produce intoxication injures the body and diminishes the mental power.

"If, as he testifies, a large proportion of the most painful and dangerous maladies of the body are due to the use of fermented liquors taken in quantities which are conventionally deemed moderate, then it is certain that such use of them must result also in serious injuries to the mental and moral nature. Who does not know reputable gentlemen - physicians, artists, clergymen even — who were never drunk in their lives, and never will be, but who reveal in conversation and in conduct certain melancholy effects of the drinking habit? The brain is so often inflamed with alcohol that its functions are imperfectly performed, and there is a perceptible loss of mental power and of moral control.

"The drinker is not conscious of this loss; but those who know him best are painfully aware that his perceptions are less keen, his judgments less sound, his temper less serene, his spiritual vision less clear, because he tarries every day a little too long at the wine. Even those who refuse to entertain ascetic theories respecting these beverages may be able to see that there are uses of them that stop short of drunkenness, which are still hurtful to the mind and heart, as well as the body.

That conventional idea of moderation to which Sir Henry Thompson refers is quite elastic; the term is stretched to cover habits that are steadily despoiling the life of its rarest fruits. The drinking habit is often defended by reputable gentlemen, to whom the very thought of a debauch would be shocking, but to whom, if it were only lawful, in the tender and just solicitude of friendship, such words as these might be spoken: It is true that you are not drunkards, and may never be; but if you could know what is too evident to those who love you best, how your character is slowly losing the fineness of its texture, firmness of its outline, how your art deteriorates in the delicacy of its touch, how the atmosphere of your life seems to grow murky, and the sky lowers gloomily above you, you would not think your daily indulgence harmless in its measure. It is in just such lives as these that drink exhibits some of its most wonderful tragedies."

COCAINE POISONING; MAGNAN'S SYMPTOM.

Rybakoff of Moscow, insists on the diagnostic value of the symptom of chronic cocaine poisoning described by Magnan, i. e., an hallucination of common sensation. The patient complains of feeling some foreign body under the skin. In some cases the foreign bodies felt were like grains of sand, in others slightly larger; generally they were described as more or less rounded, and gave rise to complaints of microbes, worms, crystals, etc., situated just under the skin. While other symptoms of chronic cocaine poisoning occur also in alcoholism and with other poisons, Magnan's symptom seems to occur only with cocaine. It has, therefore, a real diagnostic value, especially in cases in which the patient is unwilling to admit having used cocaine. Where cocaine is extensively used in surgery and dentistry, the appearance of Magnan's symptom is a valuable indication for the immediate cessation of the drug. Korsakoff reported a case in which a woman, suffering from multiple neuritis complained of "worms in the skin." On inquiry it was found that vaginal tampons containing cocaine had been freely used. The omission of these was followed by amelioration of the symptoms.

SOME CONSIDERATIONS OF ALCOHOLISM AND ITS TREATMENT.*

By N. S. Davis, M.D., Chicago, Ill.

Dipsomania, Methomania, Oinomania. — These are names that have been applied to a large class of cases of chronic alcoholism, characterized, not so much by ordinary symptoms of mental derangement, as by persistently returning periods of uncontrollable drunkenness, varying in length from one to four or six weeks, with intervals of sobriety lasting from one to six months.

During their periods of drinking most of this class of patients give themselves up to unrestrained debauchery and vice, until either their money is exhausted, or their stomachs refuse onger to tolerate the alcoholic drinks, when they stop as sudlenly as the paroxysms commenced, and in two or three days return to their customary work with as much correctness and diligence through the usual interval as any other citizens.

As the years pass by, in nearly all of these cases the intervals of sobriety become shorter, the periods of debauch recur more frequently, and are more liable to end in delirium tremens, or permanent gastric, hepatic, or renal disease; or, escaping these, in the final development of alcoholic dementia. The most singular features presented in the early history of these periodical drinkers, are the recklessness of the periods of drinking while they last, and, for the most part, the practice of total abstinence during the intervals. During the former their mental emotions and illusions are such as prompt strongly to acts of licentiousness, and the indulgence of unpro-

^{*}The following is an extract from a lecture by Dr. Davis.

voked jealousies, while in the interval the larger proportion of them, at least, are chaste, upright, affectionate, and deeply humiliated by their previous conduct. And yet, despite their earnest resolutions and pledges, when the time comes round, the most trifling circumstance, often without the slightest apparent reason, will cause them to plunge into another debauch. Members of this class are to be found in all ranks of society; and it has long been a mystery, not only to their friends, but to physicians and moralists as well, why men of this class — intelligent, refined, and eminently respectable as many of them are, at least in their early years — can continue to repeat such apparently causeless periods of revelry and disgrace, of the consequences of which they are so fully conscious during the interval.

The strictly periodical return of active phenomena, the tendency to gradually shorten the intervals as the years pass, and the observance in many cases of the fact that each returning debauch was immediately preceded by certain mental conditions, have led to the conclusion that these patients were laboring under some obscure disease in the cerebral nervous center analogous to that of epilepsy and other recurring neuroses. It is alleged by many writers that a large majority of this class derive their persistent tendency to periodical drinking from hereditary influences. While the facts adduced in regard to such influences are sufficient to render it probable that they had been potent in some cases, they are wholly inadequate to explain the origin of many others. It was the increasing conviction in the minds of psychologists and philanthropists that the phenomena of this class of inebriates were founded on actual morbid conditions of the nervous structures, aided by hereditary predispositions, that caused it to be separated from ordinary cases of habitual intoxication, and ranked as a form of mental alienation under the name of dipsomania or methomania.

Prognosis.— Abundant clinical observation has shown that a very large proportion of these so-called dipsomaniacs Vol. XIX.—25

have resisted every means devised for their permanent cure, but a smaller ratio have recovered, and doubtless the same result could be obtained in a much larger number if they could be placed under the most favorable influences in the early part of their career.

Treatment.— From a careful study of the many cases that have come under my observation, I have been led to regard it necessary to give the most careful and persevering attention to three things if we would achieve the greatest degree of success in the management of this class of cases.

- The patient must be so fully instructed in regard to the deceptive and injurious influences of alcoholic drinks in the human system that he is actually convinced their use is unnecessary in any of the relations of life, either ordinary or extraordinary. Unless this is done, hardly the length of an ordinary interval will pass without the occurrence of one of the thousand mishaps or emergencies, such as getting wet, or cold, or exhausted, etc., for which the popular mind says just a glass of wine or punch or toddy is the sovereign remedy, and he will take it. And in nineteen times out of twenty that glass will initiate a full period of characteristic debauchery. In conversing with many of this class of men, I have found few who did not mention some circumstance of supposed necessity, or, at least, benefit which had been the occasion of commencing each paroxysm. Consequently it is an important step gained if the patient and his family can be so thoroughly instructed that they will not only regard the use of alcoholics as unnecessary, but will not keep them anywhere within convenient reach.
- 2. The second object in the management is to acquire as complete knowledge as possible of the mental characteristics, business habits, and tone of physical health of the patient, that we may the more accurately adjust all those influences capable of acting favorably upon him during his intervals of sobriety.

So far as possible all sources of petty annoyance in either the family or social circle should be avoided, and also all specu-

lative enterprises involving large risks and consequently alternate emotions of elation and despondency; and if the digestive functions are impaired, the nervous system irritable or sleep disturbed, a proper use of remedies should be continued until such infirmities are removed. I have seen excellent effects result in these latter cases from the use of one milligram (gr. 1-60) of digitaline, and two milligrams (1-30) of strychnia at each mealtime, and from twenty to thirty minims of dilute hydrobromic acid at bedtime. In cases accompanied by costiveness I have added from ten to thirty minims of the fluid extract of cascara sagrade to each dose of the hydrobromic acid. Instead of the digitaline and strychnia I have given, with good effects upon the digestive and nervous functions, a pill or gelatin capsule containing extract of hyoscyamus, six centigrams (gr. j.), and oxalate of cerium, two decigrams (grs. iij.), at each mealtime. If it has been ascertained in any given case that the periods of dissipation occur at nearly regular intervals the patient should be induced, if possible, to commence a week before the usual time of recurrence to take at each mealtime a pill containing sulphate of quinia, thirteen centigrams (grs. ij); extract of eucalyptus globulus, thirteen centigrams (grs. ij.); and extract of cannabis indica, two centigrams (gr. 1-3); and to continue the same two weeks or more.

3. The third item that requires attention in the management of this important class of patients relates to their occupations and personal associations. All experience has shown that little or no progress can be made towards the permanent recovery of a dipsomaniac so long as his business places him in more or less contact with alcoholic drinks or in frequent association with drinking comrades. Consequently, both physician and friends should combine all their influence to separate, as far as possible, the patient from such associations. And if it cannot be done in any other way, let him be induced to take a residence for six or twelve months in a well-regulated asylum for inebriates, until the usual paroxysmal tendencies have been broken.

By a patient, judicious, and persevering application of the system of management I have briefly sketched, I have had the pleasure of seeing a considerable number of this class of sufferers permanently restored to mental, moral, and physical health. But when a fair trial of such measures finally fails, as it will with many, and the periods of uncontrollable debauchery become more and more frequent, nothing short of an enforced seclusion in a proper asylum, with no possibility of obtaining any kind of alcoholic drink, but where good air, good food, kind treatment, and some suitable occupation can be furnished, on the same principle that applies to the treatment of other insane persons, will save them from early destruction.

Alcoholic Dementia.— The long-continued use of alcoholic drinks is capable of inducing all grades of mental impairment, from simple weakness to complete dementia. Those who drink to such excess as to become either habitual or periodical drunkards, and are not cut off by delirium tremens, mania a potu, or visceral diseases, before the near approach of old age, pretty uniformly develop symptoms of progressive mental impairment, caused by pathological changes in the membrane and substance of the brain resulting from the long-continued contact with alcohol. These results, however, are not limited to those who drink enough to be recognized as inebriates, but there are many of both sexes who make liberal daily use of alcoholic liquors for many years without ever becoming grossly intoxicated, and yet later in life develop all the phenomena of alcoholic dementia.

Symptoms.— The early symptoms of alcoholic dementia vary much in different cases. In a large majority of the cases the first noticeable symptoms are weakness and unsteadiness of the voluntary muscles, giving a slight tottering motion in rising from a chair or walking, and some trembling of the hands, especially when weary. At the same time the memory is less reliable; it is more difficult to fix the attention; the emotions and passions are more easily disturbed; the facial expres-

sion more dull; sleep is often disturbed; and there are various annoying sensations, such as creeping, pricking, or numbness of the scalp, or other parts of the surface, and not infrequently noises in the head and momentary pulsating sensations. Sexual illusions and jealousies are peculiarly prominent in this class of subjects. These various symptoms once begun, usually steadily, though slowly, increase until the patient can neither walk nor even stand without being supported; the muscles of the face become relaxed, often letting the saliva dribble, and imparting a decidedly idiotic expression to the countenance; while the mental faculties continue to fail until the patient has neither memory, power of attention, nor ability to converse, and hardly gives heed either to his food or to his evacuations.

