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JULY, 1892.

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than the Bromide Potassium.
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tained by the administration of
this Effervescing Salt. It is
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gestion, the Depression fol-
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EVIDENCE OF THE SOMATIC ORIGIN OF INEBRIETY.

BY EUGENE S. TALBOT, M.D., CHICAGO, ILL.

Dr. Langdon Down first called the attention of the profession to the fact that contracted arches and high vaults were common among idiots. Later on, Dr. W. W. Ireland contributed largely toward our knowledge of and interest in these deformities. Both of these gentlemen have charge of large English institutions for the feeble-minded; both of them, but more especially Dr. Down, believed that these deformities were pathognomonic of idiocy. Dr. Ballard contended, that inasmuch as these deformities were very common among idiots, and, as is frequently observed, idiots suck their thumbs, therefore the high vaults and contracted arches were caused by thumb sucking. Later on we shall see that these signs are no more proof of idiocy per se, than that Hutchinson’s teeth are characteristic of inherited syphilis. Congenital syphilis is a constitutional disease interfering with the development and growth of the body, hence, the arrest of development of the crowns of the teeth. Now, any of the constitutional diseases, such as measles, scarlet fever, typhoid fever, etc., etc., which also interfere with nutrition, will pro-
duce the same deformities of the teeth. After Down, Ireland, and Ballard had made known the results of their researches on this subject, Drs. Kingsley, Stellwagen, and White of this country made extensive investigations in our own institutions of idiocy and reported that contracted arches and high vaults were, in their opinion, no more common among idiots than among their private patients. I had frequently observed in my own practice quite marked cases of deformities of the jaws and irregularities of the teeth, hence you will observe my analogy to the Hutchinson teeth. That these deformities of the jaws and irregularities of the teeth were found to be nearly, if not quite, as frequent among apparently healthy individuals as among idiots, led me about twelve years ago to take up this particular line of study, with a view of ascertaining, if possible, the cause of these peculiar deformities.

I will not weary you with a recital of the different theories advanced as causes of these deformities, but as briefly as possible will give you the results of my own investigations. You are all aware that the main feature in idiocy is arrest of development of brain tissue; that the growth of the brain is greater between birth and the seventh year, than during any other period in life. After this period the substance of the brain and the different tissues of the body grow rapidly. If the brain be a healthy one, we would naturally expect to find all the tissue of the body developing in a normal healthy manner. On the other hand, if the brain be diseased or arrested in its development, we would expect to find the tissues of the body arrested in their development. Reasoning from their standpoint, we observe that the different structures which go to make up the body of the idiot are very markedly deformed, and excessive development and arrest of development of tissue are frequently noticed. No other tissues of the body receive so marked an impression as the osseous system. Hence we observe excessive and arrested development of the jaws very frequently.

We have noticed that the brain adds but little to its size after the seventh year; irregularities of the jaws and teeth
Evidence of the Somatic Origin of Inebriety.

are rarely if ever seen before that period. In other words, deformities are never observed with the first set of teeth. Now it is a singular fact that the first permanent molar makes its appearance at the sixth year. The superior maxilla and the bones of the cranium cease to develop in these cases at that period.

The second set of teeth requires a jaw one-third larger than does the first set; hence, in those cases where the superior maxilla and bones of the cranium cease to develop at an early age, there is not sufficient room to accommodate them. Contracted jaws and irregularities of the teeth always take place between the seventh and twelfth years, and if, from any cause, arrest of development due to defective brain development result, contracted jaws and irregularities of the teeth would take place at that period. The high vault is modern architecture; it is never observed in ancient skulls, and is far more common in this country than in any other. It is always or nearly always noticed in defective individuals, idiotics, etc. Just how it is developed I am not prepared to state. The shape and character of the deformity depends entirely upon the order of the eruption of the teeth. Thus, if the bicuspid tooth is the last to erupt the anterior part of the jaw becomes contracted, the incisors are thrown forward, and the V-shaped arch is produced. If, on the other hand, the bicuspid erupts before the bicuspis, the saddle-shaped arch will be formed. The cause of the deformity is a local one, depending upon a small jaw. There is, however, another factor for the small jaw that must not be lost sight of, and which is not constitutional but local in its makeup, viz.: if the temporary molar decays early, or is extracted before the proper time, the first permanent molar will advance forward and fill the space made vacant by the removal of the first temporary molar. This condition must be taken into consideration in making up our diagnosis. I only give the cause in a general way for want of time, but each variety is explained in my works upon "Irregularities of the Teeth." Having thus found the cause, the question naturally arises:

"Shall we not find as large a percentage of defective among
Evidence of the Somatic Origin of Inebriety.

Inebriates as other neurotics? I have, therefore, examined the mouths of all of these classes. I will now give you the results of my investigations, taking them in the order in which they were made.

**TABLE OF DEFORMITIES OF THE JAWS OF THE DEGENERATES.**

<table>
<thead>
<tr>
<th>Class</th>
<th>No.</th>
<th>Normal</th>
<th>Large</th>
<th>Wide</th>
<th>Vaulted</th>
<th>Vaulted</th>
<th>Vaulted</th>
<th>Vaulted</th>
<th>Vaulted</th>
<th>Vaulted</th>
<th>Vaulted</th>
<th>Vaulted</th>
<th>Vaulted</th>
<th>Vaulted</th>
<th>Vaulted</th>
<th>Vaulted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idiot</td>
<td>1977</td>
<td>55.3</td>
<td>7.0</td>
<td>16.</td>
<td>5.1</td>
<td>11.9</td>
<td>16.4</td>
<td>10.4</td>
<td>10.4</td>
<td>10.4</td>
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<td>10.4</td>
</tr>
<tr>
<td>Deaf and Dumb</td>
<td>1935</td>
<td>46.1</td>
<td>15.7</td>
<td>21.7</td>
<td>8.7</td>
<td>9.9</td>
<td>5.3</td>
<td>4.3</td>
<td>4.3</td>
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<td>4.3</td>
</tr>
<tr>
<td>Blind</td>
<td>207</td>
<td>50.7</td>
<td>7.1</td>
<td>18.3</td>
<td>3.3</td>
<td>4.3</td>
<td>12.1</td>
<td>5.3</td>
<td>5.3</td>
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<td>5.3</td>
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<td>5.3</td>
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<td>5.3</td>
</tr>
<tr>
<td>Insane</td>
<td>700</td>
<td>62.0</td>
<td>18.</td>
<td>44.</td>
<td>26.</td>
<td>47.</td>
<td>12.</td>
<td>5.3</td>
<td>5.3</td>
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<tr>
<td>Criminal</td>
<td>477</td>
<td>20.06</td>
<td>15.7</td>
<td>4.6</td>
<td>12.1</td>
<td>6.3</td>
<td>9.3</td>
<td>13.2</td>
<td>7.7</td>
<td>7.7</td>
<td>7.7</td>
<td>7.7</td>
<td>7.7</td>
<td>7.7</td>
<td>7.7</td>
<td>7.7</td>
</tr>
<tr>
<td>Inebriates</td>
<td>514</td>
<td>25.4</td>
<td>6.4</td>
<td>59.5</td>
<td>1.1</td>
<td>6.1</td>
<td>3.3</td>
<td>5.3</td>
<td>5.3</td>
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<td>5.3</td>
<td>5.3</td>
<td>5.3</td>
<td>5.3</td>
</tr>
<tr>
<td>Normal</td>
<td>1000</td>
<td>28.</td>
<td>1.9</td>
<td>5.6</td>
<td>1.1</td>
<td>6.1</td>
<td>3.3</td>
<td>5.3</td>
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</table>

It will be observed that there is a larger percentage of deformities among the inebriates than among any other defective class.

These deformities, however, are not so pronounced as those found among the idiots and criminal classes. The large percentage of deformities and high vaults indicate a strong neurotic tendency early in life, even before the seventh year. Finally, if the child from the seventh to the twelfth year has arrested development of the superior maxilla, and possesses constitutional irregularities of the teeth and a high vault, we can almost invariably say that the individual will become, not always an idiot but a genius in some one direction, or an idiot, a deaf, dumb, blind, insane criminal, an extreme egotist, excessive tobacco user, or an inebriate, all of these conditions coming under the head of degenerates or neurotics. In making a diagnosis of any one of these classes of individuals mentioned, we should always take into account these three conditions of deformities of the jaws, viz: arrest of development of the superior maxilla, constitutional irregularities of the teeth, and high vaults.

*The examination of inebriates was made in The Keeley Institute, Dwight, Ill., The Inebriates' Home, Ft. Hamilton, N. S., Washington Home, Chicago, Washington Home, Boston, and Dr. Crother's Institute, Hartford, Conn.*
Recent Advances in the Study of Inebriety.

RECENT ADVANCES IN THE STUDY OF INEBRIETY.*

By J. E. Usher, M.D., F.R.G.S., of Melbourne.

Considerable interest has been manifested on the part of the medical profession and the world in general, in the treatment of alcoholism during the last eighteen months. Until very recently, drunkenness was looked upon as a species of moral depravity only; now, however, thanks to the observations and experiments of physicians interested in this subject and insanity, it has become fairly well established that every man or woman who drinks must not at all times be held responsible for his or her conduct.

Intoxication is no new habit or disease; allusion being made to the same in the book of Genesis. Although only lately some forms of drunkenness have been admitted to be due to constitutional disease, one of the earliest writers, Herodotus, who wrote nearly four centuries before Christ, mentions that both mind and body were temporarily, if not permanently diseased, following the use of alcohol; Aristotle also laid stress upon the fact that drinking meant madness.

In the Talmud we find many instructive legends and traditions of a highly educating nature, and the dangers apt to arise from the inordinate uses of alcohol are figuratively given in an argument supposed to be carried on between Moshi and the Devil.

Buddha laid down a special law to the Orientalists to "Obey the truth and walk steadily in the path of purity, and drink not of liquors that disturb the reason." In the Koran, Mohammed strictly enjoins the non-use of beverages containing alcohol. So much is this impressed upon the Mohammedan, that I found considerable difficulty in treating

* Read before the English Society for the Study and Cure of Inebriety, April 5, 1892.
patients during a short stay in Sindh, India, some years ago.

Ine, king of the Saxons of the West, in the year 694, found mead (a kind of ale) so important a luxury, that his subjects were called upon to provide him with a certain quantity yearly. An amusing illustration is related of what took place in the reign of Edgar in 958. He really was the first temperance advocate, and as a beginning, he directed that guests should be restricted in the quantity of their potations. And in Dorsetshire, until a little while back, a vessel was on view, the sides of which were marked off with pegs at regular distances from one another. No one was allowed to drink more than was to be found between the pegs. The Archbishop of Canterbury of the same reign aided the king in every way. If we may believe the history of that period, the laws introduced against drinking beyond the pegs had to do mainly with the habits of the rural clergy.

Legislative reform of a prohibitive nature really came to light about the Magna Charta period (1216). From what can be gathered, the governors of the nation were at their wits' end in dealing with the liquor question. In the year 1552, in the reign of Edward VI, licenses were first granted by the magistrates. From that period to the present time parliamentary interference has been invoked at intervals to create a better state of things.

In this regard I would venture to offer some remarks on the different forms of repression that have been and are still being used in different countries to curtail the licensing system. The high licensing act has proved efficient in its provisions, but even in this the success expected has been very much minimized. In some parts of America and in Australia good results have been obtained under the local option enactment. As the position I am speaking from to-day is one purely of a medical character, I may be pardoned for not offering suggestions on the political aspect of this matter.

A new danger in our islands has arisen. I speak of the ether habit; in Ireland it has attained such proportions, in the north chiefly, that the large quantity of 20,000 gallons of
other, good, bad, and indifferent, are consumed yearly by the people. Some of the victims there produce a state of unconsciousness or intoxication half a dozen times daily.

Indeed, a man may become intoxicated for two-pence. Insanity frequently follows this habit.

In a recent brochure on drunkenness, we are told with all seriousness that the results obtained in the retreats in England are not sufficiently satisfactory, and recommending the patients to be sent to continental countries for treatment. This is a hazardous indictment. In the United States, where legal forms sustain the position of such institutions, the leading specialists in that country very rarely have to call in their aid, and it must be allowed that America is in the front rank in the arrangements made for dealing with this admittedly newly allowed disease. I do not agree with the opinion expressed by some physicians, that no good is to be obtained out of inebriate homes where full power does not exist to enforce compulsory restraint. That buildings under government auspices, having for their object the treating of alcoholic diseases, are urgently required, will not be gainsaid. However, in cases where the position of the patient is such that poverty or want of sufficient money is not a bar, there is no valid reason why the friends being agreeable, he should not be treated by competent men specializing upon this subject. Germany has made a wondrous move in this direction, and some sections of the bill recently brought forward in the Reichstag are exceedingly drastic. It is proposed to treat the disease as one of criminality, and also to give power to the judiciary to keep alcoholics under lock and key till satisfied of their cure. The profession will hardly submit to such an interference; at present the matter is sub judice. Some idea of the amount of money realized from the manufacture of wines and spirituous liquors, and the taxes upon the same, may be gathered from the fact, that Russia produces an income of nearly 250 millions of roubles per annum from alcohol. New York city receives for licenses the sum of $1,469,130 yearly. France manufactures 1½ billions of
dollars’ worth of wines and brandies yearly, equaling 300
mioions of pounds. In one year the police in St. Petersburg
arrested 47,000 persons for drunkeness. The consumption
of ardent spirits in that country reaches to more than 34-
875,000 gallons yearly, or for each inhabitant about 37 gal-
lons. The average for every individual in the empire rep-  
sents a consumption of 9 gallons per annum. In the west-
ern provinces of Russia an average of 10 bars or drink sta-
tions for every four villages exists. Dr. Portougalo in a 
recent letter tells me that he had occasion not long ago to 
visit several large villages in the famine-stricken districts of 
Samara, and found that in some of them (where for more 
than three years no public house had been), during the last 
months two or even three gin shops had been opened in each 
village. This has been owing to the fact, that the authori- 
ties found it impossible to put a stop to the secret and illegal 
sale of vodka except by granting licenses to some of the 
villagers, so attached is the Russian “moujik” to this drink. 
Vodka is a kind of gin distilled from rye and containing 
about 40 per cent. of alcohol, and is looked upon as the 
national drink.

The forms of disease.— I would now proceed to the con-  
sideration of the recognized forms of alcoholic inebriety.