In other words the dementia becomes complete; and still the patient may live for months in utter helplessness, but fortunately without sufficient intelligence to realize the degree of his degradation. Many cases, instead of progressing through all the stages to the complete loss of nearly all functions, both mental and physical, become early subject to well-marked symptoms of pachymeningitis interna, such as sudden attacks of vertigo, partial paralysis, temporary suspension of consciousness, and finally fatal cerebral hemorrhage. In other instances, the earlier stages of mental failure are characterized by intercurrent periods of exciting hallucinations or illusions. constituting active outbursts of insanity, during which the patients are very liable to commit criminal acts directly prompted by the nature of their illusions. In these periods of more active derangement many of this class find their way into asylums for the insane, where they add to the great class of incurables, and ultimately to the number affected with general paralysis of the insane.

Nearly all the patients affected with alcoholic dementia present, even from an early period, an anaemic look, and are affected with more or less gastric and duodenal irritation, rendering digestion imperfect. The excretory functions of the skin, kidneys, and liver, are also frequently disordered.

Pathology and Pathological Anatomy.— All the essential phenomena of alcoholic dementia are traceable, not to the immediate presence of alcohol in the cerebral vessels or structure, but directly to those structural changes in the membranes and cerebral substance that I described as present in fatal cases of delirium tremens, and the still further progress of these changes in the same direction, which may continue, in some cases, long after the use of alcoholic liquids has ceased. In addition to the changes just alluded to, in nearly all the post mortems in cases of fatal alcoholic dementia there are found more thickening and opacity of the pia mater and arachnoid, with thrombi or varicosities in the vessels of the dura mater, and sometimes hemorrhagic spots, and more or less serum on the surface and in the lateral ventricles. The convolutions, especially over portions of the cerebral hemispheres, appear most frequently pale, shrunken, and harder than natural, though in some cases there are limited regions of increased redness and less density. These appearances are caused by more or less atrophy of the nerve cells of the gray matter, and either sclerotic or fatty changes in the connective tissue. Fatty or atheromatous change in the copts of the cerebral vessels are also present in most instances.

Numerous small cystic degenerations have also been described by some observers. It is to these various and extensive degenerative changes in the cerebral structures that the patient owes the loss of his mental faculties.

Prognosis and Treatment.— When well-marked symptoms of dementia have supervened upon chronic alcoholism

the prognosis is decidedly unfavorable.

In the earlier stages something may be done to palliate symptoms and retard the progress of the morbid processes by rigidly abstaining from all alcoholic liquids, whether fermented or distilled, a proper regulation of the diet, the avoidance of excessive exercise, either mental or physical, and the use of such remedies as may be indicated for maintaining a healthy condition of the digestive and excretory functions. The only additional items of treatment relate to such measures of a legal and sanitary character as will best protect the patient from injuring himself or others, and secure for him the most faithful and humane attention until the end of his life.

THE PAUPER INEBRIATE — CASES VERSUS INDIVIDUALS — NECESSITY FOR LONG TERMS OF COMMITMENT.

By Dr. L. D. Mason, Brooklyn, N. Y.

The care and control of poor and indigent dipsomaniacs and inebriates is a question of vital importance to every community, and should command the attention of every student of our social economy. In the annual report for 1877 of the President of the Inebriates' Home for Kings County, to the legislature of the state, Dr. T. L. Mason thus writes, under the caption, "'Cases' vs. Individuals:—

"It will be observed that in the presentation of our annual reports we have invariably drawn a distinction between the aggregate number of 'cases' treated in the institution and that of the individuals who go to make up these 'cases.'

This may be said to be a new departure, for it is the almost universal custom in the presentation of such reports by public and private corporations to speak of the number of 'cases' treated, leaving out of sight altogether the number of persons subjected to such treatment.

In some respects this last-named plan of presenting an annual report may appear to be necessary. For example, if ten individuals be the recipients of relief at the hands of some charitable institution on ten different occasions, those ten individuals swell up the record of 'cases' treated to one hundred. The very able and exhaustive report of the police and excise commissioners of the city of Brooklyn for the year 1876 fully illustrates the necessity for such a distinction, to a clear understanding of the valuable statistics presented.

"We do not quote from this admirably arranged exhibit of the work of the police and excise department, which, it may be remarked, in passing, bears evidence of careful compilation and abounds in comparative tables of criminal statistics of considerable interest to the thoughtful citizen and philanthropist, in any spirit of hostile criticism, but as merely illustrating the point we desire to make in the presentation of our yearly record to your honorable body.

"It appears that during the year 1876 there were 1,463 arrests for vagrancy in the city of Brooklyn, 9,680 arrests for drunkenness, and that in 4,851 of these cases the accused

were registered as having no occupation.

"It would also appear that in the previous year, 1875, 55,567 lodgings were provided for homeless wanderers at the various station houses through the city.

the various station-houses through the city.

"If we accept the cases of vagrancy, there is no record of the number of individuals which goes to make up this astounding number of arrests and of free lodgings provided in

a single year.

"On referring to the tables of the occupations of those arrested, we find the actual number of individual vagrants taken into custody during the year to be 215; but these 215 turned up in court on 1,463 different occasions, occupied the time of the guardians of the peace to a considerable extent, in and out of court, necessitated 1,463 trials before a police magistrate, made the same number of trips to the jail in a public conveyance and at the public expense, entailed the payment of turnkey's fees from the county treasury in every case, and, finally, boarded at the county's expense for terms ranging from ten to twenty-nine days each.

"These are the chronic vagrant drunkards of our community; and this perpetual record of arrests and rearrests has been going on from ten to fourteen years, while some of these jailbirds could not, if questioned, compute with anything like accuracy the number of their rearrests and recommitments during the long years in which the prison has taken for them the place of home. Thus we see at a glance how important it is to rid the community of even a modicum of those whom jail officials aptly, if inelegantly, term 'rounders' and 'repeaters,' even from an economical standpoint; not to speak of the moral aspect of the question or to dwell upon the value of reformation in a single case. This class largely helps to increase the burden of the taxpayers, and its decrease is a matter of grave importance.

"The number of individuals arrested for drunkenness probably bears a less proportion to the number of recorded ar-

rests for this offense than does the number of individual vagrants taken into custody to the number of recorded vagrancy 'cases.' If the exact number of drunkards arrested during the year could be sifted out, rejecting aliases and coming down to individuals, it would be probably found that the actual total would fall short of one thousand, though 9,680 arrests for drunkenness were reported during the year.

"The same reasoning on the score of economy alone applies in the case of the chronic drunkard even more forcibly than it does in the case of the constitutional vagrant; for the latter, as a rule, has only himself to provide for, while our criminal statistics show that the large majority of drunkards have others depending on them who are more than likely to

become a burthen on the community.

"The rescue of one such inebriate has a social significance, independent of morals altogether, which the casual observer is not apt to realize or take into account in estimating the value of the work of our purely reformatory institutions.

"One more point under this head. It is stated that 55,567 persons were accommodated with lodgings at the station-houses during the year 1875. We find that the population of the city, according to the census, was in that year 484,616. On the supposition that each of the 55,567 lodgers had a distinct individuality, it would follow that for every eight and three-quarters persons in the city of Brooklyn one slept in a station-

house one night during the year.

"If we add to these 55,567 lodgers the 26,669 arrests by the police during the same year, and then proceed to figure up the tens of thousands of cases which have been cared for by our charity commissioners, by private charitable associations, at dispensaries, and in hospitals, orphan asylums, homes, and the whole family of charitable institutions, we find that, according to this mode of reasoning, Brooklyn was in that year one vast poorhouse and prison, and that we were all paupers and criminals living at the public expense.

"This reductio ad absurdum is the natural result of the prevailing tendency on the part of the commissioners and directors of public and private institutions in making their reports to place in the boldest relief the full extent of the work accomplished, and in the pursuit of this object to confound

'cases' with 'individuals.'

"Taxpayers and private benefactors have a right to the Vol. XIX.—26

fullest and most definite information under this head; and we believe that the community can be helped to a clearer understanding of the work of all our public institutions by a plain statement of the number of persons treated, the duration of the different terms in them, and by giving a separate record of the number of readmissions. And we prefer to do this, even at the risk of lacking in our report the amazing array of figures with which the community is frequently startled."

In the same annual report, deprecating the short term commitments for inebriates, the writer asserts the necessity of long terms of commitments as follows:

"NECESSITY FOR LONG TERMS.

"A great deal has recently been written and said concerning the expediency of utilizing the chronic drunkard by establishing workshops in connection with our prisons, in which he may be able to contribute something towards his own support while in custody, and even to lay up a little capital to start with when released at the expiration of his term.

"The experience of those thoroughly acquainted with the management of penal institutions is that it is utterly impossible to utilize the drunkard who is constantly being recommitted to the jail or the penitentiary unless, after repeated offenses, he be committed for a term of years. On this important subject we cannot do better than to quote from an annual report of Gen. Amos Pilsbury, the late warden of the Albany Penitentiary, and father of the present superintendent of state prisons — a gentleman who is acknowledged to have been one of the best prison officials we have had in this country, and who has been ably succeeded by his son, Captain Louis D. Pilsbury. In speaking of this subject he says:

"'It is for the law-giver to determine whether imprisonment in the penitentiary is the best mode of punishment for intoxication in any case; but if it is designed to have any effect in curing the vice of intemperance, a term of six months should be imposed in all cases of second or further convictions.

"'The truth is that nothing short of a direct interposition of Divine power can perform the miracle of suddenly converting and turning men from the error of their ways. Human agencies can only hope to accomplish the work of reform by

retaining the subject under their operation until the power of old evil habits shall have been weakened by disuse, and new and good habits of sobriety and industry shall have been firmly acquired.'

"In a recent report of the Board of State Prison Inspectors (whose offices have been abolished under the new constitution), we find the following language on this subject:

"'For the large class of convicts having sixty or less days to serve, the superintendent can obtain little or no remunerative employment, so much time being required in these cases for the necessary instruction as to leave an employer small prospect of a compensating gain. It follows, as your honorable body will readily perceive, that convicts of this class not only fail to indemnify the penitentiary against the cost of their own support, but become, for the most part, a constant drain upon the productive labor.

"But it must be remembered, moreover, that many of those short-time men are committed to the penitentiary during the year over and over again, deriving themselves nothing whatever from the transient suspensions of their liberty, while inflicting upon the resources of the institution a steadily grow-

ing pecuniary loss.

"'Besides, this class of subjects make heavy demands on the time and the attentions of our physician, and convert our hospital in too many cases into a place of recovery from attacks of delirium tremens or other consequences of habitual intemperance and evil habits.'

"In a comparatively recent address of the English 'Howard Association,' on the treatment and prevention of crime, they say that the system of repeated short sentences

' is intolerable.' They continue:

"'Repeated sentences of fortnight upon fortnight, and month upon month, add to the difficulties of prison management, and greatly demoralize the delinquents and their companions as a class.

"'Where a single short sentence fails to deter, it is a proof that public morality and economy alike require the infliction of a longer reformatory discipline, protracted until criminal

habits are effectually subdued.'

"An eminent authority has recently remarked that 'magistrates who repeatedly pass demoralizing short sentences are themselves promoters of crime.' "From the foregoing statements three conclusions are forced upon us:

"First, that the penitentiary and the jail are not the proper places for the reformation of habitual drunkards.

"Second, that it is impossible to make the drunkard contribute towards his own support under the system of repeated short sentences.

"Third, that, to accomplish reformation effectually, long

sentences must be inflicted after repeated convictions.

"Surrounded by the demoralizing influences of a prison the work of reformation of the habitual drunkard becomes most difficult, be the superintendent of a purely penal institution ever so able or ever so well inclined.