First, we have that of heredity, the most fearful of all. 
That this form is a disease, pure and simple, no authority on 
mental diseases will deny. It presents a complexity of mental 
aberrations and changes so puzzling, that it can be easily 
understood how difficult it must be at times for even an ex- 
pert to give a final opinion where a person is the victim of 
this degeneration. The child of the alcoholic enters the 
world with a modified nervous organism; and the liability to 
hereditary diseases, such as tuberculosis, cancer, gout, and 
other well known ailments in the children of parents who 
have been alcoholic subjects, is exceedingly strong. This 
may extend through several generations. A startling ex- 
ample of this nature came before me recently in New York. 
A gentleman of high attainments, well cultured, of good
Recent Advances in the Study of Intemperance.

social position, and wealthy, consulted Dr. Gray, one of the leading psychological specialists, as to his recent and present crave for alcoholic stimulants. On going into his history, it was found that his grandfather up to the age of forty had led a very regular life; soon after he took to intoxicants, and in a year was dead. The patient’s father, strange to relate, knowing the fate of his parent, avoided drink in every way, but upon reaching forty years of age, he fell a victim to alcoholism. The gentleman who applied to Dr. Gray had only just turned the fatal age of forty, and it was both Dr. Gray’s and my own opinion that one of the most difficult cases had come forward for treatment.

During a visit to Washington in January, Dr. Hammond related an extraordinary case of hereditary transmission. I will give it in his own words as follows: “A gentleman informed me that his grandfather had become accustomed to wake up from sound sleep at twelve o’clock every night and drink a cup of tea, after which he would lie down and sleep quietly till morning. The father of my informant was a posthumous son, and his mother died in childbirth with him. He was English, and at an early age went to India with an uncle. One night, when he was about twenty years of age, he awoke suddenly with an intense desire for a cup of tea. He endeavored to overcome the longing, but finally, being unable to sleep, got up, and, proceeding to an adjoining room, made himself a cup of tea, and then, going back to bed, soon fell asleep. He did not mention the circumstance at that time; in fact, it made no strong impression on his mind, but the next night the awaking, the desire, and the tea-making were repeated. At breakfast, the following morning, he alluded to the fact that he had twice been obliged to rise in the middle of the night and make himself a cup of tea, and laughingly suggested that perhaps it would be as well for him in future to have the materials in his bedroom. His uncle listened attentively, and, when the recital was finished, said:

“Yes, have everything ready, for you will want your tea every night; your father took it at midnight for over twenty years, and you are like him in everything.”
"The uncle was right; the midnight tea-drinking became a settled habit. Several years afterwards the gentlemen returned to England and there married. Of this marriage a son—my informant—was born, and six years subsequently the father died. The boy was sent to school till he was sixteen years old, when he was sent to Amsterdam as a clerk in the counting-house of his mother's brother, a banker of that city. He was kept pretty actively at work, and one night in particular did not get to bed till after twelve o'clock. Just as he was about to lie down, the idea struck him that a cup of tea would be a good thing. All the servants had retired; so the only thing to do was to make it himself. He did so, and then went to bed. The next night he again had his tea, and after that took it regularly, waking from sleep punctually for that purpose at twelve o'clock. Up to that time he had never been a tea-drinker, though he had occasionally tasted tea. Writing home to his mother, he informed her that he had taken to the custom of drinking tea, but had acquired the habit of taking it at a very inconvenient hour—twelve o'clock at night. She replied, telling him that he had come honestly by his liking, for his father and grandfather had had exactly the same habit. Previous to the reception of this letter he had never heard of the peculiarity of his father and grandfather."

Dr. Darwin was one of the first to observe characteristics such as the above. Another form of drink heredity is the amount of idiocy, spoken of in some of the American statistics, traceable to the same. At the least it is believed that over thirty-three-and-a-half per cent. of the insane cases arise from imbibition of alcohol. Many allow even a greater percentage than this. In Russia the percentage of lunacy brought about by intoxication rises to seventy and eighty per cent. Here in England, from the reports of a parliamentary committee on lunacy, issued a number of years ago, we find that the percentage of lunatics from alcoholism in English asylums reached the enormous number of nearly fifty per cent. From forty-five to sixty per cent. of the imbeciles
and other demented creatures have to thank their parents for their demoralized state.

Speaking of the acquired form of alcoholism, it is hardly necessary to tell you here how it is brought about. I need only repeat that fashion, customs, medical prescription, injuries to the head, exhausting complaints, nervous debility, overwork, insufficient food, and innumerable like causes bring about an appetite which is hard to extinguish, once having been established. In talking of the forms both by heredity and acquirements, we are apt to lose sight of another and not less dangerous, which might well be denominated a case of "et si la force majeure." I speak of the indiscriminate administration to little children of any beverage the parents may be partaking of at the time. Yet these are the very people who would condemn an exhibition on the part of some poor unfortunate who, through no fault of his or her own, might be victims to legacies in the shape of transmitted alcoholism.

At the present time there are nearly one hundred asylums and homes in the world for the treatment of this disease. It may be said that heredity is the causation of sixty per cent. of the cases. Injuries and disease may account for another twenty per cent.

Pathology.—I would now crave your kind consideration and attention for a few minutes, in order to lay before you the results of a series of microscopical experiments conducted with the view of arriving at a more defined knowledge and more intimate acquaintance with the pathological conditions existing in chronic alcoholism. For some time it has occurred to me that the pathology in the disease we are discussing is not as well understood as the morbid changes existing in other diseases. Further, beyond a knowledge of the alterations that take place in certain organs, in the blood-vessels, and to some extent in the nervous system, it has never been pointed out, to my knowledge, that degenerative changes which are very slightly understood may operate on the blood in such a way as to defy all possible chance of the body being
properly nourished. My labors have been devoted to noting the blood changes.

In the blood of several patients that I examined, suffering from alcoholism of a chronic character, the red blood corpuscles were found to be very much changed and altered in their appearance. In reality, in some very bad subjects the disintegration constituted so great a change that the individuality of the cells had become nearly extinguished and lost. The chief pathological difference was to be found in a contraction of some of the red cells with the exudation of the coloring matter, added to considerable lessening of their natural size, and an almost entire loss of their normal outline. What takes place apparently is a partial coagulation of the albumen of the serum and corpuscles. A convex appearance is presented, or, to indicate it more correctly, a series of indentations appear to have surplanted the bi-concave or normal appearance of the red cells. The stroma of the corpuscles appears to undergo great contraction.

The leucocytes or white blood corpuscles exhibit a striking contrast to the red, but, singular to relate, the same utter disorganization does not appear to exist. Thé white cells it would seem present changes in the nuclei which evidently are contracted to a surprising degree. Apart from this the cells do not evince any lessening in size, but suggests a swollen or enlarged state. The size of the red cell is amazingly diminished with perhaps an increase in one of its diameters. These pathological appearances were very well marked in several chronic alcoholists, and in a much less degree, extremely so, in men whose drinking might be called moderate. The non-drinkers whose blood I examined did not present like changes.

What are we to infer from all this, and what line of treatment should be followed, admitting the correctness of the hypotheses here advanced as to the pathological changes present in the blood? Where alcohol has been absorbed in an inordinate quantity producing blood changes which affect the nutrition and function of the nervous matter which gov-
ern the system, what other morbid states are to be sought after or expected?

Can there be changes of a fungoid or germ-like character in the vital parts of which the blood is composed. It is well known to all physicians how altered in structure become the organs of the body, due to fibroid changes which are rarely, if ever, corrected. In the conduct of a number of post-mortems during the last four years a peculiar condition was at times found in the brain matter leading to the supposition that a supplicative or other alteration had taken place. The softening may have been due to one of several conditions. Microscopically examined, some of the nerves, apart from evidencing changes in their size and form, appeared to present a peculiar irregularity of surface, looking somewhat like chiliary processes, and which at the time, for want of a better name and more perfect knowledge, were classed as partaking of the nature of a fungus. Accepting the possibility of such having existed, is it too much to believe that the intense craving, so prevalent in the accentuated forms of alcoholism, may not arise from the irritation, or partly so, of such formations as well as from the blood. A singular feature attendant upon many deaths from inebriety and insanity is the remarkable fact that on post-mortem examination no traces of disease are to be found, that is to say, no lesions or alterations of brain structure or of any of the organs are to be discovered.

Deep as have been the studies in pathology, there is a vast empire of discovery still to be conquered. (Spero meliora.)

It must be patent that the action of blood, apparently so changed and altered in its vital constituents, should have an influence on the nervous matter in general, and the more delicate cells of the brain in particular, leading to the production and appearance of symptoms so marked in their character as to preclude the possibility of mistaking the existence of a mental change.

In this connection it is hardly necessary to point out, what is already well known, how intolerant of even a partial
blood impurity the nervous organization is. As nearly eighty-four per cent. of the diet we ordinarily take is water, we are placed in the position of having to consider a very strong fact in the knowledge that water constitutes nearly seventy-five per cent. of the blood, and approximately equals three-fifths of the weight of the whole body. As alcoholists take very little water we cannot be surprised that the diet of the blood, a forced one too, becomes preeminently one of alcohol. The cry of the brain in answer to the general system for an increased and better supply of nervous force causes the central nervous system to call upon a fluid already impoverished and degenerate to keep up the quantum of that liquid which in fact is annihilating the body it is supplying.

Treatment.—In dealing with this section of the paper, I would primarily point out that there is little doubt whatever but that much care should be exercised in prescribing for patients suffering from alcoholism. I would refer to the desirability of using, in most cases, aqueous solutions and infusions of drugs, and not those which have been prepared with alcohol. This may be looked upon as an extreme argument, but there is little doubt that any drug or liquid which acts as a poison would, when exhibited in subjects predisposed to its action, be dangerous, whether administered to them in small or large quantities. A new order of therapeutics appears to be coming into vogue, having for its basis the peculiar principle, that by the use or introduction of another drug, the action and desire for one to which a patient has become habituated may be checked, if not altogether entirely suspended. To this end some specialists are devoting their attention to the treatment of alcoholism by using opium, belladonna, cocaine, and other drugs of a similar class to combat the disease. In innumerable instances the patient has gone from Scylla to Charybdis; in fact, the morphine or cocaine habit has supplanted the alcoholic, and vice versa.

There is a little satisfaction in realizing that the more recent the case of alcoholism, as in cases of insanity, the greater is the chance of cure, and the quicker is the same
accomplished. Some attention has been called to a so-called cure used in one of the Western States in North America. The alleged remedy was stated to contain gold, but on analysis none of this metal could be found. Several deaths have followed the treatment, and a large number of cases of insanity are reported as having resulted from the administration of the drugs used. This I investigated on the spot. Paralysis is not an uncommon sequence to the course of treatment. The cure, as it is advertised and termed, has been sold, like hosts of other nostrums, for nearly twelve years in the State of Illinois; latterly it has created quite a boom, having been taken up extensively by some of the Far West newspapers, but is now undergoing a decline owing to the fatalities following its use. It is said that $40,000 per annum is spent in advertising the "cure." Amongst the many treatments carried out I would make mention of that of Dr. Jewell of San Francisco, whose experience, extending over ten years, has been very considerable. In all he has superintended the treatment of over 7,000 cases. First of all he isolates the patient from alcohol, and then proceeds to the treatment by using strychnine, cinchona, acid phosphate, and, when occasion requires, sedatives. Dr. Day of Boston, the oldest specialist practicing in America, adopts a tonic treatment with isolation. As a hypnotic, he prefers paraldehyde to others of that class. In Russia the remedy employed; and this chiefly by Dr. Portaugloff, who has, during the past five years treated over 500 cases, resolves itself into the use of nitrate of strychnine. He claims to have obtained very good results. Dr. Hammond of Washington, U. S. A., treats the general state, adopting tonics or sedatives where demanded, and also favors the use of baths, electricity, and massage. In Australia no special formule are used, but tonic remedies are in vogue, and acute symptoms are attended to as they arise. Dr. Weir Mitchell of Philadelphia, the noted specialist on nervous diseases, informed me that he always prepares
his patients for treatment by first attending to the stomach, and imposing rest in bed for a few days. In nervous diseases he, at times, uses gold, and would use strychnine in case of alcoholism. Hyoscine and sulphanal are adopted by him to procure sleep. In India, at Bombay, strychnine has been in use some time, and, it is claimed, successfully. Dr. Giacomini (an Italian) was one of the first to use strychnine, in the form of injection, for drink. In France, Drs. Dujardin-Beaumetz and Lutton were amongst the earliest users of nitrate of strychnine. Dr. Dennison of Colorado uses gold, and has done so for some time. The leading surgeon in Chicago, Dr. Andrews, finds much success in the administration of gold, atropine, cinchona, flex, coca, and muriate of ammonia. He cuts off the liquor after a few days. Dr. J. C. Da Costa of Philadelphia related to me how successful he had been in the exhibition of cocaine; he also prescribes strychnine and sulphanal, and insists upon isolating the patient.

Dr. Gray of La Porte, Indiana, in the treatment of all forms of alcoholism, gives a mixture similar to that used by Dr. Andrews of Chicago.

From the foregoing it will be noticed that many of the remedies are on the old lines, although at times the rationale of treatment, in some instances, is, to say the least, very strange. Many specialists still hold to the use of alcohol as a tonic and remedy in the earlier treatment; this is open to challenge, and for my part I prefer that patients should be deprived of such a remedy without delay. A line of treatment I would be inclined to suggest is one of isolation, for a period to be fixed; the use of special blood alteratives, to be followed, or accompanied, by nerve tonics, together with care in the selection of food.

Conclusion.—I regret that the time at my disposal this evening will not permit of my giving you the details of the treatment I follow, based upon the pathological deductions already presented. Before leaving Melbourne, a number of lawyers, civil servants, physicians, journalists, and others
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were under treatment, and appeared, when I left Australia, to be well established in their habits of moderation regarding the use of drink. Very shortly I hope to be able to give, in extenso, the latest treatment and opinions upon alcoholism in all its forms.

That the domain of medicine has a new disease added to it is without a doubt fairly established in the differential diagnosis now made and adopted by experts in this form of nervous disintegration.

Terrible and conclusive evidence is being amassed by observers in the treatment of intemperance that many of the victims enter this world with the nidus of disease latent in their organizations. Are these people to be treated in the same way as those whose surroundings are those of acquisition and habit, and who have become addicted to one or other of the poisonous methods with the intention of creating conditions imaginatively altered, only to find, on the effects of the drug or liquor passing away, that life is all too real for them? What is more natural than that, the habit once having been established, a recurrence is not difficult, where only moral force is used as a preventive.

As it is my present intention after having visited the Continent to elaborate the result of my investigations into book form, I shall conclude these remarks by expressing the hope that apart from my own investigations and experiments, I hope further advantages may be gained by an aggregation of all the treatments that have come to be known; allied to a more perfect knowledge of what is being done by some of the best minds in the profession, who are working at the present moment on a scourge which is responsible for the perversion of so many splendid intellects, the causation of most cases of insanity, and for the vicious propensities which are unfortunately so often found where the drink, morphine, or other narcotizing habit is established.
"DELIUSIONS AS TO LOCALITY" A PROMINENT SYMPTOM IN THE MENTAL DERRANGEMENT OF CHRONIC ALCOHOLISM WITH A TENDENCY TO DEMENTIA.