"A sentence for a long term, say two or three years, after repeated transgressions, to a proper institution, would, in all probability, not only accomplish the complete reformation of the inebriate, but would enable the officials to make him contribute to his own support by the establishment of workshops; while a law investing the directors of the institution with power to exercise their discretion in the granting of leave of absence in certain cases would undoubtedly have a salutary effect. We respectfully suggest to your honorable body the necessity for some revision of the criminal law in this regard."

In further confirmation of these facts I desire to present portion of an article on the care and treatment of inebriates, by Rev. J. Willett, superintendent of the Inebriates' Home for Kings County, and published in 1881. He thus writes concerning the "vagrant drunkard" or "rounder," or "prison class" of inebriates:

"I only wish we had the means and the machinery at our disposal to take hold of the prison class. I refer more particularly here to those who have been committed and recommitted to prison from one to one hundred times, in order to save them from spending the balance of their lives in revolving from the bar-room to the bar of justice, and from thence to the prison cell. When discharged from jail, ragged and forlorn, they find themselves friendless wanderers in the streets, shunned by every passing stranger. I am aware that the popular cry is 'Let them go to work!' but who will employ them, when they are everywhere shunned as if stricken by

pestilence? Besides all this, they are physically broken down through the effects of bad liquor and starvation prison diet. The majority of their number are mere wrecks of humanity, and are regarded as fair game for the policeman to hunt up and chase down for the purpose of swelling the annual return of the arrests made by him, with a view to promotion to a higher grade. On each succeeding recommitment of the vagrant drunkard to the jail, the daily charge for his subsistence goes to swell up the sheriff's board bill, the profits on which in some counties may be safely estimated at more than one hundred per cent. Thus the vagrant drunkard is practically reduced to a mere chattel, the legally recognized

stock in trade of the police force and his jailors.

"For these inebriate prison-birds I would purchase either a large farm or tract of waste land and erect inexpensive buildings thereon, and make the place a strictly remedial and reformatory institution. Let each commitment be for a term of not less than three years, modified by authorizing the managers to grant 'tickets of leave' for the purpose of practically testing the moral and physical condition of apparently hopeful patients, — always making subject to rearrest if they return to their former drinking habits. When committed to the reformatory, the first requirement is repose and hospital treatment, including an abundant supply of nourishing food, in each case to be regulated by the physician in charge. When built up, those who are physically competent should be trained to field labor, and the weak and debilitated should be taught to work at some light trade, with a view to preparing them to earn a living when their time expires.

"Practically, it is very difficult, indeed, almost impossible, for book-keepers, clerks, and others who have formerly held responsible situations, to regain the confidence of their late employers; on the other hand, when builders, cabinet makers, tailors, etc., require the help of additional mechanics, good workmen are asked few, if any, questions, as all that is required is the performance of a day's work for a day's wages. I would compel this class of men to learn a suitable trade, and then aid them to find employment, so as to have work

to go to when leaving the reformatory.

"The annual arrests for drunkenness in the city of Brooklyn range from nine to ten thousand, but I dare venture to say that they never include one thousand distinct persons

arrested during any given year. With few exceptions, they are the same unfortunate victims of rum who have been arrested and rearrested every few weeks, many of whom could not begin to compute the number of times they have been committed to prison. I have met with some of this unfortunate class who have kept count in some cases up to fifty, sixty, seventy, eighty, ninety, and one hundred times, and then given up the record.

"Ten thousand annual arrests represent ten thousand instances (or more, for in many cases the work cannot be performed single-handed), where the arresting policemen are called off their beats most frequently during the night; ten thousand registrations of charges at the police stations; ten thousand attendances of arresting officers at the police courts on the following day to give evidence, and, in addition, the enormous cost to the county for maintenance in jail of those who are convicted.

"On the other hand, by reducing these ten thousand arrests to the number of individuals actually arrested, and disposing of the vagrant drunkards for three years, we would not only benefit and probably reform at least from thirty to forty per cent. of their number, — which should be the first great object, — but we would at the same time relieve the police force, police stations, and police courts of four-fifths of their onerous duties in this direction.

"More recently our aim has been to stop the inebriate while pursuing his downward course to the prison, and every one thus rescued prevents from five to twenty arrests in the For a long time we met with great opposiensuing year. tion and sometimes with bitter persecution, and this has stood in the way of attempting to extend our work. If we could only establish a reformatory on the plan which I have suggested, the occupation of at least one-third of our stipendiary justices of the peace and the same proportion of our police force would be gone, and the liquor traffic be more than proportionately reduced. · Beginning with the lowest consideration, our taxation would be greatly reduced; and, rising from thence to the grandest motives, we should restore numerous useful men and women to society, save precious souls from death, and greatly decrease crime."

The whole tenor of these two articles, written nearly twenty years ago, is fully in accord with advanced scientific thought on this subject, and the highest considerations from a humane standpoint. Legislation in harmony with the suggestions contained in these two reports would relieve the police force and the police justices of much extra duty, and prevent the overcrowded condition of the station-houses, jails, and penitentiaries, by largely doing away with the "vagrant drunkard," or, in police language, the so-called "rounder." Moreover, prompt and direct committal to remedial and reformatory institutions for inebriates would prevent a large proportion of the insanity of which repeated alcoholic excesses are the direct factors. I do not hesitate to assert, that well-established state institutions for the care of inebriates would greatly reduce the number of insane annually treated in the various insane asylums of the state.

As a matter of economy, and outside of any humanitarian view of the question, it will be found cheaper in the end to treat the pauper inebriate as a distinct class, and adopt special methods of treatment, restraint, and occupation for his relief, than to continue in the present methods, which are expensive and ineffectual, and, therefore, extremely unsatisfactory. this end, the short-term imprisonment and fines in cases of habitual drunkards must be done away with, and he must be placed under restraint for a sufficiently lengthy period of time, and surrounded by proper influences and placed under proper treatment. At present about one-third of the inmates of the Kings County Penitentiary are under commitment for "habitual drunkenness," independent of any crime. state insane asylums also contain always a certain class of inebriates or dipsomaniaes, those suffering from or convalescing from attacks of acute alcoholic delirium, or who are the subjects of alcoholic dementia; a certain proportion of these would be proper subjects for a "State Hospital for Dipsomaniacs and Inebriates."

In other words, the congested and overcrowded condition of our penal and charitable institutions would not only be greatly relieved, but the dipsomaniacs and inebriates would be

placed under a system that offers a reasonable chance at least of recovery from their lamentable condition, which is exceptionable, if not impossible, under present conditions. every instance where the inebriate has been treated as a special class, under special conditions adopted for his care and control, the result of such treatment has demonstrated that in every inebriate asylum, both in the United States and abroad, where such institutions have been founded and conducted on correct principles, that from thirty to forty per cent. of those whose history is carefully followed, are reported at sufficiently lengthy periods as "doing well and abstinent." Improved methods of dealing with the inebriate will give improved results, and a larger and more gratifying percentage of cures will be effected. But, looking at the pauper inebriate in the worst possible light, and even granting that he is incurable in a certain proportion of cases, nevertheless, he still comes under municipal, county, or state care, as much as the chronic or incurable insane, and when we come down to facts and figures, the economy of his care under proper conditions is no less apparent.

The morphine taker becomes practically an incurable in five years. The alcoholic user of spirits may continue eight or ten years, before he reaches incurable stages. This will depend on the free intervals between the time of using spirits. When he becomes incurable he may abstain, but the injured brain and nervous system never recover.

We believe the Worcester Fire Pail Co., have the most practical appliance for extinguishing fires on the market. It consists of pails of chemicals which can be used at any moment, and are always available and never out of order. Every hospital and home should be equipped with these pails.

ANNUAL REPORT OF WALNUT LODGE HOSPITAL, Hartford, Conn.

Seventy-two cases have been under treatment during the year. Sixty-one were discharged and left, and one died. The following is a general clinical grouping of these cases, and describes the most prominent symptoms:

Periodical inebriates, 26; continuous inebriates, 19; dipsomaniacs, 5; opium inebriety, 13; cocaine inebriety, 2; complex cases using chloral and other narcotics, 4; cases associated with exhaustion, 2; alcoholic hysteria, 1.

Most of the alcoholic cases had an early period of continuous drinking, or used opium and chloral, then became periodical drinkers with distinct free intervals of sobriety. Some of these strange periodical drink paroxysms resemble epilepsis in their onset, duration, and ending. Treatment directed to anticipate the paroxysm and prevent its occurrence is often very effectual. The tendency in all these periodical cases is to epilepsy and dementia. All disturbances of the nervous system which explode in intense depressions and morbid impulses for relief, as in a craving for spirits or any narcotic drugs, are to be regarded as evidence of very profound disturbance of the brain centers. The complex cases which have used spirits and various drugs, and are continually changing from one to the other, are often made to appear as examples of cure by certain remedies used by credulous advertising physicians. In reality, they have simply turned to some other drug which is being used in secret. Two cases appeared in which psychical and physical exhaustion were the real causes. The removal of these were followed by rapid recovery. One case of alcoholic hysteria, which seemed to be uncomplicated, never used spirits until the hysteric attack reached its crisis, then a small quan-

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tity of spirits brought on stupor and recovery. Spirits was taken to prevent the hysteria until finally it was used steadily. Several cases had taken to excess patent drugs, then turned to alcohol and opium.

In a study of these cases, the early causes and predisposing conditions bring out the following table:

Heredity direct, 26; heredity indirect, 18; hereditary collateral, 10; traumatism, 8; exhaustion, 2; environment and contagion, 8.

The fact that fifty-four of these cases were traceable to defects of the ancestors is additional evidence of the power of heredity, and the certainty of the transmission of special and general nerve degenerations to the next generation. Another very prominent fact is that many of these persons received from their parents a special predisposition to use spirits, with a marked physiological pleasure from the effects. In some of these persons this heredity might have been undeveloped, and they would have been abstainers all their lives by intelligent care and training. Others, after the development of the heredity, may by physical culture, medical help, and surroundings restrain this tendency and live temperately.

The mental contagion of surroundings, with strain and exhaustion, and states of general debility are common exciting causes of inebriety. Spirits in these cases are always most grateful narcotics by the relief and change they bring.

Another cause not mentioned in these tables may be turned racial. Thus some families are obviously dying out, and inebriety is only a form of degeneration. Others are evolving and growing stronger, and inebriety is only an accidental infection, in which there is a strong tendency to overcome. Such cases recover quickly, while others continually relapse, despite all treatment.

The following are some of the general statistical facts of these cases for the year:

Occupations.— Physicians, 8; manufacturers, 8; farmers, 2; merchants, 5; builder, 1; clerks, 10; engineers, 2; bankers,

3; leather dealer, 1; spirit dealers, 2; editors, 3; mechanics, 5; gardeners, 2; inventors, 2; professor, 1; drummers, 2; florists, 2; miners, 2; dyer, 1; architect, 1; miller, 1; speculators, 2; no occupation, 3.

Women.— Housewives, 2; teachers, 1; no occupation, 1. Age of Persons under Treatment.— From 20 to 30 years of age, 3; from 30 to 40 years of age, 17; from 40 to 50 years of age, 42; from 50 to 60 years of age, 8; from 60 to 65 years of age, 2.

Social Condition.— Married and living with wife, 21; married and separated from wife, 3; widowers, 4; single, 44.

Duration of the Inebriety.— From 5 to 10 years, 15; from 10 to 15 years, 34; from 15 to 20 years, 14; over 20 years, 9; Education.— Collegiate, 13; university, 14; academic, 26;

common school, 19.

Former Treatment in Other Hospitals.— Been treated at Keeley Gold Cures, 37; treated at other gold cure places, 19; treated at other hospitals, 6; never treated before, 10.

It is unfortunate that so many persons neglect all treatment until their disorder has become chronic and practically incurable. Then, still more unfortunately, they seek relief from charlatans, who promise cures in brief periods of time.

Failing in this, they come to asylums where rational scientific treatment is used, and realize in some measure their real condition.

All such cases are more prostrated, and suffer from greater mental instability. That is to say, are more irritable, notional, egotistical, and delusional. The mental impression of having lost all desire for spirits, and the confident expectation of being unable to use alcohol again, contradicted by bitter experience, is a shock to the brain, which is hard to overcome. Such cases need long periods of treatment in the best possible surroundings and conditions of living.

The use of unknown drugs for unknown conditions, of which the desire for drink is only a symptom, is a fatal mistake, to which the exceptions only prove the rule. The Results of Treatment.—Recovered, 27; improved, 38; unimproved, 7.

This table expresses only in a general way the condition of persons who have been under treatment, and the strong probabilities of the results of such treatment.

The present condition of one hundred and sixty-two cases who were under treatment from two to six years ago, brings out the very gratifying fact that fifty-six persons are temperate and well up to this time. Many instances of cure in persons thought to be beyond all hope of recovery are constantly noted. The quiet and comfort with exact conditions and surroundings of the hospital, and the medical and hygienic care, often are followed by the most unexpected and gratifying restorations. The unimproved are persons, who, while abstaining from spirits during the treatment, are always dominated by the craze for drink, either concealed or openly expressed. Every disordered condition of the system, every adverse surroundings and change of circumstances provokes a desire for spirits. These cases always rebel against rules and regulations, and claim to suffer from restraint, demanding confidence and trust, and always abuse it. They relapse with every opportunity, and become bitter detractors and dangerous critics of asylums and methods of treatment. The use of narcotics in these cases is always dangerous, because of the predisposition to substitute other drugs for the alcohol, and become drug takers. Many of the very intractable opium, cocaine, and chloral inebriates begin in this way.

The restoration and curability of the inebriate depends entirely on the conditions and causes of his peculiar addiction. A knowledge of these facts suggest the remedies and means essential to break up and restore the mind and body to its former health. In many cases it requires long periods of observation to fully understand the conditions and needs of the case. The first essential the removal of spirits or drugs, and placing the patient in exact hygienic surroundings for healthy normal living, gives an opportunity to study the case, and to

know what measures are essential for cure. The persistent use of spirits or drugs is not the disease, but only a symptom and sign of some condition of the brain and body which calls for these drugs.

The scientific treatment consists in finding out what this source of irritation is, and not alone in breaking up the craze for drugs or spirits. To check this craze by drugs is like giving opium to stop pain, when the cause of the pain is not removed. The causes must be found and the treatment directed to their removal before any curative results can be expected. absence of all desire for spirits or drugs after a brief treatment is no evidence of cure. The use of spirits and drugs always produces changes of the brain and nervous system, which are not healed by will power or drugs, in a short time. It may be said that all inebriates suffer from profound degenerations of the brain and nervous system, which require a great variety of means and remedies, applied along lines of exact rational treatment, extending over long periods of time. The work in this hospital, as in other institutions, is crippled and made less efficient by the failure to keep patients long enough to bring about permanent restoration. The "gold cure delusion" of rapid cure by drugs is a serious error, followed by an ever increasing army of incurables, more and more difficult to treat.

The work of this hospital in combining special personal study and treatment suitable to the needs of each case, proves to be more practical, with better results every year. The same progressive studies have been pursued, and the accumulation of facts have been equally marked and suggestive.

Like picket guards far in advance of the main army of progress, we can only point out some of the roads and frontier lines along which this subject must be studied. Walnut Lodge may be called an outlying station, not only for the restoration and cure of the inebriate, but to indicate the direction of the efforts of scientific progress, to understand the inebriate neurotics, and the means of prevention and cure.

Abstracts and Reviews.

FOXBORO, MASS., INEBRIATE ASYLUM.

By M. Hurchinson, M.D., Superintendent.

The establishment of the hospital was authorized by a law enacted in the year 1889. It is located in the town of Foxboro, which is on the same range of hills with and adjoining the town of Sharon, and was declared open for the reception of patients early in February, 1893, since when more than seven hundred have been received.

In securing a commitment the whole course of proceedings is identical with that followed in securing the commitment of an insane person to a hospital for the insane. The only variance is that the certificate given by the examining physicians alleges that the person to be committed is an inebriate and not that he is insane. Under the law men alone can be committed to the hospital, and of them it intends that only those who still preserve the general good-will and respect of their acquaintances and friends shall be eligible, not those of well-known bad character and reputation.

When issued the order of commitment is valid for two years from the date of the admission of the patient to the hospital, but provision is made that the trustees at their discretion may conditionally release him at any time before the expiration of that time and under such conditions as they may deem best. It is also provided that when the patient violates the conditions of his permit to be at liberty, the permit becomes void and the trustees may issue an order for his arrest and return to the hospital. When so returned he becomes subject to all the conditions of his original commitment. Further provision is made

that an individual, if he relapses, may return to the hospital at any time before the expiration of the two-year limit and surrender himself, thus becoming again subject to all the conditions of his original commitment. It has been found that this power of recall, as exercised by the trustees, has been beneficial in its effects and is so felt to be by the patients themselves as well as by the relatives and friends. It acts as a restraint over the patients, helping them to resist the temptation to drink, and, what is not less important, allows them to be conditionally discharged, or placed on trial, earlier than would otherwise be thought advisable. Believing that we are dealing with a disease closely related to insanity, in which nearly every tissue of the body is affected, that the chief and most disastrous changes are seated in the tissues of the nervous system, manifesting themselves by obvious changes in the habit, thought, and action of the individual, our aim is to upbuild our patients morally and physically, knowing that only when a normal or approximately normal physical condition is arrived at can we expect the nerves to be at rest, and their craving for the narcotic action of alcohol to cease, and the power of resistance, the ability to withstand temptation be restored. We believe that the treatment of the disease requires time, and it is our custom to require each patient to remain under treatment for six consecutive months, the shortest time that in our experience and that of others who have carefully studied the subject seems likely to be of lasting benefit.

Our first aim is to protect the patient against himself in his state of weakened and diminished will-power, to prevent a further aggravation of his condition by the continued use of the narcotic poison alcohol in any form. We then seek to restore him to an approximately normal physical condition by the use of appropriate medicines, healthful surroundings, sunny and well-ventilated rooms, abundant, simple, and nourishing food, regularity in habits of sleep, rest, and exercise, as well as occupation and recreation. As soon as seems expedient each patient is put on parole within the limits of the hospital grounds

in the hope of improving his general health through the influence of pure air and sunshine, and, what is not less important, of reviving and strengthening his probity, self-respect, and tenacity of purpose by inducing him to live up to the conditions of his parole.

Definite exercise adapted to the peculiar needs of the individual is given under the direction of a competent teacher of physical training, and these exercises are followed by the use of a tempered spray-bath. The mental and physical improvement following the continued use of the baths and exercises is apparent to the patients as well as to the physicians. Occupation is found in the care of the stock, in the cultivation of vegetables and other farmwork, in the care of the diningrooms, in the kitchen and laundry work, in the making of general repairs, and in the manufacture of brooms, which in its different steps affords light, clean work adapted to the varying ability of the men.

Recreation is found in the bowling-alley, baseball, library-books, magazines, and games. From time to time the patients have arranged and conducted entertainments, employing such talent as was to be found among themselves, while the hospital authorities have provided a series of talks upon the ethics of daily life and also various lectures upon travel and science, some of which have been illustrated by the stereopticon.

Each year an inquiry is made as to the result of treatment in the cases of those who have been discharged. This inquiry is made by an officer of the hospital, who personally interviews probation officers, police and town officials, friends and relatives, as well as the patient himself. We believe that favorable results have been obtained thus far, and that they will be still better in the future.

In 1895 something like seventy million fewer cigars were made than the previous year. It is said that the wheel has done much to diminish the demand for cigars.

INEBRIETY CURED BY HYPNOTIC SUGGESTION.

Dr. Osgood Mason, in his excellent work on telepathy and the subliminal self, noticed elsewhere, gives the following case:

"B. X., twenty-four years of age, a sporting man; obstinate, independent, self-willed, a leader in his circle. He had been a hard drinker from boyhood. He had been injured by a fall three years before, and had been subject to severe attacks of haematemesis. I had known him previous to June, 1891. At that time he came into my office one evening somewhat under the influence of alcoholic stimulants. After talking a few moments, I advised him to lie down on the lounge. I made no remarks about his drinking, nor about sleep. I simply took his two thumbs in my hands, and sat quietly beside him. Presently I made long passes from head to feet, and in five minutes he was asleep.

His hands and arms outstretched and raised high up, remained exactly as they were placed. Severe pinching elicited no sign of sensation. He was in a deep hypnotic sleep. I then spoke to him in a distinct and decided manner. I told him he was ruining his life, and making his family very unhappy by his habit of intemperance. I then told him very decidedly, that when he awoke he would have no more desire for alcoholic stimulants of any kind; that he would look upon them all as his enemies, and he would refuse them under all circumstances; that even the smell of them would be disagreeable to him. I repeated the suggestions, and then awoke him by making a few passes over his face. I did not inform him that I had hypnotized him, nor speak to him at all about his habit of drinking. I prescribed for some ailment for which he had visited me, and he went away.

I neither saw nor heard from him again for three months, when I received a letter from him from a distant city, informing me that he had not drank a drop of spirituous liquor since he was in my office that night. His health was perfect and he had no more vomiting of blood. June, 1892, one year from

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the time I had hypnotized him, he came into my office in splendid condition. He had drank nothing during the year, and I have not heard from him since.

TELEPATHY AND THE SUBLIMINAL SELF.— An account of recent investigations regarding Hypnotism, Automatisms, Dreams, Fanaticisms, and related Phenomena. By R. Osgood Mason, A.M., M.D., pages 343, New York, Henry Holt & Co., Publisher, 1897.

Dr. Mason gives in the first chapter a clear idea of this book in the following:

"The object of these papers will be briefly to tell, in connection with my own observations, what is known and what is thought by others who have studied the subject carefully, and especially what has been done by the English Society for Psychical Research and kindred societies." Whatever opinion the reader may form of the subjects presented, he will be forced to conclude that the author has given a clear, candid review of one of the most difficult topics in modern psychology. This is so broad and rational that it lifts the entire subject to a level where the reader may judge of the facts and their meaning, and follow the author with increasing pleasure and confidence. The explanation of much of this obscure phenomena (now almost altogether confined to the realm of quackery), by the subliminal sense and new psychical forces is thoroughly scientific and rational. There can be no doubt that the same laws and the uniform movement of forces will be found present in these obscure unexplainable phenomena as those seen everywhere in the physical world.

Dr. Mason is the first one who has gathered in a popular scientific work the leading facts in this occult sphere, and suggested some theories which are supported by a great variety of evidence.