L. D. MASON, M.D.,
Consulting Physician of the Inebriate Home, Fort Hamilton, L. I.

After an attack of acute alcoholic delirium of either the febrile or non-febrile type, not unfrequently, instead of a reasonably rapid convalescence, the patient passes into a mental state that becomes more or less chronic, as there may be a history of one or more preceding attacks of delirium treatments, and more especially the nature of the treatment to which the patient has been subjected; for I firmly believe that the administration of large and frequent doses of the various depressing drugs, such as chloral, hydrate, or other cerebral sedatives, while they may promptly relieve the more acute and urgent symptoms, by producing a more or less profound cerebral anaemia, will also tend to protract the recovery of the patient toward his normal mental condition, if not precipitate him into complete or partial dementia.

But, from whatever cause it may arise, we find mental weakness in some degree the condition of the average inmate as he comes out from under his attacks of acute delirium.

In the partial form of dementia he can dress and feed himself, but he is listless, indifferent, not prone to exercise—under reasonable control, but full of delusions dependent upon the amnesia, which accompanies his demented condition—so that the memory is obscured as to present events, and acts largely on the past. So that persons long since dead are supposed to be living, acts and circumstances of the past become those of to-day.

There is a marked similarity between this form of dementia and senile dementia. They have many points in com-
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mon; in both the memory is weakened, or absolutely deficient as to recalling present events and events intermediate between the past and the present, so that the mind operates largely in the past, lives in the past, and past events are transformed to to-day, or, as is said, "Lives are lived over again."

Now prominent among other delusions we find in the form of dementia under consideration what we may designate as a "delusion as to locality," by which we mean to imply that the subject of it imagines that at some stated intervals he visits certain places, sees, converses with, and transacts business with certain people, and these persons, places, and forms of business are those to which he was accustomed in the past; and while it is true that the condition that thus calls back the past and causes the subject of it to be surrounded with, and live as it were in the past, is the product of a diseased mind, it is equally true that the persons, places, and events so recalled are not the vagaries or imagination of a disturbed mental condition, but the persons and places did actually exist, and the circumstances did actually occur, but they are, in relation to the patient, matters of the past. For weeks, months, or years, it may be, he has not been brought into contact with them.

He has not for several weeks or longer left his room or the limits of the institution in which he is confined, and yet he believes that he daily visits his business haunts, sees old friends, and transacts the daily routine of business — by some leading or suggesting questions, such as, "Have you been to town today?" "Whom did you see?" "What business did you transact?" A reply in the affirmative is inevitably the result, and sometimes the patient will give in detail the particulars of his imaginary visit.

Now it may be inferred that the weakened mind takes readily or easily to a leading or suggestive idea put as a question, and accepts it as a reality, but I do not believe such to be the case, for the patient will adhere to his delusions at subsequent periods all through the period of his demented
condition, the delusions fading away gradually and disappearing as his normal condition asserts itself. Like many similar delusions in the mental history of the insane, while it is the first to come it is the last to leave. This peculiar and pronounced delusion of partial alcoholic dementia we designate as a "delusion as to locality," as probably best expressing the condition involved. Authorities do not give this peculiar delusion as occurring among the many that affect the insane, if we except the condition known as senile dementia.

Blanford reports a case in which the insanity was the result of drink, which had terminated in dementia, in which he believed that he drew checks and got his servant to cash them, whereas he did not do anything of the kind, his affairs being entirely in the hands of a trustee. He simply imagined he did that which he was accustomed to do in the past.

I do not feel competent to exclude the whole field of mental derangement other than alcoholic, and assert that this peculiar delusion is limited to the latter class of cases and therefore it would be of interest to secure the experience of others on this point.

A typical case, one of several that have come under my observation, was that of a master of a vessel who was confined in the Inebriate Home at Fort Hamilton, and under my care and observation for at least three months. He was about 55 years of age, had been a seafaring man all his life; he had no history of head injury or syphilis. He had sustained a fracture of the ribs and general concussion in an accident at sea. He had drank more or less freely for years. He was brought to the institution by his wife, because of his mental condition. He was able to dress and feed himself, but his mental powers had perceptibly weakened for some time. He sat in his room in the institution, was listless, non-communicative, except when questioned spoke but little. He believed that every day or at stated days he visited New York city, where his ship was laid up, saw the ship owners,
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went aboard, attended to the lading of the vessel, and got her ready for sea—in other words, performed the usual duties of the captain of such a vessel when in port. One afternoon he had been on a cruise to New Orleans, and had just returned. This delusion that he performed the duties pertaining to an officer of a ship, daily or occasionally, adhered to him during his residence in the institution. When he left the delusion still continued, and the partial dementia still existed. His wife said he was very much like a child. He could be coaxed, and, as a rule, was fairly well controlled. She gave him ale or beer occasionally. He lived for several years after he left the institution, and died in April, 1891, from an acute attack of bronchitis. His wife has since stated that the delusions did not trouble him during the latter years of his life, that there was not any weakening of his legs or arms, no partial paralysis, that his speech remained good, and that he was useful about the house, and quiet up to the day of his death. Several years covered the period from the first appearance of his dementia until the date of his death.

In other cases the delusion takes the form of the previous occupations and antecedents of the patient. The physician will attend to an imaginary practice; the farmer cultivate an imaginary farm; the merchant transact an imaginary business. The attention of others is directed to the fact that this peculiar delusion is called out or elicited by a direct question from the physician may escape notice if an effort is not made to bring it into prominence by proper interrogation.

It would be satisfactory also to ascertain to what extent others have found this peculiar delusion for the various forms of senile dementia and alcoholic dementia, also in what proportion of cases of alcoholic dementia; if it is peculiar to the latter form of dementia it will be of value in the differential diagnosis between alcoholic and other forms of dementia.
ON UNCONTROLLABLE DRUNKENNESS CONSIDERED AS A FORM OF MENTAL DISORDER.

By L. FORBES WINSLOW, M.B. and LL.M., CANTAB., D.C.L., OXON.
Senior Physician to the British Hospital for Mental Disorders, and late Lecturer on Insanity, Charing Cross Hospital.

The question of uncontrollable drunkenness has once more been brought prominently before the world, and the opinions of many have been circulated far and wide with reference to the various supposed cures for this dreadfully malady.

For many years, experienced physicians in this country have unceasingly endeavored to impress upon the public and medical mind the importance of establishing in this country asylums or hospitals for the reception and treatment of those who have unfortunately become addicted, as the effect of some form of cerebral disease, to uncontrollable or uncontrolled habits of intemperance. I do not refer to the ordinary class of drunkards, who only occasionally gratify their appetite to “potation’s pottle deep,” and who have, to a great extent, the capacity of resisting the tendency to indulge to excess in the use of stimulants; but to a type of case, alas! too common in this country, in which intemperance has apparently assumed many of the characteristics of bodily and mental disease.

This type of insanity is known by various medical designations, viz: Oinomania, Polydipsia ebriosa, Dipsomania (a term first used by Hufeland). German writers call this phase of mental disorder Inhumanitas ebriosa and Morositas ebriosa. In Russia it is known by the name of Sapoi (saufsucht, drinking disease, or mania). In these cases the morbid craving for physical stimuli of all kinds is uninfluenced...
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by any motives that can be addressed to the intellect, heart, or conscience. Self-interest, self-esteem, friendship, love, religion, morality, are appealed to in vain. The passion for intoxicating drinks paralyzes the will, and obtains a complete mastery over the understanding and moral sense, making every other emotion of the soul subservient to its base and demoralizing influences.

This disposition for stimulants is often associated with an intense horror of the practice. The invalid is often painfully conscious of his infirmity, and bitterly laments his inability to conquer the disordered appetite.

So intensely developed in many cases is this yearning for intoxicating stimulants, that the unhappy victim allows no sense of decency, no feeling of propriety, no regard for family or domestic ties to stand for a single instant in the way of his sensual indulgence. As in other forms of disordered intellect and perverted instinct, the most remarkable cunning and ingenuity are frequently exhibited by the patient in his endeavors to obtain access to stupefying drink. I have, in my own experience, known both men and women (occupying high social positions) of decided genius, of wonderful attainments, and cultivated intellectual taste fall a prey to this form of insanity, and become utterly wrecked in mind, body, and estate.

It is difficult for those unprofessionally conversant with these cases to appreciate the extent to which this prevails in all ranks of society, and the difficulties connected with its successful treatment. In the majority of instances, and in those too where the habit of intemperance has reduced the person almost to the level of the beast, the ordinary reasoning powers for a time appear to be intact, and the mind is apparently free from the influence of delusions, hallucinations, or any pronounced form of mental alienation. The person, when not actually muddled by drink, talks rationally, consecutively, and often with great acuteness and sagacity. Hence, the medical and legal difficulties that arise when what amount of personal interference can be imposed
in such cases with the view of destroying the insane impulse to drink and of saving the patient, if not from a horrible death, at least from irretrievable ruin. It is only when the mental disorder from intemperance culminates in a commonly recognized form of insanity, that the law interferes to save the individual from himself, and to protect his relatives and friends, or the community. During the whole of the nascent and maturing stages of the alienation, during the progressive degradation of the moral faculties of the individual, the medical man is compelled to look on and witness the most heart rending ruin of a family, often in soul individually as well as in worldly possessions, by one whose intemperance is the manifestation of a true insane impulse, hereditary or acquired.

The control of friends or relatives, experience shows, fails utterly, as a rule, to destroy the morbid propensity for drink and subtract the means for its indulgence. According to the provisions of the statute regulating the confinement of persons alleged to be of unsound mind, it is imperative, previously to any interference with the free agency of the party affirmed to be insane, that two qualified medical men should separately examine him for the purpose of certifying to his mental condition and necessity for restraint and supervision. They are required to particularize symptoms observed by themselves clearly indicative of aberration or imbecility of mind. There must, as a general rule, exist some form of delusion or hallucination, in fact, a disordered or impaired state of the perceptive faculties, before a medical certificate can be legally acted upon. Hence, the impediments that interfere with the forcible confinement and detention in an asylum of clear and indisputable instances of moral alienation, manifesting itself exclusively in an insane appetite for intoxicating drinks.

In the first place it would be extremely difficult to obtain from the medical men the two certificates required by the Act of Parliament prior to incarceration, in consequence of the lunacy showing itself in conduct, and not in any appreciable aberration of ideas. In illustration of this fact, I would
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briefly refer to a case that occurred some time back. A medical man was requested to sign a certificate of mental unsoundness, previously to the patient being sent to an asylum, in the case of a lady who had made two deliberate attempts at suicide; first, by attempting to cut her throat; secondly, by jumping into a deep well for the purpose of drowning herself. The patient could give no reasonable explanation to the medical man of her conduct. In consequence of these overt acts of insanity not being observed by the surgeon certifying to the existence of mental derangement necessitating restraint, the commissioners requested the certificate to be returned to him for amendment. The medical certificate is divided into two parts. In the first portion, the legally qualified practitioner is obliged to state that he is indicative of insanity observed by himself. In the second portion, he is required to particularize facts symptomatic of insanity communicated by others. No medical certificate is legally valid unless the medical men signing are themselves able to perceive signs of mental aberration. It is quite possible, that, in a case of this character, the medical man might be able, during his examination of the patient, to observe any well-marked symptoms of aberration of mind, although convinced, from the insane acts of the party, of the existence of a mental disorder, and of the necessity, with a view to the preservation of life, of confinement in an asylum. And secondly, it would not be possible, unless the law be materially altered, to permanently eradicate the depraved habit, because the patient could not be kept sufficiently long under control and treatment to make a durable impression upon the malady.

Accompanying the two medical certificates is a petition signed by a relative of the lunatic, or by a person authorized by the family to sign the required legal document, and this, with the two certificates is presented to a magistrate for the inception order.

In dealing with patients suffering from an acute manifestation of this malady, viz.: delirium tremens, the Commis-
sioners in Lunacy have shown a humane desire to protect them as far as possible from destruction, by sanctioning, with a view to their personal safety and restoration to health, a detention in asylums for some length of time after the immediate effect of the drinking debauch had subsided.

When alluding to this subject, the commissioners observe: "We have considered that a lunatic asylum is not a place for the permanent detention of persons who have recovered the use of their reason, and are not obnoxious to the charge of unsoundness of mind otherwise than on account of the liability to run into their former excesses when restored to liberty." With this I do not agree, and I would advance a step further, and affirm that it would be better to organize, under state supervision, separate sanatoria for their reception, legal detention, and cure. I fully realize the fact, that in the existing state of things, and until a legislative remedy for the evil be provided, a well-conducted asylum is the only available, and probably the best residence for those who, under the overpowering and crushing influence of a mad thirst for intoxicating liquors, are bringing certain destruction upon themselves, and frightful desolation upon all unhappily connected with them.

It is with the view of obviating the necessity for preliminary proceedings referred to that I suggest the legal establishment of sanatoria or hospitals for the cure of persons afflicted with uncontrollable habits of intemperance.

It is not easy in many cases to discover with exactness the fons et origo mali of this malady. The injurious habit of tipping may be traced to a variety of causes. It often originates in early life, even during the days of childhood. The pernicious practice of permitting or encouraging young children to "sip a little wine" out of their father’s or mother’s glass during the hours of dinner, is a mistaken act of kindness, and cannot be too highly condemned.

The author of a tract on wine and spirits, published many years ago, says: “A late ingenious surgeon, occupied for a great part of his life in experiments equally well conceived...
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and accurately executed, gave to one of his children a full glass of sherry every day after dinner for a week. To another child, nearly of the same age, and under similar circumstances, he gave a large China orange for the same space of time. At the end of the week he found a very material difference in the pulse, the heat of the body, and the natural secretions of the two children. In the first the pulse was quickened, the heat increased, the renal secretion was highly colored, and the evacuations were destitute of bile; while the second had every appearance of high health. He then reversed the experiment; to the first-mentioned child he gave the orange, and to the other the wine. The effects followed as before—a striking and demonstrative proof of the pernicious effects of vinous liquors on the constitution of children in full health.” The deficiency of bile is full evidence of the injurious effect of the wine upon the digestive organs in this double experiment.

During a period of social distress, some poor families were driven to drink by false motives of economy. At this period a lady met with a family of poor children whose pale faces and emaciated bodies forcibly attracted her attention. Upon inquiring of the mother how they were fed, she was informed that “they did not eat much, and that what they did eat was not sufficient to nourish them without gin and water. It was scanty vegetable fare.” The lady, after pointing out to the woman the pernicious effects likely to follow from such a regimen, advised her to purchase a little animal food with the money she expended in gin, and to give the children water to drink with their meals. “Lord, madam,” replied the poor woman, “if I was to do that, I should never be able to satisfy them in these hard times. I was used to give them water, but then they were always hungry, and I could not beg the barest victuals enough for them.”

I firmly believe that the chronic form of intoxication has often owed its origin to the powerful influence which certain maniacal drinking songs have exercised over the minds of weak persons, who, unfortunately, are too prone, if associated
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with what is termed “good company” and “jolly fellows” to indulge in vinous excesses. A sagacious politician remarked: “Let me write the songs of a nation, and you may make the laws”; and I would add, Compose me exciting music, and “married to immortal verse,” but allied to Bacchanalian songs, and I will undertake to keep actively alive the propensity for alcoholic drinks, and increase to a marked degree the statistics of drunkenness.