These theories are in harmony with other facts of psychology, and are so reasonable and clear that we seem to have a

new field opened, with the possibility of each reader being an explorer for himself. The tone, style, candor, and fairness of the facts discussed disarms all criticism, and the reader puts down the book with profound awe and astonishment. The great world of the supernatural is giving up her secrets, and the mysterious and occult disappears in the light from a higher point of view.

This work takes the reader out into this new field, and tells him what has been done, and points out the possibilities of new facts from further research. Hence there can be nothing but praise for a book of this kind. No one can justly say the writer has gone too far, or not far enough. No one can question the facts or the conclusions, unless he has made a special study of the same or similar facts, and can point out clearer explanations.

Such works live as landmarks and starting points for new and wider studies, and we hope all our readers will procure a copy of this book, and become students of much of this wonderful phenomena that occurs in all our lives.

We shall give some extracts from this work in our future issues.

NATIONAL TEMPERANCE LEAGUE'S ANNUAL, for 1897. Edited by Robert Rae, Secretary, London, 33 Paternoster Row, E. C.

This volume of over two hundred pages groups in a convenient form a great variety of facts and statistics of unusual interest. The first part of the book gives a very carefully edited review of temperance work in England and on the continent; with an excellent address by Archbishop Timple, a sketch of the late Dr. Richardson, and a retrospect of forty years' work.

The medical side of the temperance work, including the questions of heredity, and inebriate retreats, laws of control, and statistics, insurance of inebriates, and other allied topics are treated at some length. The last half of the work is de-

voted to statistics of all phases of the drink problem, together with a directory of the various temperance organizations, and their work during the year. Such a work is of inestimable value to all who are interested in reform movements along this line. The facts and statistics are put in an available form so they can be studied, and are carefully grouped and edited, by one who has been for years an authority, and who probably is more familiar with the temperance movement than any other person living.

INEBRIETY, ITS SOURCE, PREVENTION, AND CURE. By Charles F. Palmer, M.D. Fleming H. Revell Company, New York, 1896.

This little work of one hundred and ten pages is posthumous and issued as a monument to the author's memory.

It consists of five chapters, the first, on the nervous mental organization, treats of morbid conditions and perverted sensations; neuro-psychopathic constitution; inebriate diathesis, etc.

The second chapter treats of cure, the moral aspect, the will power, selfishness.

The third chapter discusses the preinebriate morbid conditions, and the strengthening of the bases of self-control.

The fourth chapter takes up the progress of building up moral manhood, and the last chapter we have presented entire in this issue. While the style is labored and obscure in some parts, the general analysis is good and suggestive. The philosophy of treatment is sound and worthy of a careful consideration. Altogether, this work is an important contribution to the subject, and is very helpful to both professional and lay readers. As a semi-popular discussion of the causes and treatment of inebriety it is to be highly commended, and will serve a very useful purpose of clearing away many of the mistaken notions of the day. A popular work along this line written in an attractive style will be in great demand. This work approaches this ideal, and had the author lived he would, no

doubt, have presented such a work in future editions of this work.

SECRET NOSTRUMS AND SYSTEMS.— A Book of Formulas, Compiled by C. W. Oleson, M.D. Sixth Edition. Oleson & Co., Publishers, Chicago, Ill., 1896.

The popularity of this volume gives a good idea of the value of its contents. Literally, it describes the formula of every popular patent nostrum, and gives the physicians some idea of the deleterious effects of many highly-vaunted drugs. In many cases where these quack remedies are used, it is important to know their nature so as to estimate their action in any case. Many of the so-called "gold cures" are given in full. We commend the book as of unusual value and interest to every physician. Dr. Bradner's paper in the next issue contains a list of some of these drugs.

THE DUXHURST INEBRIATE HOMES.

AN INTERVIEW WITH LADY HENRY SOMERSET, THE FOUNDER.

I called on Lady Henry Somerset at the Reigate Priory to ask her about her Industrial Colony at Duxhurst. I had seen the first report that has just been issued on the working of the adventure, and was anxious to hear what in addition Lady Henry would have to say about them. First I asked what led her to embark on so very onerous an undertaking.

"Well," said Lady Henry, with a half smile, "we teetotalers had done so much talking that there seemed to be a danger we should be thought incapable of doing anything else. Women are essentially practical, and our women jumped at the idea of trying to do something to undo the work liquor had wrought on some of our sisters."

"So you determined to found an institution for reclaiming them?"

"Oh, please don't say 'institution' or 'reclaim,'" pro-

tested my hostess; "the word institution suggests rules and constraint. We have practically no rules, beyond the provision that for the first three months no visitor shall leave the village alone; and further, we don't 'reclaim,' but give our patients the opportunity and the means of recovering from what is nothing less than a disease."

"A disease and not a crime?"

"Exactly. It is a sort of paralysis of the will, partly mental, partly physical. Our experience leads us to the conclusion that not only is it a disease, but a perfectly curable one. It has been said again and again that a woman drunkard is incurable. I think it quite possible she is, if subjected to the purgatorial processes that are usually employed."

"What are they?" I asked in all ignorance.

"Confinement with hard labor for the most part. The laundry and the sewing-machine are the accepted panaceas. There seems to be a general idea abroad that, as far as women are concerned, all the ills that flesh is heir to can be expiated at the wash-tub and the sewing-machine. Of course, we believe in work, and in hard work, too. But the work should be varied; open air, if possible, and of a nature to amuse and interest the worker. At Duxhurst there is, of course, the laundry work of the village to be done, and some necessary sewing, but no other. We do not trust to these as specifically helping in the cure. What we have aimed at is to find work that will inspire hope and encouragement as it goes along."

"But what is the work that is so encouraging?"

"I said just now confirmed drunkenness is a disease; it is a disease of the mind and of the soul, and it afflicts the body cruelly, bringing it into that painful state in which a perpetual craving for further poison is the most marked and fatal symptom. Obviously, to effect a cure you must persuade the patient first to forego drink, and next eradicate the desire for it. The first can be mechanically secured by confinement, but it is useless as a remedy; on the contrary, from the cases I have observed, I should say that enforced abstinence by itself only

makes the mental desire stronger and less controllable. This is what makes terms of imprisonment so futile a device; and recognizing this we set ourselves to work on a different plan. First, not in order of time, but in order of importance, there is the moral side of the question; and by means of our bright and cheerful services twice a week in our village chapel, daily prayers, and occasional short and interesting Gospel and other lectures and discussions, we give the spiritual character opportunities of growth. But we also recognize that physical health and mental sanity are necessary antecedent conditions of making this moral upbuilding a success. And this is why we have tried to find work and occupation for our patients that is not only healthy and strengthening physically, but affords food for reflection and thought, and in its processes is at once encouraging and amusing. Nobody who has ever tried gardening can have failed in acknowledging its fascinations. Well, we have made a great point of this. We got a highly-qualified lady gardener from Swanley, the market garden of London, built glass-houses, and set her to work with the patients. The thing has worked like a charm. Most of our women are town bred — to them the growth of a green thing is an ever fresh mystery and wonder. Gardening is more like a perpetual game to them than the hard physical work it really is. Their pride in the results of their skillfully-directed labor is only equalled by its commercial success. It was hardly to be expected that we should make the place pay; but this gardening earns a good share of its expenses already. Then there is the farm. Already our women are doing a good deal there - and they will do more. Then beside the daily work and directly religious and intellectual training we have a little home for poor children - 'The Nest.' Here we entertain batches of the poorest slum children in summer and autumn, and the needs of these little ones afford a splendid opportunity for development of that motherly affection that is ingrained in every woman's nature. The sight of these poor things revives feelings of sympathy and love in many a heart that has long been

too drink-sodden for any human passion, and in their awakened love for others their own self-respect finds a new life."

"In short, Lady Henry, instead of locking these poor creatures up in the sort of institution that most of us associate with the name of 'charity,' you really have organized a kind of 'model village,' where, amid plain living, high thinking, and pleasant and constant occupation, your guests may recover their proper and normal rectitude of mind and body."

"Yes, that is our aim; but I should add that although we aim at high ideals, and are guided first and last by a determination to make our cures genuine at all costs, we have also set ourselves to make the village as self-supporting as possible. Accurate labor books are kept, and each patient who earns more than the nominal cost of her maintenance has the surplus credited to her account. One patient had over £8 at her banker's at the end of her first year."

"And your cures?" I asked. "Are they lasting?"

"Absolutely so, so far as we can judge. So far we have in our work met with every encouragement from our doctors, patients, and all those who have visited the village. I only wish the public would encourage us a little more with subscriptions. Unfortunately, we have only accommodation for forty-three in the village, and we have had to refuse over 3,000 applications. It is almost incredible what a universal want has been shown by the establishment of our colony. Imagine our receiving ten applications a day during only the first year of our existence! Who is it that sends us patients? Why, mostly, of course, their relatives; but the most encouraging outside feature has been the extraordinary support we have met with from the magistrates, and it is they who are the real experts in this business."

"So, as a final question, Lady Henry, you are satisfied the colony is on right lines and is succeeding?" I put in, rising to go.

"Yes, if it does not sound conceited, we are," she replied; so confident, indeed, that if we had £100,000 we know that

we could fill up the village faster than we could build it. Look here," Lady Henry added, thrusting a set of very pretty pictures into my hands, "these cottages can be built for £250 apiece, and each holds seven patients.—Temperance Record.

INCREASED EXPENDITURE ON ALCOHOL.

There has been a large and striking increase in the amount spent on alcoholic intoxicants during the year 1896. The increase in British spirits was £1,069,720; on beer, £4,425,724; and on wine, £1,103,114, amounting in all to £6,598,558; but a decrease on foreign spirits of £41,140 has to be deducted, leaving an actual increase in the cost of intoxicating liquors of £6,557,418. We are here presented with a year's alcoholic expenditure not only six millions and a half greater than in 1895, the preceding year, but larger by £1,683,471 than the amount similarly expended in the previously highest year, 1876. It ought, however, to be borne in mind that, as the population has varied the average amount consumed per head in 1896, namely, £3 15s. 6d., is not so high as it had been in some of the preceding years, having gone up in one year to £4 9s. With all allowances of this kind, it still remains a serious and alarming fact that the annual alcoholic expenditure was over a million more than it had ever been before. Whatever the cause or causes of this startling increase, it behooves the medical profession to exert the weight of its influence on the educational powers that be to follow the laudable example of the French Minister of Education, and order instruction on the composition and effects of alcohol to be given in every school.—From the British Medical Journal.

Atropine not a Respiratory Stimulant.— Unverricht denies the generally-accepted doctrine that atropine stimulates the respiratory function, and asserts that his investigations Vol. XIX.—29

prove that morphine and atropine do not antagonize one another in their action upon respiration. Atropine can induce Cheyne-Stokes breathing, which is not regarded as an evidence of respiratory stimulation. His experiments show that the action of the drug on respiration is essentially depressing, and that in three cases of poisoning the only symptom which caused any anxiety was the profound disturbance of the mechanism of respiration.— British Medical Journal.

Epilepsy from Tobacco.— A patient had convulsions, epileptiform in character, due to use of tobacco. For two months he had had one or two a week, and they were growing progressively worse in spite of treatment. With the discontinuance of tobacco the convulsions ceased.— Scott, in Southwestern Medical Record.