The writers of such verses as the following, incur a heavy amount of moral responsibility. They little know the frightfully mischievous effects of these mistaken sentiments on the too easily excited mental fancies and depraved animal appetites of those to whom they are addressed:

“Behold, my boys, a goblet bear,
Whose sparkling foam lights up the air;
Where are now the tears, the sigh?
To the winds they fly! they fly!
Grasp the bowl, in nectar sinking,
Man of verse, drown thy thinking!”

In adults, gastric irritation, nervous exhaustion, lowness of spirits, associated with sensations of intolerable malady, are often the first incentives to alcoholic drinking.

The train of gunpowder once fired, vain are the efforts to arrest the onward march of the conflagration.

A great proportion of persons who indulge to excess in stimulants allege that they suffer from an indescribably painful feeling of languor and corporeal illness, which alcohol alone is found to alleviate or remove. This feeling is said to be intolerable to those who, like the English opium-eater, “hanker too much after a state of happiness,” or who “cannot face misery with an eye of sufficient firmness,” so that the desire to relieve it becomes uncontrollable. Amongst the causes of these sensations may be mentioned those nervous affections which more particularly have their seat in that part of the nervous system which is the seat of the feeling of

* In humble prose this literally means, stupefy your brain, addle or stultify your intellect by intoxicating liquors, and thus banish from your mind all capacity for serious thought or grave contemplation.
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well-being, and, while ministering to the functions of the viscera in important relation to life, involve, therefore, the instincts for life and well-being. Certain diseases of the heart, impeding its functional activity or rendering its action painful, induce this depressed condition. Morbid states of the stomach and bowels, either inflammatory or irritative, in which digestion is accompanied by pain, and a distressing sensation of weakness in the epigastrium, are among the most frequent causes of habitual drunkenness and opium-eating.

I speak advisedly when I say that many sad cases of the worst type of incurable intemperance, particularly among women in the upper ranks of life, may be clearly traced to the highly injudicious way in which various kinds of stimulants have been indiscriminately exhibited medicinally, no doubt with the best intentions, to patients suffering from diseases associated with diminished vital force and nervous depression.

Among the remote causes of dipsomania, I have to consider its hereditary character. Like scrofula, consumption, puerperal fever, leprosy, and certain diseases of the brain and skin, the disposition to drink intoxicating liquors to excess is often transmitted from drunken parents to their children.

It is a law of vital physiology that "like begets like." Drunken parents often transfer their brutalizing habits to their unhappy offspring, and if they do not follow literally in the wake of their parents, they exhibit some form of moral or mental obliquity or nervous disorder clearly traceable to a disturbance of physical structure (in all probability seated in the brain), caused by a long and persistent indulgence in the use of intoxicating drinks.

"If a drunken man gets a child, it will never likely have a good brain," says old Burton. "It is remarkable," observes Dr. Darwin, "that all the diseases that spring from drinking spirituous and fermented liquors are liable to become hereditarily even to the third generation, gradually increasing, if the vice be continued, till the family become extinct."

I am now speaking of the general laws regulating the
hereditary transmission of depraved habits, moral and mental conditions, and certain bodily diseases. To the operation of this law there are, of course, many exceptions. Drunken parents have given birth to very sober children, and the offspring of insane persons have often been remarkable for the sanity of their intellect and vigor of their understanding.

It has been computed that over 30 per cent. of lunatic cases in all parts of the universe clearly originate in habits of intoxication. Out of 286 lunatics confined in the Richmond (Dublin) Hospital, Macnish calculated that one-half were drunkards. Parchappe asserts that 28 per cent. of the cases of insanity at Rouen were due to the abuse of stimulants. At Turin, Bonacossa found the proportion of insane drunkards to be 22 per cent. males, and 2 per cent. females; in Holland, 11 per cent. males, and 1 per cent. females; in Berlin, every third case of insanity among the working classes was attributable to intemperance.

In Sweden, where the lunatics are in the proportion of one to 770 of the population, Professor Huss states that about half the number of insane males have been intemperate. Dr. Wilson affirms that of from sixty to seventy men received into the asylum at Stockholm, only ten were insane from other causes than drunkenness. In the great asylum at St. Petersburg, out of 997 lunatics admitted during ten years, 837 were reduced to a state of insanity directly or collaterally by intoxication.

Lord Shaftesbury, who was the President and Chairman of the Board of Commissioners in Lunacy, in his evidence given before the select Parliamentary Committee on Lunacy in 1853, expressed his opinion that out of all the cases of lunacy admitted into the English asylums, 50 per cent. were attributed to drink. Since Lord Shaftesbury made this alarming statement, every year confirms the correctness of his views, as drink still remains at the head of the tabulated causes for insanity. The superintendents of foreign asylums have estimated the admissions from intemperance at 25 per cent. of the whole admissions. The percentage would be
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much higher if we took into consideration the large number of insane persons who owe their condition to the inebriety of their parents. "The sins of the father shall descend upon the children" was never more truly illustrated than in such cases. M. Lunier has estimated that 50 per cent. of all the idiots and imbeciles found in the larger cities of Europe have had parents who have been notorious drunkards.

Mr. Neison, when speaking of the rate of mortality among persons of intemperate habit, says: "At the term of life 21-30 the mortality was upwards of five times greater than that of the general community, and that in the succeeding twenty years of life it was four times as great, the difference becoming less and less as age advanced. If," he adds, "there be anything in the usages of society calculated to destroy life, the most powerful is certainly the inordinate use of strong drinks."

The average duration of life among the intemperate is as follows:

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<tr>
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<th>Years</th>
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<tr>
<td>Mechanics, working and laboring men,</td>
<td>18</td>
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<tr>
<td>Traders, dealers, and merchants,</td>
<td>17</td>
</tr>
<tr>
<td>Professional men and gentlemen,</td>
<td>15</td>
</tr>
<tr>
<td>Females,</td>
<td>14</td>
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</table>

In one of the most important asylums in Prussia the following resolutions were proposed and carried in the Medical Synod:

1st. That all persons found drunk in the streets and public-houses, or places where intoxicants were sold, should be liable to punishment.

2nd. That the vendors of drink who supplied those in a state of intoxication should likewise be punishable.

3rd. That habitual drunkards should be compulsorily placed in institutions specially prepared for their reception.

The recognition and consideration of dipsomania in America has occupied more attention than in England. Institutions have been founded in all the United States for that reception and treatment. Dr. Crothers, in an article

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concluded to the *New York Record*, states that dipsomaniac is more complex in its character than insanity, and complains that it has never received the careful study which it so fully deserves. The following facts must not be forgotten in considering the question:—

1st. That in all cases of persistent inebriety, the question of heredity should form a most important element, and one which should have the utmost investigation.

2d. That injuries to the head, or prolonged illnesses, often act as important factors in such cases.

3d. That it is a central disease of the nervous ganglia, which may be periodically arrested, or make rapid progress, and may arise from some uncertain cause; but, whatever its course may be, it always follows a certain order and regularity in the stages of degeneration, that is seen, and may in many cases be predicted.

4th. That every effort should be made to check its progress while in its infancy, and that if it has become chronic in its nature, it is our duty to deal with it peremptorily, and in such a way as to limit and control its progress in the least baneful way in our power.

5th. That the question must be regarded by medical men above the superstitions of those who cry out for the sanctity of the liberty of the subject, and the interference of reformers and clergymen, who in such cases do generally much more harm than good; the persistency of their commendable efforts causing frequently serious delay in legally dealing with such cases, and buoy the patients themselves and their relatives up with hopes, which, from the nature of the case, can never be properly realized, and cause the unnecessary wasting of precious time, which might on the other hand have been used profitably and effectually.

Dipsomania has for many years been attracting the attention of the government, but I regret to say without success, and no measure enabling us to satisfactorily and legally deal with this form of mental disorder has as yet been adopted.
In 1834 a Parliamentary inquiry was instituted into the subject of intoxication, and most valuable facts were brought under the notice of what was then termed the "Drunken Committee." Dr. Farr here stated in his evidence that he was acquainted with a gin-drinker who was in the habit of imbibing seventy-two of the usual drams of spirits at one sitting. Another drunkard took half to a whole gallon of gin and brandy a day. Chomel refers to a case of a young man who was in the habit of drinking fifteen bottles of wine and four of brandy per diem. Esquirol mentions a person who swallowed 177 petit sorres daily.

Another committee was appointed in 1872, but notwithstanding that a large amount of valuable and useful information was gathered together, they failed to lead to any results. In Scotland, Ireland, France, Belgium, and United States of America, and other countries, dipsomaniac institutions exist, but of these only Belgium and the United States of America detain the individual legally against his will. The disease exists at the present day to a very large extent among all grades of society, females being more prone to it than males, but especially young married ones.

In 1875 a number of authorities signed a petition, drawn up by Dr. Holthouse, to the effect that they gave their cooperation to the foundation of an institution for the care and treatment of such cases who might desire to place themselves under restraint voluntarily. It is impossible for any institution to be established upon a sound footing where such persons would thus voluntarily place themselves for any specified time, except some measure be passed by Parliament empowering us to deal with this variety of disease, and make such incarceration compulsory. Our great object in dealing with these cases is to endeavor to establish in them a power of self-control, by firm but judicious treatment for a considerable period; and I must again contend that for any permanent good to result from such treatment, the patient must be submitted to legal restraint in an institution recognized by law, and one in which he can be placed against his will on proper legal documents.
In 1879, and again in 1888, the subject was again considered. An act called the Habitual Drunkards' or Intemperates' Act was passed in England, but it has been acknowledged by all, whose opinions are worth entertaining, that the present act is inadequate for the purpose for which it was intended. All who desire to place themselves in such establishments in England are required to sign certain documents, the one being a statutory declaration, the other a request for reception into the retreat; this is according to the act for 1879 and 1888.

Some years ago, says my late father, in his *brochure* on this same subject, I attended a professional gentleman of extraordinary talents and high literary attainments, who, for a period of twelve months, never went to bed sober. He was in the habit of drinking, at one sitting, fourteen to fifteen glasses of brandy and water, and when he was so muddled that he lost all power of locomotion, he tumbled like a beast into bed. This man died a most miserable death. He was fully conscious of the frightful termination that awaited him, painfully realized the morbid condition of his vitiated appetite, and fully acknowledged the infirmity of purpose that was leading him on, like an *ignis fatua*, to his own terrible destruction.

"I was lately consulted," says a well-known physician, "by a young gentleman of fortune from the North of England. He was aged twenty-six, and was one of the most lamentable instances of the resistless tyranny of this wretched habit that can possibly be imagined. Every morning, before breakfast, he drank a bottle of brandy; another he consumed between breakfast and dinner; and a third shortly before going to bed. Independently of this, he indulged in wine and whatever liquor came within his reach. Even during the hours usually appropriated to sleep, the same system was pursued, brandy being placed at the bedside for his use in the night-time. To this destructive vice he had been addicted since his sixteenth year; and it had gone on increasing from day to day, till it had acquired its then alarming and most incredible magnitude. In vain did he try to resist the
insidious poison. With the perfect consciousness that he was rapidly destroying himself, and with every desire to struggle against the insatiable cravings of his diseased appetite, he found it utterly impossible to offer the slightest opposition to them. Intolerable sickness, fainting, and tremors followed every attempt to abandon his potations; and had they been taken suddenly away from him, it cannot be doubted that delirium tremens and death would have been the result."

A gentleman of very amiable disposition, and justly popular, contracted habits of intemperance; his friends argued, implored, remonstrated; at last he put an end to all importunity in this manner. To a friend who was addressing him in the following strain: "Dear ——, your family are in the utmost distress on account of this unfortunate habit; they perceive that business is neglected; your moral influence is gone; your health is ruined; and, depend upon it, the costs of your stomach will soon give way, and then a change will come too late." The poor victim, deeply convinced of the hopelessness of his case, replied thus: "My good friend, your remarks are just; they are, indeed, too true; but I can no longer resist temptation; if a bottle of brandy stood at one hand, and the pit of hell yawned at the other, and if I were convinced I would be pushed in as sure as I took one glass, I could not refrain! You are very kind. I ought to be grateful for so many kind, good friends, but you may spare yourselves the trouble of trying to reform me; the thing is impossible."

Once the passion for drink obtains the mastery over the will, vain will be the efforts of relatives and friends to prevent the dipsomaniac from obtaining access to stimulants as long as he is permitted to remain unrestrained and at large. When deprived of the legitimate means of purchasing drink, the most ingenious devices will be had recourse to in order to obtain stimulants. A woman suffering from this phase of insanity was never permitted to have any money at her command. Having no other means of purchasing stimulants, she had nearly all her teeth extracted; these she sold
for the purpose of enabling her to gratify her morbid craving for intoxicating drink.

It does not necessarily follow that this craving is confined to brandy, gin, rum, whisky, wine, or beer. It occasionally embraces within its domain every conceivable description of intoxicating beverage. Patients have been known when other kinds of stimuli have been withheld, to fly to opium, Indian-hemp, camphor, absinthe, noyaux, shrub, kirschwasser, curacao, anisette, and other highly pernicious liquors, and to drink large quantities of eau-de-cologne, spirits of wine, chloric and sulphuric ether, solution of ammonia, lavender water; highly-concentrated perfumes, as well as medicinal tinctures, containing a large percentage of alcohol. A lady, respecting whom I was consulted, being deprived of all access to ordinary intoxicating liquors, was reduced to the extremity of surreptitiously abstracting and drinking the spirit of the hall and table lamps. Any attempt to prevent patients so afflicted from obtaining stimulants is, to a degree, rendered nugatory by the extreme cunning and morbid fixness of purpose so often associated with the propensity. Drink of an exhilarating character, they declare, must be had, and all near and dear to them they are prepared readily to sacrifice, in order to gratify an intense yearning for intoxicating liquors.

It is not easy to describe in writing the peculiarities of these dipsomaniacs.

I am fully conscious of the difficulty of distinguishing in many of these cases between the post hoc and the propter hoc; in other words, whether the craving for stimulants causes the cerebral disease and mental disorder, or the irresistible propensity for alcoholic drinks is to be viewed as a symptom or effect of some form of brain mischief and mind disturbance. I have often known paroxysms of insanity preceded by a sudden disposition to indulge to excess in spirituous drinks. A clergyman was subject to periodical attacks of mental derangement. He generally knew when the mental alienation had commenced by his feelings and intense yearning for
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stimulants. He has been known, just before an outbreak of acute derangement of mind, to seize hold of a decanter of port wine, and drink it at a draught. After the reason was restored to its healthy balance, this patient became a most abstemious person, rarely, if ever, drinking any kind of stimuli until a relapse of his malady came on, and then again he flew to his bottle.