The moderate use of alcohol is a delusion. The belief that, because no poisonous effects are apparent, its use is harmless, is a fatal error. Many moderate users of spirits are physiologically inebriates, and suffer from defects and degenerations of the brain and nervous system that are referred to other causes. They are more prominently diseased than others who become intoxicated often from excess of spirits. There is absolutely no moderate use of spirits that is not injurious, and no means of testing the degree and extent of the damage which follows from spirits in any given quantity.

The phenomena of the first intoxication from alcohol is always significant of the direction of the degeneration in future excess. If this event were prominent in symptoms of dementia the continued use of spirits will terminate in this way. If delirium were prominent, the breaking down process will be along this line. If delusions and manias appear, they will follow in the future from each subsequent attack.

BEWARE OF CHLORODYNE.

Dr. Coley, in the Temperance Record, writes as follows: "Chlorodyne is a compound containing several sedatives, the most important of which is morphia, the chief active principle of opium. It is notorious that the morphia habit (like opium-eating and laudanum-drinking) is a slavery which is often even harder to break than the slavery of alcohol. It certainly does not produce crimes of violence; but in every other way the victims of morphia are as thoroughly demoralized as the victims of 'drink.' It should, therefore, be no matter of surprise that chlorodyne, which is shamelessly advertised, like other quack remedies, in religious periodicals, has been the ruin of many promising lives. Ladies especially are prone to become the victims of chlorodyne. I have heard from chemists of huge sums being spent in chlorodyne by ladies who have become addicted to the habit of taking it.

"On the whole, it may be open to some question whether the moral danger implied in the promiscuous recommendation of chlorodyne is not quite as great as that which is involved in similar recommendations of brandy.

"The physical dangers of the use of chlorodyne in unskilled hands are by no means small. Leaving out of account the possibility of an overdose, an ordinary dose might easily be dangerous under special circumstances. It is curious that chlorodyne is recommended in the advertisements for just those diseases where it might be particularly risky to administer any preparation of morphia. I have before me, for instance, an advertisement in a religious periodical (the managers of which ought to have too much high principle to admit any such advertisements), in which it is declared that chlorodyne is the best known remedy for bronchitis. Now the merest tyro in medicine knows that the danger of a really severe case of bronchitis would be greatly aggravated by the use of opium or morphia in any form."

THE NEW LAW RELATING TO INEBRIATES.

By George L. Shattuck, M.D., Butler Hospital, Providence, R. I.

The enactment of a law by the Rhode Island legislature, at its last session, pertaining to the care and treatment of inebriates, has occasioned considerable comment and discussion by members of the medical profession.

The question of the drug-habit and its treatment is, all physicians well know, a vexed one. Whether regarded as a vice or a disease, or, as is more rational, a condition midway between these extremes, the physician is always the one appealed to when relief is sought, and he must treat its victims, like other medical cases, with the best therapeutic measures at hand.

In recent years so many alleged cures for inebriety have sprung up and been urged upon the public, that an unusually large number of cases have fallen into the hands of quacks to be treated by secret and mysterious methods. Sooner or later, however, the great majority of these patients apply for treatment by more honest, rational, and scientific measures. While it is, unfortunately, a fact that treatment by these means has heretofore resulted almost as unsatisfactorily as by the methods of quackery itself, it should be said in explanation of this fact, and in justice to the medical profession, that these discouraging results have been due, in a large measure, to the complete lack of control of the physician over his patient, and his consequent inability to properly carry out those measures which are absolutely essential for his relief. All authorities agree that foremost among these measures is seclusion - partial or complete - according to the necessities of the case. It offers to very many confirmed inebriates the only hope of cure of their baneful habits, and without it all treatment were as well abandoned. Secluded, the auxiliary means of treatment can be carried out with some degree of success. Elimination of

the drug from the system and restoration of the functions of the nervous system and other bodily organs from the exhausting effects of over stimulation to normal and healthy action, may, to quite an extent, be brought about; while the improved physical condition, prolonged rest, change of surroundings and associates, and absence of temptation will afford opportunity for the mind to recover its equilibrium and to again exert, by the proper exercise of will and judgment, its normal inhibitory influence.

Under the old regime these measures of relief could not even be approximated. Successful home-treatment was not to be thought of, and hospital treatment availed but little. The legalized means of commitment to hospitals was valueless, since, by the voluntary application of the patient, or his commitment by court, when in the delirium of drug-intoxication, he could not be restrained if he demanded his release, which he usually did before any benefit from treatment had been received. A few patients, only, had the requisite force of will and character to yield themselves voluntarily to treatment, — the great majority using the hospital simply as a sobering-off place, from which they soon took their departure, regardless of the advice of physicians or friends.

The new law is based upon the assumption, which we all recognize, that these patients are both unappreciative and careless of their own needs, and it provides, with proper limitations, for the restraint and treatment, regardless of their own wishes, of those persons so excessively or dangerously addicted to the use of alcohol or other poisonous drugs as to render it necessary for their own good or for the safety of the public that they be so restrained. The law is similar in many respects to the one which, during the last fifteen years, has been in operation in Massachusetts, but, including as it does, not only cases of alcoholism, but all forms of inebriety, the Rhode Island law is a much broader, and therefore more useful measure. Commitment by the certificates of two physicians has

been substituted here for the judicial method used in Massachusetts; and, in the absence of a hospital for inebriates in this state, the Butler Hospital has been selected as the most suitable one in which to carry out hospital treatment.

The law in Massachusetts was met, at the start, by much opposition on the part of hospital physicians, chiefly upon the ground of lack of proper facilities for the treatment of these cases in the state hospitals for the insane. They held that, in the large and over-crowded state institutions where insane patients of all classes and conditions were placed, the treatment of inebriates could not be advantageously carried out on account of the deleterious effect upon the latter of the surroundings and associations. This opposition culminated in the erection of a hospital especially for inebriates and dipsomaniacs, which began operation about three years ago.

The constitutionality of the law was also questioned by some upon the ground of improper infringement upon the liberty of the individual. This question was settled by a test case before the supreme court, the decision sustaining the law.

We have laws restraining patients with contagious disease, insane patients, and even inebriates, when they have, by reason of their habits, encroached upon the criminal law. When we consider how widespread and disastrous are the evil effects, physical and moral, arising from the habits of this last class of cases, is it reasonable or proper, especially for physicians, to oppose any just measure looking to their treatment before they have so far degenerated as to be beyond hope of cure, or have unfortunately committed some crime as the direct result of their intemperate habits?

Although seriously handicapped at first, partly by the opposition already noted, and partly by a misinterpretation of its object which resulted in the commitment of drunkards of all grades and conditions rather than those cases, only, for whom the law was designed, viz.:— those whose condition was amenable to treatment and offered some hope of cure,— the law in Massachusetts has produced encouraging results, as is shown

by the statistics published in the last annual report of the Foxboro Hospital.

The law in this State provides that the necessities of every case be submitted for judgment to the family or friends of the patient, two reputable physicians, and the trustees and super-intendent of the Butler Hospital. Allowing, as it does, the additional privilege of a hearing before a justice, jury, or commission, the question of unjust detention is eliminated.

In selecting the Butler hospital as the one in which to carry out institution treatment, a demand has been made upon it which is not light. The peculiar characteristics of these patients, and the conditions attending their treatment, necessitate, as everyone familiar with them fully appreciates, a demand for much sacrifice on the part of a hospital and its officers in the interest of humanity.

The newly-enacted law is doubtless imperfect in some respects and might, perhaps, be amended so as to meet better the exigencies of cases. The spirit of it is, however, correct, and it is surely a step in the right direction. If it finds the support that it deserves among members of the profession, its defects will soon be made apparent, and can doubtless be easily remedied.

Although physicians may possibly differ as to the details of the present law, as they differ in regard to the details of management of other disorders, they at least should not forget that this question is a medical one, and should insist that, in its solution, medical ideas shall largely prevail. The doubtful prognosis and the extremely difficult and unsatisfactory means of treatment of inebriety hitherto available should lead them to welcome any legitimate measures offered, and should cause them to be slow to criticise, at least without trial, any measure which may be utilized by them in the interest of their patients, of the families of these patients, and of society at large.—

Atlantic Medical Weekly.

The *Hypnotic Magazine*, edited by Sydney Flower, and published at Chicago, Ill., is a most excellent practical journal, treating the subject in a broad, scientific way.

It is very helpful and useful to all medical men, and should have a wide patronage. Send for a copy.

Funk and Wagnalls publish the leading religious review of the day called the Homiletic Review. It is an excellent instructive journal, and well worth a careful reading.

Appleton's Popular Science Monthly is now giving a series of valuable papers on racial geography, which are intensely interesting. Every number contains many papers of great medical interest, which are not found in the ordinary professional journals of the day.

The Monist is always a welcome guest to the library of every scholar. Its teachings are very suggestive and scholarly, and are studies of the higher psychology of especial value to every physician. It is published by the Open Court Publishing Company, Chicago, Ill.

The International Journal of Ethics, published in Philadelphia, Pa., is a magazine of rare and increasing interest to all scholars. Especially medical men should be students in this field. They have a more intimate knowledge of the relations of life, and its bearings than others. This journal should be among the essential periodicals of physicians who would keep abreast of the times. Send for a copy for examination.

In the Journal of Botany there is a note by an observer on the drunken habits of certain humble-bees. The intoxicant is the honey produced by the crowded flowers of the capitulate heads of certain compositae. The bees, after sipping the honey, roll on their backs, striking their legs wildly in the air, and appear to be in a helpless condition. When the bees recovered from the effects they seemed in most cases eager to repeat the debauch, but some show signs of "remorse and disgust."

Editorial.

SOME UNKNOWN PHENOMENA IN INTOXICATION.

Acute alcoholic intoxication is always marked by a general palsy of the senses and reasoning. At the first, delusional egotism, with deliriums of suspicion and credulity, and general confusion of thought are present. Then an increasing confusion and mental enfeeblement, also a general lowering of all emotional and functional activities. The reasoning is obscured and deranged, certain ideas may fill the mind to the exclusion of all others, together with mental instability of thought, such as changing suddenly from one topic to another, are present. In all cases degrees of dementia, with profound and progressive palsy, are the marked symptoms. These are so prominent and common to all cases that no one doubts the insanity and imbecility of an intoxicated person.

In a certain number of cases in this condition, there has been noticed sane moments and intelligent reasonings, with clearness of judgment and perception, equal, if not superior, to the highest brain activity in its normal state.

In a semi-comatose state, the mind will suddenly display a degree of wisdom and sanity in some opinion or advice, then sink back into its demented condition. Usually these sane thoughts refer to his present condition, as in the following:

In one case a man profoundly intoxicated, while being taken to the station-house, said to the officer: "I was overcome with the heat and drank some whisky; my brain has given way. Take me to the hospital." He was found dead in the station-cell next morning. His statement was true."

In a second case, a physician notoriously stupid from spirits said: "I am poisoned from kidney disease. Put me in a hot Vol. XIX.—30

bath, and purge me," then relapsed into a delirious state. The next day he died, and his advice was found to have been true.

A man arrested for assault, in a delirious state, said: "I hit the man because he was kicking his wife; it made me mad to see him do this." He then relapsed into delirium, and, although sentenced to jail, never repeated this statement. It was afterward found to be true.