As in other types of disordered intellect, the abnormal condition of the instinct is to be appreciated and not defined. The physiognomy of the truly insane drunkard is very significant to the eye of the experienced physician. The morbid attacks of intemperance are often paroxysmal in character. Clear and distinct intermissions or lucid intervals occur—weeks, months, and sometimes years, intervening between the attacks. The patient has, in numerous cases, well-manifested premonitory symptoms. He is observed just prior to the seizure, to be depressed in spirits, taking little or no interest in the ordinary business of life. A feeling of lassitude, nervous depression, gastric irritation, and sinking is complained of, often amounting to physical anguish. Following these symptoms is a gradually increasing crave for stimulants. "The individual," says a well-known authority, "then disappears from his home or usual place of business, and spends his days and nights in alternate sleep or intoxication, haunting the lowest dram-shops and associating with depraved persons."

A patient of my father had attacks of this nature once in two or three months. During the interval he was steady, cheerful, industrious, happy, joyous, and apparently a religious, moral, and sane man. Without exhibiting any of the precursory symptoms referred to, he would vanish from home. Where he went none of his family knew. After an absence of some days, occasionally a few weeks, a letter would arrive intimating where he was. He often described his feelings. Up to a certain day and hour he was perfect master of himself. While following his occupation, he would be instantaneously seized by a motiveless and irresis-
ible desire to run away to some distant place. Almost unconsciously he travelled to a country town or village many miles distant from his own residence. He then took lodgings in a public house or hotel, and, flying to stimulants, he was generally in a state of frightful inebriety during the whole of the time. After the lapse of some days, but often of weeks, his reason and consciousness were suddenly restored, and then, realizing his sad state, he sat down and wrote to some member of his family, saying where he was, and begging them to come immediately to him. In the repeated conversations with this gentleman it was impossible to detect the slightest sign of disordered ideas or impaired intellectual power.

It would be foreign to the subject of this brochure were I to enter into a consideration of the medical treatment of cases of dipsomania. I would however, en passant, observe that much may be done for their alleviation, if not cure. In the generality of instances there will be found some form of gastric or intestinal irritation, chronic dyspepsia, enlargement of the liver, or irritation of some of the great nervous centers, which can be medically dealt with. In the paroxysmal type of dipsomania the malady may, in many cases, in its incipient stage, be nipped in the bud by the timely exhibition of an emetic, a large dose of opium, Turkish bath, an active purge, or large doses of quinine and ammonia.

Among the medicines recommended for the re-establishment of the health of dipsomaniacs are camphor, Indian hemp, strychnia, fusel oil, oxide of zinc, arsenic, the various preparations of iron, valerianate of zinc, quinine.

It is well known that the highly esteemed and accomplished father of the eminent and well-known dissenting minister, Dr. Newman Hall, was for many years of his life addicted to sad habits of intemperance. The following particulars of his remarkable recovery are recorded by Newman Hall, in an interesting memoir of his father, published some years ago:
"In a moment of extreme mental agony caused by a horrible consciousness of the degraded state to which drink had reduced him, Mr. Hall cried out in earnest prayer, 'O Lord, have mercy upon me! Lord, be thou my helper!' Sinking down in a state of profound exhaustion, he was enabled to realize that his petition for aid had been granted." Dr. Hall says that at this critical moment "a physician was consulted as to the probability or possibility of medicine being rendered effectual in stopping the disposition to intemperance. The poor man would have suffered the amputation of all his limbs, and so severe a method have rid him of his deadly habit, which, like a vulture, had fastened upon his very vitals. The physician boldly declared that if this poor slave would strictly adhere to his prescription, not only the practice, but the very inclination for strong drink would subside in a few months. Oh! could you have seen the countenance of that poor man when the physician told him of this; hope and fear alternately rising up, while he grasped the physician's arm, and said, 'Oh! sir, be careful how you open that door of hope, for should it be closed upon me, I am lost for ever!' The physician pledged his credit that, if his prescription was punctually followed, the happiest results would ensue. The remedy was given, and eagerly did the poor slave begin to favour the antidote to his misery. Every bottle was taken with earnest prayer to God for his blessing to accompany it. He commenced taking this medicine on the first week in March, 1816, and continued until the latter end of September following; and from that month (up to the time of Mr. Hall's death) not so much as a spoonful of spirits, liquor or wine of any description ever passed the surface of his tongue." The prescription I have in my possession.

Dr. Kain recommends tartar emetic for the cure of habitual drunkenness. "Possessing," he observes, "no positive taste in itself, it communicates a disgusting quality to those fluids in which it is dissolved. I have often seen persons who, from taking a medicine in the form of antimonial wine, could never afterwards drink wine. Stimulat-
ing liquors with the addition of a very small quantity of tartar emetic, instead of relieving, increase the anorexia and the loathing of food, and quickly produce in the patient an indomitable repugnance to the vehicle in which it is administered. The method of prescribing this medicine must vary according to the habits, age, and constitution of the patient. It should be given only in alternative and slightly nauseating doses.

"If severe vomiting and purging ensue, opium must be given to allay the irritation, and the dose of the mixture should be diminished. In some cases the change suddenly produced in the patient's habits has brought on considerable lassitude and debility, but this will be of short duration. In a majority of cases no other effect has been perceptible than slight nausea, some diarrhoea, and a gradual but uniform distaste to the menstruum."

Dr. Macnich says, "I can bear testimony to its good effects in curing habitual drunkenness. The active ingredient in Chambers' nostrum for the cure of inebriety was this medicine. Tartar emetic, however, must always be used with caution, and never exhibited unless under the eye of a medical man, as serious consequences might ensue from its indiscreet and injudicious employment."

Sanatoria are useless unless such establishments be sanctioned by the legislature, and placed under the direct authority of the state, and compulsory restraint be possible. In order to carry this suggestion into effect, it would be necessary to have an Act of Parliament clearly defining or describing the peculiar phenomena observed in this phase of insanity, and then to authorize the erection of a public sanatorium, or private sanatoria, under the official auspices and direction of competent persons.

If, after examination, the case is proved to be bona fide in its character, then the statute specially referring to the subject should legally sanction the detention of the patient until he was considered fit either to be discharged as cured, or well enough to leave the institution on trial. I think a system of
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unirritating supervision might be exercised over these hospitals either by the existing commissioners in lunacy, or by any other body of official gentlemen selected by the government for the purpose.

The first desideratum is a retreat which shall be effectual in its remedy; and it goes without saying that all such retreats must be systematically visited by doctors, albeit their management may well be in the hands of lay men and women.

It is equally certain that no decree for restraint should be made by a magistrate without adequate evidence, and also without the judge being satisfied—by the testimony of relatives and others—that no improper motive is concealed behind the proceedings. In Germany these proceedings will probably more often emanate from the police than from relatives; but in either case the court should be satisfied that no malicious design is at work. The period of restraint should also not exceed that which, according to medical evidence, is essential to cure.

Treatment, and not punishment, must be aimed at; for any vindictive spirit shown by the law towards a condition largely regarded both by doctors and the intelligent public as a physical disease, will certainly defeat its own aim, and result in the ultimate repeal of too Draconian legislation.

In this country, where the law is in a most unsatisfactory position, we shall be interested in watching experimental legislation, which may, in some measure, afford a model for legal reform, and will, at any rate, be highly instructive. Some such cases may be found, who, conscious of their tragedy, and anxious to subject themselves to a curative plan of treatment, are willing voluntarily to surrender their personal freedom into other hands, and prepared to reside for a time under control in an establishment specially organized for their reception. But it may be asked, what is to become of those (perhaps the largest class) in whom the habit of intoxication has apparently become confirmed and chronic? The majority of these unhappy persons are insanely
unconscious of their condition, and studiously resist every appeal that may be addressed to them. In Belgium, dipsomania is regarded as a form of mental disorder, and the same documents are required to place such a person under supervision as in a case of ordinary mental unsoundness. Dipsomaniacs cannot only be placed in these institutions, but retained there until recovery has taken place. I have personally visited and inspected some of these establishments, and I have made myself cognizant with all the legal bearings of the question relative to the reception of and treatment therein required and enforced. The conclusions I have arrived at are that it gives the only possible chance to the wretched victims of this complaint by forcible and legal detention until recovery takes place, and by aiding this in combining judicious and skilled medical supervision with the necessary legal restraint. Medical certificates on the prescribed legal Belgium forms, signed by English physicians, in England, are accepted, and are valid in Belgium; and the necessary legal preliminaries are in no way complicated.

Each case, individually, requires a different modus operandi, and must be left to the relations and friends to arrange, armed with the legal instruments. All these institutions in Belgium are well managed, and are under frequent official visitation and inspection, and to the same extent as in England, some of the leading physicians in the country being attached to them as consultants. The accommodation is as good as that provided here, and the charges vary from one pound a week up to five, according to the requirement of the cases; these are generally inclusive. Separate suites of rooms are provided, special attendants, and, in some instances, private gardens, at the disposal of the inmates. And without being accused of desire to interfere with the liberty of the subject, I think that the example here shown in Belgium, by classifying dipsomania as a form of insanity which can be legally and effectually dealt with, in order to obtain a permanent cure, is one that ought to be followed out by all civilized countries of the universe. In England they
are allowed to drag out their miserable existence unchecked, un molested, uncared for; and to become terrible banes not only to themselves, but to society in general. They go on their way rejoicing, dragging honored names into the mire, ruining themselves and their families, and procreating their species by bringing into the world those destined to follow in their footsteps, for the simple reason that we have no legal power in England to check them in their mad career, and in their precipitous descent from sanity to what we must recognize as a mental irresponsibility, and one of the worst and most intractable forms we have to deal with at the present day.

A Miscarriage of Justice.—In a neighboring state a physician has just been sentenced to one year's confinement in the state prison on the charge of burglary. He plead guilty of the offense but offered in extenuation proof that he was an opium habitué and consumed daily narcotics in quantities sufficient to kill an ordinary man. The court expressed its pity and sympathy for the unfortunate and imposed the lightest sentence the law allowed. This case demonstrates that the law relating to the responsibility of opium fiends is not sufficient. To one who knows the mental, moral, and physical depravity resulting from this pernicious habit, it seems that an opium eater should have the same protection thrown around him that the law gives the lunatic. In this instance the accused was a man of prominence, wealthy, highly connected, and with every surrounding influence calculated to restrain him from entering upon a criminal career. Every circumstance in his past life goes to prove that mental and moral failure must have occurred before he became a burglar. To punish such a man is idle and useless, if not original. If the court did not feel that the charge should be dismissed, it would have subserved the interests of humanity and justice immeasurably better by suspending sentence and committing the victim of his own excesses to an institution where he would have been treated for his baneful habit and restored to society and usefulness.—Western Med. Reporter.
COCAINE.

By Conolly Norman, M.D., Richmond Asylum, Dublin.

The dangers to be apprehended from the abuse of cocaine are probably hardly yet quite realized, at least in this country. A great deal of harm has undoubtedly been done of recent years by the use of cocaine as a help to break the morphia habit. An exaggerated estimate of the assistance to be obtained from the former drug has been formed by such writers as Freud, and although Elwin and Erlenmeyer have warned us not to fly from Scylla to Charybdis, still it is to be feared that the notion lingers that cocaine may be used advantageously and safely for this purpose. Nothing can be more mistaken. Cocaine is more seductive than morphia. It fastens upon its victim more rapidly, and its hold is, at least, as tight. Cocaine solutions are probably somewhat too freely prescribed in cases of diseases of the nose and naso-pharynx. Patients who use the drug in this way become very soon acquainted with its agreeable effects. Several cases have been recorded by American authors of cocaine habit arising thus. That cocaine has not been even more extensively misused is probably due to its being still a comparatively new drug, and also in part to its costliness. Up to the present time the largest number of its victims appear, unfortunately, to have been medical men.

Cocaine owes its special dangers to three causes. First, it is particularly treacherous. Secondly, it produces early mental breakdown both in the moral and intellectual spheres. Thirdly, it is intensely toxic, bringing about destructive tissue changes after a comparatively short period of abuse. Taking the last first, we know that alcoholic poisoning is usually a slow process, while morphia may be taken even in very large quantities for years without producing any serious structural changes in the nerves. In fact, we recognize no
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distinct pathological results of morphia poisoning. On the other hand, the marasmus of chronic cocaine poisoning, appearing early and developing with extreme rapidity, is but one indication of the serious organic changes that are produced. Convulsions similar, as Richet points out, to those of cortical epilepsy, have been noted in a great number of cases. In at least one recorded case, death occurred in an epileptiform attack. In animals, poisoned with cocaine, remarkable rise of temperature has been observed by Mosso Reichert and others. Acute poisoning in animals kills by asphyxia; chronic poisoning, as Zanchevski shows, is accompanied by albuminous degeneration of the ganglionic cells in the medulla oblongata and spinal cord, as well as of the ganglionic cells of the heart ganglia and of the liver cells. In other, more advanced cases this author has found atrophic changes with vacuolation in the cells of the medulla and cord, fatty degeneration of the muscular fibres of the heart, and atrophy of the liver cells. Degenerative changes also occurred in the arterial coats, particularly in the spinal cord, perhaps organic changes similar, but less in degree, account for the slowness and difficulty in recovering from the cocaine habit, and the liability to dangerous collapse which exists during the process of withdrawing the drug.

The treacherous and insidious character of cocaine results from the fact that when taken in small doses it produces at first apparently nothing but a slight degree of exhilaration, a sense of well being, a feeling of mutual and bodily sympathy, of general satisfaction and of good humor that is not agreeable. There is no mental confusion which the consumer of cocaine is conscious of, and the only overt symptoms he betrays at this stage is more than natural dullness. The hypnotic effects, when they appear, are not overwhelming, and there is no headache, no nausea, no confusion next day. This cocaine is probably the most agreeable of all narcotics, therefore the most dangerous and alluring. It is to be feared that these peculiar qualities may, indeed, conduce to raise this drug in the future to the bad
eminence of being, as Erlenmeyer says, the third great scourge of the human race (alcohol and opium being the first and second). Like several other observers, I have satisfied myself by experiments on healthy persons, that the agreeable results described actually follow the ingestion of small doses of cocaine, and this fact impresses one strongly with the feeling of how seductive this drug would be to the neurotic or debilitated. Of course, as is the case with all narcotics, small doses soon lose their effect, and hence a rapid increase is necessary.

The rapidity with which mental symptoms of a grave character appear is remarkable in cases in which increasing quantities of cocaine are taken. Within three months marked indications of degeneration, loss of memory, hallucinations, and suspicion deepening into persecutory delusions have been found.