These are prominent examples of sane statements and reasoning for a brief moment. Other cases less prominent, referring to more trivial things, are also common.

These sane moments concern the acts and motives of others, as in the following:

A man in a pronounced alcoholic delirium, said: "I have willed my property to a banker to avoid arrest for using trust funds. I have returned all the money, but he has refused to give up the deeds. He has been urging me to drink on every occasion, and wishes to destroy me." He recovered, and this was found to be true, although he never referred to it when restored.

An incbriate in a comatose condition, suddenly begged me to write his mother in St. Louis where he was. He recovered and had no memory of this. The letter to his mother was the first news she had from him for two years.

A stupid comatose inebriate, son of a business man, was brought to me. The father complained of financial stringency, when suddenly the son said: "Discharge my brother, and put a stranger in his place, and times will be better." The father did this and wrote that he found and stopped a serious defalcation. The inebriate son did not remember this remark, and could not understand why he made it.

A man, suffering from delirium tremens, said to his brother: "Sell out all your stock in such a company, for it will fail." Of course no heed was taken of this advice, and the man when he recovered denied all recollection of it. Later the company failed and all his property was lost.

A man found in deep drunken stupor on the street, said: "Get a physician for my friend who is dying in a room at a leading hotel. Later a man was found dead in a room at this hotel who was his friend. When sober he could not recall this remark. He had drank with this man a few hours before he was found on the street.

These cases show that certain ideas are formed, and expressed unconsciously, leaving no impress on the memory, and appear in the stupor and palsy of intoxication.

Probably some special exciting cause brings them to the surface as flashes of reason, and conceptions of truth, then all is a blank again. Of course these incidents are not common to all intoxicated men, but exceptional. Occurring as they do in the extreme palsy from spirits, they suggest the operations of consciousness below the senses, and behind the phenomena of ordinary brain activity. The shrewd remarks and wise advice of intoxicated men at times out of all harmony with their present or past actions is the same condition. These sane moments are marked in some cases, who, when clearly intoxicated, seem to have flashes of wisdom unusual at other times. The remark so often made by the laity that states of intoxication in certain men are followed by greater wisdom and judgment than ever manifested during their sober periods, is a recognition of this condition.

The theory of double consciousness applies and explains much of this phenomena. The ordinary consciousness is palsied by spirits, and cannot act only along automatic lines. The sub-consciousness or subliminal sense breaks through this palsy and asserts itself, in wise comments or statements of events, predictions and sane thoughts. It is certain these manifestations come from some deeper and less impaired mentality, and are not mere accidents and morbid impulses of the moment.

The gathering and grouping of a number of well-authenticated incidents of this class may bring out some laws and conditions which control these at present very obscure phenomena.

SMALL ASYLUMS FOR INEBRIATES.

The number of inebriates who come under medical care are increasing every year. Many of the large hospitals have wards especially devoted to this class, and rooms with nurses who are experienced in the care of such persons. Almost innumerable homes and private asylums advertise to take such cases, in connection with mildly insane and nervous victims. One asylum advertises to receive all kinds of surgical cases, also mental and alcoholic patients, and offers superior facilities in the treatment.

One institution claims to have a cottage system, in which all cases of mental and drug origin can be separated and treated alone. Epileptics are taken at this place. A great number of these places claim great superiority from the use of special means and drugs, and hint that a wide experience promises a cure in most cases. One of these places claims to have had thousands of cases under treatment; as the advertisement of the asylum dates back less than two years, this experience is remarkable. The failure of the gold cure homes sends an army of drug takers to these asylums, who come under the impression that some special rapid curative agent will be used. In some places this is encouraged and the patient goes out buoyed up with the hope of perfect recovery, only to relapse, and be sceptical of other means. All of these small asylums work under great disadvantages in having other cases associated with them. The means and measures essential for one are not useful for the other. Inebriates should be treated alone in small groups of not more than twenty or thirty, and in special prepared asylums and the most favorable surroundings.

Most of the recent asylums are mere hospitals for recovery from the drink paroxysm, the patient deciding for himself that he is well and able to go out. Of course few, if any, permanent recoveries follow, and the public judge of the failure of such asylums by the statement and experience of those who have claimed to be cured. In large cities, hospital wards

and rooms for alcoholics suffering from narcotism, of spirits and drugs, often bring large returns in money to the hospital. which fact encourages the growth of homes and small asylums to divide up this business. In reality this is a very small part of the treatment, and in most cases can be accomplished without medicine or medical care. All these cases require months, and even years, of long persistent nerve rest and special medical care, in the most favorable surroundings and conditions of living. High altitudes and seashore levels, special methods of treatment in special conditions may all have advantages. But no one means or remedy can be depended upon. The successful treatment requires not only an exhaustive study of the case, and the conditions which enter into the causation, but the scientific application of every rational remedy and means to build up and restore the brain and nervous system.

The treatment of inebriety will be superficial, empirical, and transient, or scientific, exact, and thorough, according to the study of the case and knowledge of the physician. The care of such cases for a few weeks in temporary homes, established accidentally, is not likely to be very thorough or scientific. The most unfortunate fact, that nearly all cases are in chronic conditions before they come under treatment, should be recognized in all asylums, and long, persistent treatment should be urged by all physicians. The present empiric stage of treatment is rapidly passing away, and we may expect in the near future a great advance in the asylum treatment of inebriates.

SUNSTROKE IN INEBRIATES.

Experience in India and other warm countries has indicated an extreme fatality from sunstroke in persons using alcohol to excess.

The congestion and vaso motor paralysis, common in all inebriates, are both predisposing and exciting causes for the coma from the sun's rays. The breaking up the heat regulating centers of the brain by alcohol leaves the body powerless to resist the sun's rays. Yet this fact is not very widely recognized, and every summer the record of such cases becomes more prominent. Dr. Norton, in the New York Medical Journal, reports fifty cases of sunstroke brought into the Presbyterian Hospital with the following comment:

"The use of alcohol seemed to have a direct unfavorable influence. The habit was marked in thirty-two per cent., moderate in forty-six per cent., denied in ten per cent., in the remaining twelve per cent. no history could be obtained. Eight persons were markedly alcoholic on admission, and of these four died.

INEBRIETY IN INFANCY.

A moderate drinker and gormand married a woman whose ancestors were wine-drinkers, she being temperate and well.

The first child, a boy, died of marasmus in infancy. The second child was feeble, and anaemic from infancy, manifesting great irritability, crying all the time during its waking hours.

One day the nurse gave some wine in sugar, and for the first time the child was quiet. From this wine was given daily, and the child exhibited a radical change of temper and emotions. The physician took to himself the credit and curing the child by wine in a solution of bark. It was found that when this remedy was withdrawn, more extreme symptoms of irritability appeared. On one occasion it was very difficult to procure the remedy, and the child went into a paroxysm of nervous excitement, followed by stupor.

From this time some form of wine and spirits was used constantly. This was continued up to ten years of age when death followed from some brain affection.

This was a veritable case of inebriety from inheritance.

The alcoholic who boasts of superior strength, because he

was never intoxicated, calls attention to the physiological fact that he possesses an abnormal brain. The absence of symptoms of poisoning (intoxication), in one who uses spirits continuously, indicates serious faults of structure, and a coarser, more degenerate type of brain. The injury from alcohol is more general and marked, and the higher psychical centers are more profoundly paralyzed. The consciousness of his real condition is covered up. The sensory centers are perverted, false impressions and false reasoning increase steadily, and the power of correction diminishes. The condition is one of psychical palsy, from which restoration is difficult. All such persons are defects and degenerates, both inherited and acquired.

NEW SCHOOL OF PSYCHOLOGY.

The evidence on which the disease of inebriety is founded is so well attested and confirmed, that it has grown up into a body of accepted doctrines, which may properly be called a new school of psychology.

This school takes up the study of the effects of narcotics on the brain, and the brain conditions which demand narcotics; in other words, the psychology of the toxic state of the brain and nervous system. This school is peculiarly American, in history and attainments. The facts and their meaning have been boldly asserted for over half a century, and slowly they have roused inquiry and study, and been confirmed by students all over the world. Independently, without theories or teachers, the facts have been accumulated and examined by scientific methods, by many persons widely scattered over the field like skirmishers, each one working by himself.

There have been no great masters or teachers, no universal work discussing exhaustively the entire subject. Empircism has gathered like storm clouds over every advance, and even now obscures many lines of the study, but through it all there are outlines of the facts which cannot be lost or covered up.

An ever-increasing number of persons are studying the phenomena of inebriety by scientific methods. The number of papers and monographs issued every year are also increasing. Unmistakable tracings of a new school of psychology are apparent. The demand for the Journal of Inebriety, and the study of its pages, noted by the increasing number of letters after each issue concerning the facts presented, is also further evidence. This new school of study promises to solve the great questions gathering round the so-called drink problem, and point out the real means and measures for prevention and cure.

INTERNATIONAL CONGRESS AT BRUSSELS.

The sixth International Congress against the abuse of alcoholic liquors is to be held during five days in the early part

of September next.

The arrangements differ from the former congresses in that part of each day will be devoted to general assemblies, when papers will be read, but no discussion allowed. During another part of each day the different subjects will be treated in sections, at which free discussion will follow the reading of the papers. The preliminary program already issued is a very long and varied one. Among the subjects for the general assemblies the following may be mentioned:

Influence of alcoholism on civilization.

The mission of the state in the struggle against alsoholism.

Women's help in the temperance reform.

Necessity of creating national and international centers of union for all temperance societies or workers.

The subjects for discussion are divided into four sections:

- 1. Legislation Sociology Political Economy.
- Education Instruction.
- 3. Medical and Hygienic.

4. Temperance propaganda — Women's help in the

struggle against alcoholism.

Dr. Th. Belval is designated as president, and the general secretaries, Herr Merzbach and Dr. de Vancleroy, may be communicated with at 290, Avenue Louise, Brussels.

SNUFF INEBRIETY.

It is a well-known fact that a large number of persons use tobacco snuff to excess.

In some sections of the country this addiction is very general, and prominent in the marked degeneration of the victims.

The narcotic effects of tobacco used as snuff seems to cause a profound depression of all the senses, and the body generally. The higher psychical life appears to suffer most, manifest in loss of pride of character and appearance, diminished ambition to excel in any work, disregard of surroundings and opinions of others. Later, delusions of persecution and injury, with suspicion and doubts of anything that is true.

A form of low general dementia follows, terminating in death from melancholy or acute disease.

Recently another form of snuff taking in which cocaine is the central drug used, has come into prominence. Cocaine is given for some of the distressing catarrhs and nasal troubles which are so painful. Its narcotic action on an inflamed mucous membrane is very marked, and is quickly followed by a certain fascination to continue the drug which is difficult to control. The possibility of not being able to give up the drug never occurs until symptoms of obvious poisoning appear, and then, in many cases, the mind has lost all power of appreciating its real condition. Voluntary efforts are usually confined to changing to some other narcotic used by the mouth. The effects of cocaine by the nose, in most cases, differs but little from that used in other ways. Yet there is a certain mental fascination in the inhalation, as in the use of the needle, which is hard to overcome. The delirium and pleasing relief, with mild excitement which follows, make this form of inebriety most attractive.

The rapid exaltations of the sense of comfort and strength, and sudden disappearance of pain and mental fears and worryment, all make a powerful impress on the mind and nerve centers. This for a long time is far more powerful than the depression and suffering which follows.

There can be no question that this form of inebriety exists to a considerable extent in all our large towns and cities. A very sensational story of a large number of persons in a certain eastern village affected in this way has some foundation in fact. It appears that a certain druggist pushed the sale of a nostrum containing cocaine used in this way, until the demand was very large. The appearance of the toxic effects of cocaine in several persons resulted in an exposure of the danger of the drug, and its sale practically ended. No doubt similar instances are occurring in individual cases where the drug is not abandoned, and cocaine inebriety or other drug taking follows. As a nasal remedy it is exceedingly dangerous, and should be concealed and guarded by the physician with great care. The use by inhalation is more likely to become an addiction than by the mouth or needle. The treatment is surrounded with great difficulties, and often taxes all the resources of the physician to the utmost.

CLAY INEBRIATES.

In some sections of the country a number of people are found who daily use clay as an article of food.

It is used so ravenously and with so much relish, and its effects are so marked, that it can be called a veritable inebriety. The clay eaten is of dirty white color, and has a peculiar oily appearance and does not crumble, but becomes sticky when moistened. It is held in the mouth until it dissolves, and is swallowed in small quantities. It evidently possesses some nourishment, and the opinion prevails that persons can subsist on it for days without any other food. The quantity used varies largely from two ounces to several pounds a day.

There is a strange fascination which, like the diseased craving for narcotics, demands so much of this clay every day.

When, by accident or design, the supply is cut off great

restlessness, anxiety, and intense depression follow. The effect of clay eating is noted on young persons by blanching the skin, giving it a peculiar pallor, and soon a prematurely old, wrinkled look. The mind seems to be depressed and under a cloud, and all vivacity and emotionalism reduced to a low level.

General muscular indisposition to exertion and indifference as to the consequence of acts and the possibilities of the future are the symptoms in adult clay-eaters. Whisky drinking, tobacco smoking, chewing, dipping, and snuffing are common accompaniments.

All ambition to improve their surroundings and add to the mental pleasures of life is absent, and profound general depression prevails. Superstitious hallucinations and fears of the supernatural, with efforts to interpret every unusual event in nature, and the most primitive struggles to supply the common wants of the body, constitute the whole of life.

Very little sickness follows, and after years of this addiction some acute disease of the stomach or liver is followed by death.

These people occupy some of the mountain counties of the Southern States, and seem satisfied to live in the poorest sections of the country. They are content to live isolated, and by farming, hunting, and fishing make a living.

The craze for the clay used is remarkable for its persistence and tenacity. The supply for daily use is provided with more energy and precision than food. The skin of clay inebriates soon becomes of a dirty yellow color, and never changes during life. Tobacco using seems to be more closely associated with this addiction than spirit drinking. No change ever takes place except death. They cling to the same ways of life and living, never increasing the amount of clay used to any extent from one generation to the other. Both body and mind slowly retrograde down through degrees of dementia to death.

Clinical Notes and Comments.

ELIGIBLE VASO-MOTOR STIMULANTS AND BLOOD BUILDERS.

It is probable that no busy practitioner is doubtful as to the therapeutic value of mercury and arsenic. It is just as probable that every physician has frequently encountered grave difficulty in his attempt to administer these agents for a sufficient length of time or in proper quantities to produce their full therapeutic effect. Long before their remedial properties have had opportunity to exert themselves some form of stomachic disturbance or an exhausting diarrhea accompanied by profound mental depression, have indicated their discontinuance for sufficient time to permit the patient to re-establish such tone as would enable him to again "stand the treatment." This is especially true in its application to mercury, and equally true, though in a lesser degree, with reference to arsenic. That these metals have been rendered more easy of assimilation and their therapeutic value distinctly enhanced by skillful manipulation and combination, recent medical literature leaves little doubt.

In the preparation known as Arsenauro we have in solution a combination of the bromides of arsenic and gold, which is certainly an advance in pharmacy.

Mercauro, which is one of the same class, has in addition to gold and arsenic the bromide of mercury in solution.

According to Drs. Stucky, Lydston, Wight, Dumesnil, Ingersoll, Wade, Kennedy and others, these solutions are blood-builders and blood-makers, valuable nerve tonics and vasomotor stimulants, and in the experience of several Mercauro has earned first place in the treatment of the later stages of syphilis, with its accompanying nerve tissue degeneration.

Listerine is a standard antiseptic, well-known and very largely used by the profession. It is found to be very useful in rheumatism and other affections. Send to the Lambert Chemical Co., St. Louis, for circulars.

Reed & Carnrick of New York city have put on the market two most valuable remedies in Protonuclein and Peptenzyme. These are especially chemical physiological remedies which from experience and test have proven to be invaluable.

Careful experimentation with Protonuclein by many physicians who have carefully observed its effect since its first introduction has proved that if one tablet or three grains of the powder is given internally one hour before meals and two tablets or six grains of the powder is given two hours after meals, it will seldom or never fail to produce the desired effect. The dose given one hour before meals is taken directly into the circulation and increases general leucocytosis; and the dose given two hours after meals produces almost immediate proliferation of the white corpuscles, which aid in the assimilation of the digested meal.

Jno. C. Levis, M.D., West Bridgewater, Pa., says: "I have used *Celerina* in my own case for insomnia. Among all the hypnotic preparations and nerve tonics, it stands justly pre-eminent. Several persons are now using it and report that no preparation has given such permanent and prompt relief. In a general practice of more than half a century, this is perhaps the first public testimony I have offered. *Celerina* is the very best nerve tonic now offered to the profession, and cannot be too highly recommended. To those wanting a nerve stimulant it will be just the remedy."

We called attention to *Bovinine* in our last number, and described some results from its use. Our later experience has fully confirmed these observations. We now use it freely in all cases where spirits are withdrawn for at least two or three weeks with the most signal results. The improvement is very marked at the first, and its tonic and nutrient qualities are distinct and positive.

We have repeatedly urged upon our readers the value of Horsford's Acid Phosphate. In certain conditions of nervous exhaustion it has proved to be almost a specific, and deserves a trial under all circumstances.

The *Tissue Phosphates* by *Dr. Wheeler* of Montreal, is without a rival in the market as a tissue tonic, and should be tested to realize its virtues.

Fellows' Syrup of Hypophosphates has been on the market for years, and is used as freely to-day as ever, for general debility and nervous and bronchial affections.

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CHAS. E. QUETIL, M.D.

Philadelphia, Pa., Feb. 23, 1897.

Lactophenin in Typhoid Fever.— Dr. Beverly Drake Harison, of Sault Ste Marie, Mich., related his experience with typhold (500 cases with only two deaths) and explained his treatment before a recent meeting of the Upper Peninsula (Michigan) Medical Association. The full report is published in The Physician and Surgeon Nov. 1896). His treatment, ment, briefly expressed, consists of Drainage, Disinfection, and Diet. He gives calomel and citrate magnesia water, washes out the rectum and lower bowel with normal salt solution, orders an antiseptic mouth wash, lithia water, intestinal antiseptics, etc., and gives careful attention to the diet. His noteworthy estimate of a serviceable antipyretic is the following:

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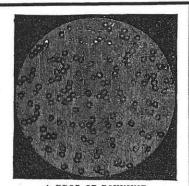
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The Treatment of Influenza or La Grippe

It is quite refreshing these days to read of a clearly defined treatment for Influenza or La Grippe. In an article in the *Lancet-Olinic*, December 28th, 1895, Dr. James Hervey Bell, 251 East 32d Street, New York City, says he is convinced that too much medication is both unnecessary and injurious.

When called to a case of influenza, the patient is usually seen when the fever is present, as the chill, which occasionally ushers in the disease, has generally passed away. Dr. Bell then orders that the bowels be opened freely by some saline draught, as hunyadi water or effervescing citrate of magnesia.

For the high fever, severe headache, pain, and general soreness, the following is ordered: Antikamnia Tablets (5 gr. each), No. xxx

Sig. One tablet every two hours. If the pain is extremely severe, the dose is doubled until relief is obtained. Often this single dose of ten grains of antikamnia is followed with almost complete relief from the suffering. Antikamnia is preferred to the hypodermic use of morphia because it leaves no bad after-effects; and also because it has such marked power to control pain and reduce fever. The author says that unless the attack is a very severe one, the above treatment is sufficient.

After the fever has subsided, the pain, muscular soreness and nervousness, generally continue for some time. To relieve these and to meet the indication for a tonic, the following is prescribed:

R Antikamnia & Quinine Tablets, No. xxx

Sig. One tablet three times a day.
This tablet contains two and one-half grains of each of the drugs, and answers every purpose until health is restored.

Occasionally the muscular soreness is the most prominent symptom. In such cases the following combination is preferred to antikamnia alone:

Antikamnia & Salol Tablets, No. xxx Sig. One tablet every two hours.

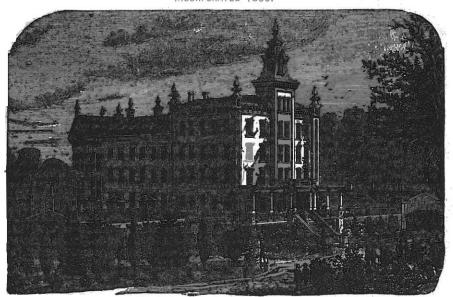
This tablet contains two and one-half grains of each drug.

Then again it occurs that the most prominent symptom is an irritative cough. A useful prescription for this is one-fourth of a grain sulphate codeine and four and threefourths grains antikamnia. Thus:

Antikamnia & Codeine Tablets, No. xxx Sig. One tablet every four hours.

Dr. Bell also says that in antikamnia alone, we have a remedy sufficient for the treatment of nearly every case, but occasionally one of its combinations meets special conditions. He always instructs patients to crush tablets before taking.

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Lactophenin

Antipyretic Analgesic Sedative

Lactyl-para-phenetidin: Co Ha NH.CO.CH (OH) C Hs

Dose for Adults: 4 to 8 grains in capsules, pills or tablets.

IN THE TREATMENT OF

Typhoid

See Report by Dr. B. D. HARISON, in The Physician and Surgean, Detroit, Mich., November, 1896;

"To eliminate the toxine and to promote skin drainage, I prescribe lactophenin. . . . It acts like phenacetin, but more slowly; has a more calming and hypnotic effect, with no effect upon the heart except that the pulse becomes fuller and slower, while the breathing is unaffected. A moderate dose, 5 to 10 grains, is given every second hour if the temperature rises above 102° F., until perspiration is produced. I cannot speak too-highly of lactophenin as an antipyretic and hypnotic. I have used it altogether in my practice during the past three years to the exclusion of all other antipyretics, with never the slightest depressing effect upon the heart or circulation."

Quinsy

See Report by Dr. J. Homer Coulter, in The Journal of the American Medical Association, November 7, 1896:

"In two cases I prescribed lactophenin, 10 grains every three hours; after the second dose Mr. B. was almost entirely relieved of pain. In the case of Mr. R. the third dose relieved him quite as completely. . . I have used the remedy in twelve cases of quinsy, and in all but one instance the results have been most gratifying. . . I have in these cases given the lactophenin to the exclusion of every other remedy internally, excepting the cathartic. . . Its action is decidedly more prompt (than salol, etc.). It has thus far given no undesirable after-effects; it not only relieves the pain, but reduces the fever with an equal certainty."

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