I have seen three cases of cocainism. For certain reasons I am unable to describe them in as much detail as I would wish. In one, cocaine had been tried as a substitute for morphia, and the patient soon found he had taken unto himself seven devils worse than the first. In another, cocaine had been originally prescribed for a painful affection of the nose. In a third, a patient sought a new stimulant after having from time to time tried to combat neurasthenia with alcohol and morphia. In the first and third cases there was very bad family history. In the second there seemed to be no contributing agent except, perhaps, overwork. In the first case the mental symptoms, which appeared about a year and a half after the use of the drug had been begun, were first, hallucinations of hearing with persecutory ideas. Patient constantly heard voices making vile and indecent charges against him. Sometimes he accused those about him of giving utterance to these abominations, at others he fully recognized their subjective and morbid nature. Second, sexual excitement of a depraved nature leading—though the patient was no longer young—to frequent very irregular modes of gratification. Third, loss of the sense of
the passage of time. This patient, after several efforts to break off the habit, and several relapses, went from bad to worse. The delusions became more general and more organized, and he was now confined to an asylum suffering apparently from chronic paravias. The second patient was an elderly man, engaged in an active and arduous business. After six months of the use of cocaine, he fell into a state of such mental hebetude and weakness of memory that he was unable to attend to his work. His sleep was broken and irregular. He suffered from trance-like conditions, in which he did and said things of which he had no subsequent recollection. He was tormented by sexual excitement, and sometimes sexual hallucinations occupied his mind in his half-dreamy state. After desperate efforts, accompanied by much depression and distressing debility, he shook off the cocaine habit, and is, at least for the time, cured. The third patient was a young man with a strong neurotic taint, who had been personally addicted to every form of dissipation, and whose health had consequently suffered. He took cocaine out of a whim, or the mere desire for a fresh intoxicant. It was impossible to be sure how long exactly he was addicted to the poison, or to what doses he went, as he was wholly unreliable, but there is reason to think that he had not been taking cocaine for a longer period than six months when he came under notice. He was then pale, emaciated, with dilated pupils, muscarily feeble, mentally depressed, suspicious, and restless. His memory was failing. He was furtive and shifty in his manner, and he had, among other things, quite forgotten to tell the truth. He thought he was dying, and that everyone saw his vice in his face. He had vague notions that his relatives were against him. The immediate cause of his seeking advice was the occurrence of visual hallucinations resembling those of delirium tremens,—small animals creeping about him, particularly at night, in bed. Sometimes he spoke coherently of these as recognized hallucinations. It was satisfactorily made out that he had not been taking alcohol in excess within several months.
Cocainism.

Abstention from cocaine was accompanied by a pitiable condition of querulous depression, but was, nevertheless, followed by very marked improvement. Before recovery was complete, the patient changed his residence, and was out of sight of. In this case the sexual passions seem to have been always urgent, but it appears that cocaine had the effect of at first very much exciting, and finally depressing their activity. It is important to observe that undue sexual excitement, abnormal voluptuous sensations, and the like have been noticed as symptoms by several authors. Richardson records a case occurring in a modest married woman, who exhibited violent erotic delirium after the application to the nasal cavity of a small quantity of ten per cent. solution of cocaine. In several chronic cases impotence has been found. Very probably the occurrence of these disturbances in the sexual region contribute farther to the rapid mental degeneration which marks this vice.

Dr. Thornley Stoker of this city first pointed out to me the frequency of sexual troubles in the cocaine habit, and my experience quite confirm his gentleman's previous observations. Dr. Clouston, in his able article on "Cocainism," remarks upon the singular loss of the time sense. I have observed this as a very marked symptom in my cases also. I think the same condition exists more or less in all narcotics, or intoxicants. In morphinism it is generally very noticeable. In no cases, however, have I seen it so prominent a mental feature as in those of cocainism. These two symptoms, together with the early appearance of the hallucinations, seem to form the most distinctive traits of the mental affection arising from the misuse of cocaine as far as it has yet been observed.—Medical Temperance Journal.

In 1891 there were 221,841 spirit dealers and manufacturers in this country. Three-fourths of this number were notoriously disreputable people. Two-fifths were criminals who had been convicted of crime.—Dr. Bennett.
Tobacco, Insanity, and Nervousness.

TOBACCO, INSANITY, AND NERVOUSNESS.

BY DR. L. BREMER OF ST. LOUIS, MO.

There is no narcotic, either in modern or ancient times, which has been and still is so universally in use as tobacco, and there is none about whose action on the human body there is so much difference of opinion among the laity and the profession.

By some, it is looked upon as an unmitigated evil, it is denounced by others that its use is not without advantage. Hence it has been condemned and commended in turn.

Without entering into preliminaries and details, I will state at the outset, that I side with those who, looking at the various effects collectively, consider it as harmful as alcohol from the simple fact that its use is more general, its effects more gradual and less obvious, and that, from a moral point of view, it is in better standing.

The breath of tobacco is held permissible and will be tolerated by all classes; that of alcohol is looked upon as vicious, and exposes its bearer in some quarters to social ostracism.

It is this connivance, on the part of public opinion, at this kind of luxus-consumption, as it is euphoniously styled by modern phisiologists, that fosters its spread, especially among those who can least afford to offer any insult to their social systems. With advancing civilization it is considered necessary by many to use a sedative or a stimulant of this sort as a kind of a safety-valve for the growing nervousness of our age.

Thus, by many smokers it is thought that, after bodily or mental exertion an equilibrium of all the functions is re-established by the pipe, cigar, or plug. Its action, therefore, somewhat like that of coca in its pleasant effects.

This is the case in the healthy smoker as long as he keeps
within certain limits. But it is quite different with the vast and ever-increasing army of neurasthenics and psychopath of our days.

Our ancestors were evidently not so deleteriously affected either by alcohol or tobacco as modern man is, with the strain of the requirements of a more complicated life weighing upon him, and handicapped, as he frequently is, in his nervous and psychical make-up.

It is specially of the effect of tobacco on this latter class that I wish to speak, and, to start with, I venture the broad assertion, that, whereas the robust and healthy, especially if he lead an active outdoor life, may use tobacco in its various forms with apparent impunity, i.e., without experiencing any demonstrable damage to body or mind, the neurasthenic and the psychopath have no business either to smoke or chew.

But it is just persons of this category (who are often not at all aware of their morbid condition) that become such absolute and powerless slaves to the habit. They fall victims to it early in life as a rule. While the healthy human organism revolts against the drug as intensely as that of a dog or a cat, and has to gradually accustom itself to overcome the unpleasant sensations accompanying the first attempts at using it, the born neurasthenic often takes to it as the young duck does to water. Only in this manner can the peculiar phenomenon of infant-smokers be explained, if one does not prefer to look upon such perversion of appetite as a species of precocious moral insanity inherited from parents who are generally not only excessive tobacco-users, but evidently mentally defective.

Now, I do not believe that, with approaching mature years, I am one of those who eye through pessimistic spectacles the rising generation, but I simply repeat the every-day observation, which I have never seen doubted or contradicted, that there is an alarming increase of juvenile smokers; and, basing my assertion on the experience, gathered in my private practice and at the St. Vincent's Institution of this city, I will broadly state that the boy who smokes at seven, will
drink whisky at fourteen, take to morphine at twenty or twenty-five, and wind up with cocaine and the rest of the narcotics at thirty and later on.

It may look like overstating and exaggerating things when I say that tobacco, when habitually used by the young, leads to a species of imbecility; that the juvenile smoker will lie, cheat, and steal, which he would not had he let tobacco alone. This kind of insanity I have observed in quite a number of cases at the St. Vincent's. The patients presented all the characteristics of young incorrigibles. They had exhausted the indulgence of their parents, who saw no other way to protect them from their insane pranks than to commit them to the institution.

I do not know whether a lasting improvement was effected in any of them. There was not one among them that was able to comprehend that tobacco was injuring him; they were constantly on the lookout for obtaining it, by begging, stealing, or bribing, and regarded the deprivation of the drug as a punishment. The sense of propriety, the faculty of distinguishing between right and wrong, was lost. The father of one of them, who looked upon his son only as an aggravated case of bad boy, told me that he himself had been smoking ever since his tenth year, and it had never affected him. In reality, being only forty-five years old, he was a wreck, physically and mentally, though he came of healthy stock. He could not or would not comprehend that tobacco was gradually undermining his own mind and body, although his wife and his friends knew and saw it.

But it is not only in the young that the use of tobacco is followed with such disastrous effects. Smoking or chewing, when commenced in the period of manhood, and even at the time it generally does least harm, after middle age, will tell on the mind if excessively indulged in. Is it to be wondered at, that a drug which, until tolerance is established, has such potent and palpable effects as to produce loss of co-ordination and unspeakable malaise, and after the organism has become used to it, is capable of setting up the well-known
heart disturbances, ambyopia and even amaurosis — which, in short, possesses the characteristic qualities of a powerful nerve poison, is it a wonder if such drug, when, in spite of the warnings on the part of various organs, excessively and persistently used, finally produces one or the other form of insanity? A drug that can, as has been demonstrated, cause organic changes of the optic nerve, which, I hardly need mention it, is, in reality, not a nerve, but a protrusion of changement of the brain itself, must certainly be capable of injuriously influencing other and functionally higher parts of the organ of the mind.

Dr. Kjelberg read before the section of Neurology and Psychiatry of the last International Congress, a paper in which he described a nicotine-psychosis, well marked by definite symptoms and stages. I have never seen the clinical picture as drawn by this observer, but it always seemed to me that whenever tobacco entered at all as a factor in a case of insanity, it was the immediate cause, vivifying, uniting, and condensing, as it were, the dormant morbid elements which predisposed the individual to mental disturbance. Thus, I have seen melancholia, more often mania, and very frequently general paresis, hastened and precipitated by excessive use of tobacco. I know, however, of instances where the last named disease, or “softening of the brain,” as it is called by the lay-public, could not be referred to any other cause but tobacco.

That the majority of the insane smoke or chew is too well known to deserve special mention. Some alienists have been of the opinion that this habit ought not to be discouraged, that it has a calming and pacifying effect especially on the chronic insane. I believe this to be the case in some of the secondary dementals, but ordinarily, though calming at first, it has an exciting effect later on. True, if the temporary contentment resulting from the gratification of the craving of the patient is looked upon as the action of tobacco, I agree that its effects are calming. But this quieting down, in my opinion, takes place on the same principle.
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that a child gets quiet and stops crying when its wish, even though most unreasonable, is gratified. The rule is, that smoking causes or prolongs excitement in the insane. Many become absolutely unmanageable as soon as they touch tobacco. They get quarrelsome, tease and molest their fellow-patients, and render themselves obnoxious generally.

That tobacco really does cause insanity is evidenced by the magic effect seen in some cases after the discontinuance of the drug, when the patient's condition is still such that he is not wholly in accessible to reason, and has will power enough to abandon the habit. Thus I have seen that beginning melancholia with suicidal impulses, hallucinations of various kinds, forced actions, besides the precursory symptoms of insanity, such as insomnia, crying spells, paroxysmal anxiety, fears of impending evil, "that something is going to happen," impotency, vertigo, beginning impairment of memory and judging power, and even the lowering of the moral tone, all of which, and a host of other symptoms, were attributable to chronic tobacco intoxication, disappeared after freedom from the habit was established. One of my patients experienced among other morbid symptoms an almost uncontrollable desire to throw himself out of the window whenever he had to go to the upper stories of the house in which he was employed; this impulse was so overpowering that he did not dare to approach the windows, and was in mortal fear of high places. He was a smoker and a neurtalphenic. The discontinuance of the drug terminated his morbid impulses and fear.

But whenever a case has gotten so far that commitment to an institution has become necessary, the prospects are not so good, because such persons, as a rule, cannot be convinced that tobacco is, or has been, the cause of their mental trouble. Their argument is that almost everybody smokes, that all their friends and acquaintances chew or smoke, without showing any symptoms of insanity. This is an argument which it is hard to invalidate, because the smoker does not appreciate the law of difference and variability of the resisting
power on the part of the organism, although this law is a matter of every-day observation. While some persons seem to be proof against almost any injurious agencies, others will yield on the slightest occasion to much less powerful influences, mechanical, toxic, or morbiče in the stricter sense. Again, the susceptibility to injury varies in the same individual.

This discrepancy, in effect, is certainly not a matter of difference in quality. As remarked before, all this is a question of resisting power produced and governed by social, climatic, industrial, and a number of other more or less occult influences. Now, all observers agree that in our country many conditions conspire to make us a nervous people to produce what has even been styled "American nervou
ness." This "nervousness" in other words means a weakness, an instability, a vulnerability of the nervous system. Add to this the unquestionably strong quality of the tobacco which the taste of the American public exacts from the manufacturer, and it becomes plain that there exist two cogent reasons why we should be on our guard against the indiscriminate use of the article. The alcoholic insane, when leaving the institution to enter active life again, generally knows and admits that alcohol has been the cause of his mental break-down; the nicotine victim does not admit anything.

French medical observers are of the opinion that one of the factors causing the depopulation of France is the excessive use of tobacco by its inhabitants; for the offspring of inveterate tobacco consumers is notoriously puny and stunted in stature, and lacks the normal power of resistance, especially on the part of the nervous system; again, in our country it is a significant fact that an astounding percentage of the candidates for admission to West Point and other military schools are rejected on account of tobacco hearts; from all countries and from all classes of society come reports in increasing numbers of the baneful effects of the tobacco habit.
But the consumption goes on and will do so until an example is set by those who, above all others, can estimate the disastrous effect of the habit.

If teachers, preachers, and physicians would pronounce the anathema on tobacco and abstain from it themselves, others would follow. But here is the difficulty. It is only exceptionally that a smoking pedagogue, clergyman, or physician can be convinced that he would be a better man physically, intellectually, and morally, if he would give up tobacco, and that he has no idea what capabilities of well-being he possesses if he only could muster up moral courage enough to abandon the use of a drug which in nine cases out of ten produces, to say the least, a vague sensation of uneasiness and restlessness, which only too often calls for a remedy that will do away with these effects, and that is alcohol. Some are aware that tobacco alone is responsible for continual malaise or misery, especially when their attention is called to it by others, but like the optimist, who asserts that the effects of cocaine are horrible, and still goes on using the poison, so the tobacco slave is bound, as by fate, to again indulge in a drug which he knows causes him to suffer. It must be a strangely potent fascination indeed, which tobacco exercises over the bulk of its victims, when we consider that some are aware that tobacco is at the bottom of all their ailments. The question naturally arises in this connection: Why do people smoke when they know that as soon as they touch tobacco they experience immediately its toxic effects? Many a smoker rises in the morning bright and energetic; the nicotine absorbed during the previous day has been eliminated from the tissues, thanks to his well-meaning and powerful excretery organs. He smokes his first cigar after breakfast, becomes at once restless, dissatisfied, peevish, and disagreeable; the cigar stamps its signature on his mind for the rest of the day. This is the experience of many a neurotic smoker, and yet he will resume the practice day after day, making his own life a burden, and rendering everybody
around him miserable. It is easily intelligible why some persons take alcohol; this is primarily a stimulant and secondarily a paralyzing, but tobacco paralyzes at once; it lowers all the faculties except those of fancy, and tobacco phantoms are not of much value. The downfall and general backwardness in civilization so characteristic in the Orient, people is largely due to their dreamy disposition engendered by abuse of tobacco.

Some, however, labor under the delusion that it increases their working power, that the flow of thought becomes easier and that without tobacco they are unable to do any mental work. Instances are cited by them of great men, inveterate and excessive tobacco consumers, who left their mark in the history of civilization as savants, artists, etc. They do not consider the possibility that these men accomplished what they did in spite, but not in consequence of, or aided by their habit.

Students of chronic nicotine intoxication are convinced that the great men among the tobacco slaves would have been still greater had they never used the drug. Thus, Kant, the most eminent of German philosophers, is said to have written such an obscure and unintelligible style, because he smoked and snuffed to excess. I, myself, know of a medical man who wrote a great book, which laboring under the same defect as Kant's works, because of his slavery to tobacco.

But these things are trifles when compared with the destructive and degenerative influences the drug exerts on the broad masses.

There is only one way to lessen the evil—it is the dissemination of knowledge of the baleful effects of tobacco among the rising generation, initiated and sustained by the three professions mentioned above. Of course, they ought to practice first what they are going to preach.

I know of physicians who not only smoke to excess themselves, or, still worse, indulge to a morbid extent in the unmannerly habit of chewing, but permit and even encour-
Tobacco, Insanity, and Nervousness.

Some habit of awarding his 13-year-old son by extra good, i.e., extra strong, cigars for high numbers in school. It is hardly necessary to add what became of this boy. He is now a periodical inmate at various sanatoriums for a combination of bad habits.

In view of such discouraging facts I hardly expect much good from this contribution and testimonial to the pernicious effects of tobacco, because the truth has not dawned upon the multitude yet. As in the body politic evils will run their course until there is a general uprising of common sense which disposes of them, so with the irrational and excessive use of tobacco, which will probably go on increasingly, until a limit of endurance is reached, and the disastrous results of the abuse become patent enough to impress even the dullest mind.

But under existing conditions the habit will not want for new generations of victims as long as the cigar is looked upon as a symbol of manliness by the young, and the pipe is that of peace and comfort by the adult, and as long as tobacco is praised in word and picture.

Petitions are being signed, addressed to both Houses of Parliament, England, by members of and sympathizers with the Society for the Study of Inebriety, declaring that the petitioners are gratified to observe the marked advance in public opinion in favor of legislation for the compulsory reception and detention in special homes, for curative purposes, of such diseased inebriates as have had their will-power broken down as to be unable of their own accord to apply for such admission and detention; and praying that parliament may pass such measures as shall make suitable provision for poor inebriates, and also for the removal of the present barriers to the reception of voluntary applicants. These are the points to be considered by the departmental committee, appointed by the home secretary to deal with this question, and which in a few days will resume its sittings.
DYSPEPSIA AMONG ABSTAINERS AND NON-ABSTAINERS.

BY DR. J. J. RIDGE,

Physician to the London Temperance Hospital.

One of the commonest of reasons given for the use of alcoholic liquors is that they assist digestion. This is not only a popular idea but is endorsed by many medical authorities. Alcohol is supposed to increase the quantity of gastric juice, and this is assumed to insure more rapid and perfect digestion. Even if the fluid secreted by the stomach were actually increased there is no evidence that this fluid is other than ordinary mucus, or its digestive power equal to that of normal gastric juice. Even if there were an increase of true gastric juice it would by no means follow that true digestion would be accelerated thereby. It may be accepted as an axiom that in the normal stomach the amount of gastric juice secreted to digest the proper amount of food will be just enough and no more. If more be secreted it will be superfluous and so much waste of vital power. Its excess may even cause derangement of function. If more food has been ingested than is required it can be of no real service to digest it, and its disposal will unduly tax other organs of the body. All these considerations, and others that might be adduced, point to the desirability of letting well alone. But it is alleged as a matter of fact that alcoholic liquors relieve indigestion and promote appetite.

The antiseptic action of alcohol is beyond dispute, but on the other hand the deadening of pain is no proof of the arrest of the morbid process. Improvement of appetite consequent on the use of ale, etc., which may sometimes occur, is chiefly due to the bitter principles which they contain. A natural appetite does not need stimulation, but notwithstanding all this there are doubtless many who would still assert that
Dyspepsia Among Abstainers and Non-Abstainers. 259

minor degrees of indigestion are relieved and prevented by alcoholic liquors.

It occurred to me that some light might be thrown on this vexed question by a search through the record of medical cases seen by me in the out-patient department of the London Temperance Hospital. Since 1896 I have kept notes of all the cases, stating whether they are abstainers or not and the nature of their illness. Of this list there are 3,629 consecutive cases in which the particulars required are fully given. Of these 2,453 were total abstainers and 1,166 were drinkers. The fact I wished to obtain was the proportion of each of those who were suffering from any of the forms of dyspepsia. A diagnosis of the cases had been made and recorded long before such an idea occurred to me. There was, therefore, no possibility of bias one way or the other, but a simple matter of fact enumeration. To make it more valuable I excluded all young children from the category, as these would unduly swell the abstaining class. Of the 2,453 abstainers, I found that 688 were suffering from indigestion — gastric or intestinal — equal to $27\frac{3}{10}$ per cent. Of the 1,166 non-abstainers no less than 452 were stated to be so suffering — equal to $38\frac{1}{10}$ per cent. Roughly speaking $\frac{3}{5}$ of the non-abstainers were dyspeptic and only $\frac{2}{5}$ of the abstainers. So far then from abstinence from alcohol conducing to indigestion the users of alcohol exceeded the abstainers by $1\frac{1}{4}$ per cent. It is very clear, therefore, that, whether alcoholic liquors relieve indigestion or no, they are a common cause for it.

It must not be supposed that this excess of dyspepsia is due to excess in the use of alcohol. The number of excessive users who come to the Temperance Hospital is, in my experience, very few. Such people fight shy of the hospital unless they desire to reform. Nearly all the cases are those of ordinary moderate drinkers. I do not affirm that all of them are suffering as the result of using alcohol. Seeing that the proportion of abstainers to non-abstainers is nearly three to four, it would be absurd to say that, but there is
no apparent reason why the number in one class should be
greater than in the other. If the proportion of abstainers
had been the higher, our opponents would have undoubtedly
regarded it as a proof of the causation of dyspepsia by
abstinence. As the figures point the other way we may
reasonably conclude that the ordinary use of alcoholic liquor
is a common cause of dyspepsia. I have not been able to
determine that there is any peculiar variety of dyspepsia
which non-abstainers are more liable than abstainers to
catch from acute gastric catarrh, which is a consequence of heavy
drinking. Many were suffering from hyper-acidity and
atony, but these cases, as is well known, are often due to
other causes.

I have not come across any class of cases which cannot
be cured or relieved without the use of alcohol. The cases
are so numerous and often so complex that it is sometimes
difficult to discover them, and even if discovered patients are
not always able or willing to avoid them, hence, although
relieved for a time the complaint is ever liable to recur; but
there is no reason to imagine that any stomachs are so con-
stituted that they cannot digest food without alcoholic liquor
and the use of them certainly appears to render the user
more liable to some form of dyspepsia. — *Medical Temper-
ance Journal.*

That inebriety is a disease of a physical nature, is sus-
ceptible of the clearest demonstration, and is generally rec-
ognized. There is now no question or doubt of its being
hereditary, and no one doubts that it is acquired by social
customs. That it is also a disease of the moral nature,
engendered by allowing the intellectual faculties to remain
inactive, by not exercising the power of conscience and will,
by permitting the power of appetite and passions to dominate
over conscience, by the lack of a positive character, by
defective moral education, and by the want of self-culture, is
equally as certain, and can be as clearly proved. — *Dr. Day.*
Acute alcoholic insanity may be a toxicosis as is delirium tremens, but sometimes the brain alterations are so profound as to instigate chronic alcoholic insanity which may be classed among mental ailments due to coarse brain disease. The alcoholic brain lesion is well recognized and in many cases there is little doubt as to its genuineness. It was not until after the discovery of the brain tumor that the alcoholic was recognized as having a disease of the brain. The alcoholic was compelled to leave his employment at the age of 40 and was confined to the insane asylum. He was subsequently sentenced to the penitentiary. A few years later he was again confined to the insane asylum. He was later transferred to the insane asylum in Edinburgh. While there he was subjected to a severe attack of delirium tremens.}

The alcoholic brain lesion is well recognized and in many cases there is little doubt as to its genuineness. It was not until after the discovery of the brain tumor that the alcoholic was recognized as having a disease of the brain. The alcoholic was compelled to leave his employment at the age of 40 and was confined to the insane asylum. He was subsequently sentenced to the penitentiary. A few years later he was again confined to the insane asylum. He was later transferred to the insane asylum in Edinburgh. While there he was subjected to a severe attack of delirium tremens.}

Matthias Busch, insane here to-day, a head trauma. Feb. 6, 1888 he killed his wife by cutting her throat. He was sent to the insane asylum in Edinburgh. While there he was subjected to a severe attack of delirium tremens.

The alcoholic was compelled to leave his employment at the age of 40 and was confined to the insane asylum. He was subsequently sentenced to the penitentiary. A few years later he was again confined to the insane asylum. He was later transferred to the insane asylum in Edinburgh. While there he was subjected to a severe attack of delirium tremens.
Alcoholic Insanity.

detained during the more violent period of his insanity. His statements in the court-room were very plausible and surrounded him with sympathizers. During the course of the proceedings his delusions of persecution became very evident. He claimed that attempts had been made to poison him, and charged his wife with unfaithfulness. He stated that repeatedly at night a number of men would come into the room with a battery, with which they "mesmerized" him. He had often accused persons of persecuting him in his walk leading to numerous rows.

Judge Gary of Du Page County assisted Judge Prendergast at that time, and I told them that Redmond was a dangerous alcoholic lunatic, and so far from being allowed to have his daughter's funds, he should not be permitted to have his freedom, for he would surely harm some one and was liable to murder his wife. There being no legal provision for his detention, he returned to his house and blacksmith shop, and recently, under the influence of an alcoholic delusion, killed Dr. Wilder.

Dr. F. S. Johnson and I, during June, 1891, succeeded in convincing a jury in the county court that a certain inhabitant should not be allowed to run at large. He was thirty years of age and had been drinking heavily half his life and lately averaged three pints of whisky daily. His eyes and skin were yellow with icterus, his liver and kidneys were cirrhotic, and ascites had set in. He had threatened to kill his mother, claiming that she was fraudulently depriving him of property which was a delusion, as she had done everything a mother could do to reform and protect him.

Under the influence of alcohol he was suspicious, abusive, and asserted that efforts had been made to poison him, but in the court-room he managed to make a fair defense of his conduct and one of the attendants believed him to be sane. He was sent to a state asylum where under good treatment and the impossibility of obtaining liquor he improved so much as to induce the officials to think he had recovered. In spite of expostulations and our assertions that the mental improvement was only apparent and not real, he was discharged.
Alcoholic Insanity.

If asylum superintendents feel themselves compelled to be guided by the average ignorant lay opinion as to what constitutes recovery, they may be justified in making such liberations, but the student of psychiatry knows full well how little importance can be attached to superficial observations of insane patients, some of the most dangerous of whom talk rationally and are able to hide their delusions until opportunity enables them to commit some crime under their influence.

A few days ago this lunatic came to my office in nearly as bad a condition as when first sent to the asylum. He talked offensively and accused me of being the author of all his troubles. It is a race between his physical and mental degradation, and under the circumstances it is to be hoped that his liver and kidneys may be winners and so prevent some of the threats he has made against his mother's life.

Some years ago when residing at the county asylum as pathologist I became very well acquainted with one of the notable characters of the place, E. R., who died there, aged about 60 years. The old man was a general favorite, particularly with the children, to some of whom he gave music lessons. He had been leader of a German singing society and was an excellent musician. At the asylum he was regular in his habits generally, assisted the attendants in taking care of the patients, and at long intervals suffered from slight cerebral difficulties, with some not very pronounced delusions of persecution.

If any member of his family visited him his rage made it necessary to lock him up. Two or three times during his ten years stay he had been allowed to go home, privileges he celebrated by smashing pianos, tearing up his music, chasing wife and children into the streets, and loading himself up insensibly with beer.

All this had to be explained to successive grand jurors who expressed their doubts as to the propriety of keeping so solitary, rational, and apparently inoffensive an old man in an asylum.

The people shun contact with the insane as they do other
disagreeable matters, the average idea of an asylum being derived from trashy novels, such as "Valentine Vox," wherein sane persons are locked up by designing relatives, who thus attempt to possess themselves of fortunes. Such instances in real life are more rare than deaths by lightning.

The physical symptoms of alcoholic insanity, such as tremors, anesthesia, abnormal sensations, are the same as may be found in ordinary alcoholism, but the mental derangement is peculiar and consists in delusions of persecution, of having been poisoned, and that the wife is unfaithful, and many a brutal wife murder is the result. A delusion of the mutilation of the sexual organs also is characteristic.

Other insanities may be complicated by alcoholism, and the traumatic is particularly liable to be tinged with alcoholic peculiarities, and after a head injury there is a remarkable tendency to liquor addiction, and a very little affects such cases badly. The danger to others lies in the patient appearing to be sane at times.

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**Prize of $100 for Popular Essay on the Pretensions of Homoeopathy, etc.**—Dr. George M. Gould of Philadelphia, Pa., offers a prize of one hundred dollars for the best essay that, historically and actually, "will show up the ridiculous pretensions of modern homoeopathic practice." The offer is open to any one of the regular profession of the United States. The competing essays should not contain over 15,000 words, and should be sent to Dr. George M. Gould of Philadelphia, Pa., on or before Jan. 1, 1893, typewritten, without the name of the author attached, but with a motto signature, accompanied by a sealed letter, giving the name of the author, corresponding with motto or *nom de plume*. The several essays will be given to a competent committee, and, when their decision is reached, the sealed letters of the authors will be opened, and the prize sent the winner.
Abstracts and Reviews.

DELIRIUM Tremens.

Dr. Krukenberg of Hamburg, Germany, has made an exhaustive study of this subject. Among the lower classes in Hamburg, there is an extensive abuse of alcoholic drinks, and especially that of brandy. The new hospital at Hamburg-Eppendorf has a special department for the treatment of alcoholism. The number of cases treated in 1891 was 301, which consist of 265 patients, with 36 relapses. Of these patients 119 were cases which had been treated before; hence, there was a percentage of 45 of relapses. Some of these even relapsed 27 times. The diagnosis was:

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<th>Diagnosis</th>
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<td>Delirium tremens</td>
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<td>Chronic alcoholism</td>
<td>103</td>
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<td>Acute alcoholic intoxication</td>
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<td>Other alcoholic psychoses</td>
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The patients were nearly exclusively men, between thirty and forty years; only three patients were over seventy. Restaurant-keepers, waiters, and such persons form the majority. The patients from the upper classes are usually in reduced circumstances. Only six women were observed. Prostitutes were not allowed to enter. In nearly every case brandy, which is drunken together with beer in equal parts, is the beverage; from one-half to two quarts of brandy was usually taken. Beer is rarely, if ever, the cause. The patients' statements in such cases were absolutely unreliable.

The quantity of alcohol drunk does not bear any relation to the outbreak of the disease. One hundred and seven patients were ventrally predisposed; in 144 cases the relations suffered from psychoses, epilepsy, or were habitual drunkards. Twenty per cent. had drunken fathers; how far this predisposes, the writer leaves unsolved. Six cases had
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passed through serious diseases before. Immediate causes play a great part. Sudden leaving off the habit could in no case be proven as a cause, which the writer emphasizes, for it is generally believed that alcohol must be supplied to drinkers in order to keep off delirium when attacked by this or that disease. No delirious patient was given alcohol after his entrance. Most of them soon quiet down of their own accord. Alcohol was only administered where such complications as pneumonia, etc., with threatening collapse set in, and then in large doses, and in a concentrated form. Delirium, due to abstinence, as in morphiomania, is not recognized by the writer; the use of alcohol is unnecessary in treatment. The history of the case was never obtained from the patient, but from his relatives and friends. In this manner of 143 cases, about 50 per cent. could be traced to an immediate cause. In twenty-three cases an acute infectious disease, and of these twenty were pneumonia, brought it on; in fourteen cases violent excesses, in fifteen cases grave injuries, in nine, spontaneous internal hemorrhages, consumption, iritis, furuncles, gastritis. In seventy-four, no exciting cause could be discovered. The writer then passes the symptoms in review. The hallucinations of vision are dependent upon the patient's surroundings, and one often finds them not to be hallucinations, but rather illusions. Sight is normal during these, as the writer has often proved. Their imperative ideas may be explained in the same manner. They are not hallucinations, but psychic illusions provoked by misunderstanding their relations and surroundings. One of the patients was tortured by the thought that he was to be castrated. Investigation showed him to have been shortly before suffering from a chancre. Self-mutilation is rarely seen. Relapses do not present anything peculiar; an entire series of attacks will not necessarily leave behind them any serious consequences. On the contrary, extensive tropic and somatic changes may yield to continuous abstinence. The writer's observations show a mortality of 10 per cent.; other authors place it
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between 5 per cent. and 24.30 per cent. This favorable mortality rate demonstrates that one need not fear the appearance of fatal collapses, if one deprive the patient of alcohol, a therapeutic measure which has been practiced during last year in this institution. Out of twenty cases complicated with pneumonia, nine died. Alcoholism plays, as is well known, an important part in the mortality of pneumonia, tuberculosis seems to exercise a similar influence. In a number of patients, who were discharged as cured, incipient pulmonary tuberculosis could be diagnosticated. This point worthy of notice, especially as lately cirrhosis of the liver is been observed associated with peritoneal tuberculosis. Hence, it is clear that alcoholism increases the predisposition for tuberculoses, which fact is to be borne in mind in the treatment of phthisis. In old people delirium tremens sometimes runs into chronic dementia. The sensory disturbances are dependent upon neurotic changes, and are either functional or purely psychic, as for example, the analgesiae. The delirium lays hold of the patient and keeps his entire attention; he knows neither pain, hunger, nor fatigue. Ophthalmoscopic examination reveals nothing during and after the attack. Only in some cases did he find the retinal arteries contracted and the veins fuller. The patient's vision, in strength, undergoes no changes; on the contrary, his field of vision is subject to peculiar changes. In nineteen delirious patients, twelve presented great concentric narrowing of the visual field, in five, slight, and in two none was noticed. A concentric contraction for color perception also is remarked, which in some cases disappears before the former symptom does. The limits for red and blue overstep the normal boundaries again to return to the normal. There is transient anesthesia of the retina, similar to that found by French investigators in hysteria, and by Oppenheim and Thomsen in epilepsy and other psychoses; a large number of these alcoholic individuals suffer from epilepsy, about 35 per cent.

200 patients in the writer's observations. The above-mentioned ocular symptoms are also found in non-epileptic
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delirious patients, and again they may be wanting. There is a resemblance between these patients and epileptics. Out of the relapsing cases, forty-four, 16 per cent. were epileptics. Their epileptic attacks are completely identical with those of true epilepsy, with aura, etc. It never appears in abstinent patients, but is associated with other alcoholic phenomena. Delirium tremens and the motor attack belong together, as do the epileptic mental state and the spasmodic attack. The spasm must be regarded as the beginning and not the cause of delirium tremens.

Pathologically there are revealed, at the necropsy, increased proliferation of tissue, turgescence and opacity of the pia mater, the result of the frequently recurring venous stasis. The brains of delirious patients present nothing of peculiar anatomical interest. The clinical-phenomena are all that one has to base one's decision on the gravity of the disease. These present great similarity with epileptic states, without absolutely identifying the two affections.

A slow pulse is characteristic of alcoholism; in delirium tremens the pulse is dicrotic. In delirium tremens there is never retention of urine, which may be used as a differential diagnostic sign between it and meningitis, which delirium tremens, complicated by a pulmonary affection, might easily simulate, and mislead one. In 37 per cent. of the hospital cases of alcoholism, albuminuria was present; in 52 per cent. of those delirious, oliguria sets in to pass into polyuria, without albumin.—Norsk Magasin for Lægevidenskab, Hahnemann Monthly.

A boy, four years old, died from excessive use of whisky in New York. While an infant he was given spirits to relieve cramps. He soon developed a craving which was partially indulged by the parents. One evening a bottle of spirits was left accidentally on the table where the child could get it. This was drank and a drunken stupor followed ending in death. So strong was this impulse that the child would cry for spirits and only be satisfied when given some.
THE DANGERS OF MORPHINISM.

The discussion of a proposed law against alcoholism in the Federal Council of the German Empire has elicited from several high medical authorities a decided expression of the opinion that morphinism, or morphinomania, should be opposed by equally stringent measures. In "Berliner Klinische Wochenschrift," as well as in "Aerztliche Rundschau," of Munich, the dangers of morphinism are represented as quite equal to the dangers resulting from the abuse of alcoholic beverages. Professor L. Levin expresses in this connection the following deliberate opinion:

Alcoholism claims the majority of his victims among laborers and artisans — morphinism claims them among those classes of the population who, by their social position, education, and general culture, should least be suspected of being powerless slaves to this passion. This is the first material difference between alcoholism and morphinism. The second difference consists in the absence in morphinism of those unpleasant, very apparent, exciting, and depressing effects which follow the abuse of alcohol. In this way a very large community of morphinists has originated in a short time, including many of the best intellects, artists, savants, university teachers, diplomats, officers, and merchants. If alcohol damages the hand of a nation, morphine destroys its head. This condition was scarcely known then, in 1874, simultaneously Von Fiedler and I first called attention to such a fact. And how well, unfortunately, it is known at present!

Morphinism is a passion which develops and grows in the exclusion of private life. Publicity is not molested by it in any offensive manner. But much more extensive and pernicious are the consequences of developed morphinism in their bearing on public life and indirectly on the well-being of many innocent persons. It would be a regrettable hardship to extend the sufferings of a person afflicted with this disease, although often by his own fault, even to his social
position, but as far as the State is concerned, it should tolerate inebriates, much less morphinists, in official positions. The reason for such a proceeding is easy to understand. Cognit alone excepted, there is no narcotic substance, the enjoyment of which will become a necessity to the organism in the same degree as morphine. Morphine hunger is much more irresistible than the desire for alcohol. An alcoholic may continue for many hours after the alcoholic effect has disappeared before feeling compelled to ingest new quantities. A morphinist, on the contrary, as soon as the time has arrived when the cells of his body clamor imperiously for their stimulant, will be carried toward new doses abruptly and resistlessly. If he fails to obtain them, soon his body and his intellect will be subjected to suffering.

A judge used to morphine, by the syringe or internal, is unable in this condition to follow the proceeding and give an undisturbed decision, and an examiner, in the same predicament, will fail in the fulfillment of his duty, not being able to judge as objectively as he is expected to do. We have to add that after a certain time, although morphine being supplied, the mental faculties begin to suffer and the moral sense to be impaired. And, whatsoever may be the boldness of the rider by which he wins the prize in the race, whatsoever may be the skill and elegance of the surgeon in performing an operation, or the acuteness of the clinician diagnosticating a disease— if they are addicted to morphine, they are lost men; for morphine may continue for awhile, lending them its assistance, but it holds them by a chain growing shorter and shorter as time passes on.

Neglect of all duties, loss of energy and spontaneity, possibly, also, a gradual moral decadence to a very low standard, follow soon, associating with manifold bodily ailments, which finally render the condition hopeless and intolerable. A radical cure of this passion being quite an exception, morphinists should, in fact, always be regarded as incurables. Conditions of this kind, in which the body, especially the...
central nervous system, induce the continued use of the

drug, while the impotent will, and all moral forces together,
succumb before the exigent demand of the body, can never,
or, at least, very seldom, be removed.

I appreciate perfectly well the difficulty in this connec-
tion to establish practical distinctions between a wanton and
medical chronic use of the drug. One person may have
become a morphinist because he had heard of the pleasant
care provoked by it; another one, because in the beginning
he helped him to suppress painful bodily conditions, extending
its use later on to the suppression of moral affections, and,
finally, from habit; a third group of persons will take mor-
phine with the idea of subduing their chronic ailments. Un-
fortunately, as far as public interest is concerned in this
taste of affairs, no difference can be made between these
three groups. Demonstrated morphinism, or opiophagy,
should preclude all official positions, at the same degree as
alcoholism. The same holds good with regard to cocaism,
cocainism, chloroformism, sulphonalism, and, perhaps, also,
with regard to bromism. All persons affected with them
should be excluded from responsible positions, or should the
morbid condition dependent on these affections be found to
be in an advanced state, they might be placed under
wardianship, or confined to some asylum for the inebriate.
In my opinion they are certainly irresponsible.

In case government intervention in this respect should
be disliked, then, at least, the sources from which morphine
derived should be placed under better supervision. What
has been done hitherto has ceased to be sufficient. Every
day avidity breaks through all restrictions and obstacles
raised by the State against the traffic with this alkaloid. Is
it intended to wait until morphine may be possibly prepared
artificially, and cheapened on this account? Alcohol will
then have acted its illustrious part, and morphine will take its
place. At present this contagion invades, occasionally,
the classes who, "in the sweat of their brow," should gain
their bread, but not their morphine. Don't we see to-day

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many millions of men as slaves of the morphine habit? Anyone who should have a doubt about the extensibility of such a passion, may look at China, a country which has known this stimulant very recently only, has been conquered and enervated by it. He may be referred to Prschewalsky's descriptions, who shows the whole militia garrisoning Mongolia, officers and men, completely demoralized by opium. The use of this drug is in constant increase, intensively and extensively, especially since the northern provinces of the Chinese empire have been cultivating their own poppy, thus rendering themselves independent of India and the high fiscal prices of its government. The Chinese have carried this passion over the ocean and have caused not a few Americans, men and women, to indulge in the same vice. Morphinism possesses a greater faculty of extension than opium smoking and opium eating, while the damage caused by it is equally great. May these short warning words be heard in a moment when some public action with regard to this condition is urgently requested.—Pacific Record.

The Reichszeit of Berlin, which published in full the proposed 'law against the "abuse of spirituous liquors,"' in presenting reasons for its passage, states that in the year 1889-90 there were 2,279,388 hectolitres of pure alcohol consumed in Germany, or 4.64 litres for each man, woman, and child in Germany; of wines about 6.44 litres, and of beer an average of 90 litres per head for each human in Germany, were consumed annually. There had been a large increase in the number of cases of chronic alcoholism and of delirium tremens treated in public institutions, from 4,272 in 1877 to 10,360 in 1885. The alcoholic cases furnished nearly 20 per cent. of nearly all the cases treated in the public hospitals. Of the prisoners in German penitentiaries convicted of murder, 46 per cent. used liquor, and 41 per cent. were habitual drunkards; of those who committed manslaughter, 63 per cent. were drinkers; violent assault, 74 per cent.; rape, 60
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per cent., and other crimes varied from 40 to 68 per cent. by habitual drinkers. This in a country where we have so often been told by brewers and others, "there is no intemperance."
—National Temperance Society Report.

WASHINGTONIAN HOME.

The thirty-fourth annual report of this pioneer Hospital is before us. During the past year three hundred and twenty-seven patients have been admitted. Thirty-eight had delirium tremens. The new rules refuse to admit any one for less time than one month, and other excellent arrangements are noted. The superintendent, Dr. Day, discusses the popular fallacies of the drink question in his usual frank, graphic way. We give some extracts and refer the reader to the report, which can be had by addressing the author.

"Not a few men called temperate, and who have thought themselves such, have learned, on abstaining from ardent spirits, that for years their minds have been clouded, impaired by moderate drinking, without their suspecting the injury. Multitudes in this city are bereft of half their intellectual energy by a degree of indulgence called innocent. Of all vices, this is the deadliest. Nothing has done more to degrade men and keep them down. Nothing has done more to destroy their self-respect, to rob them of their influence in the community, to render profileless the means of improvement within their reach, than the use of ardent spirits as a beverage. . . .

"The existing generation of civilized states is peculiarly subject to this vice, from the combined effects of extreme nervous development, of restlessness, and anxiety engendered from worldly competition, of exhaustion produced by excessive and monotonous toil, of defective social, intellectual, and physical excitement, and finally from the depressing influence of general culture, contrasted with tantalizing inequality of condition.

"Again, there is a puny, half-healthy, half-diseased condi-
tion of body, perhaps more common in this country than in any other, which, by producing irritableness and restlessness, and weakening the energy of the will, is a strong temptation to the free use of stimulants, and many, I am inclined to think, become sots through bodily infirmity. Physical vigor is not only valuable for its own sake, but it favors temperance; and all virtues, by producing clearness and soundness of intellect, and by removing those indescribable feelings of sinking, disquiet, depression, which no man who has not felt them can possibly understand. Physical education needs more attention. The intellect, indeed, calls for chief care; but the mind is now lodged in matter, and acts through organs, and suffers and pines with them. A child owes little gratitude to the parent who gives him knowledge at the expense of health. Beware of sacrificing the body to intellect, for they are intended to be friends and joint workers. The body cannot be neglected with impunity; bad temper, discontent, and intemperance follow in the train of nervous debility. . . .

"Much has been said by a certain class of people who, no doubt, are sincere in their belief, because not informed in relation to physical laws and of the structure of the human system, concerning the 'removal of the appetite,' as though appetite was something that could be extracted the same as a tooth, or amputated similar to a limb. There is no theory advanced by these pseudo-medico reformers, because there are no grounds for foundation. One class base their opinion on the ability of the Almighty to perform miracles, and, to use their language, that 'nothing is impossible with God.' No reasonable person doubts this; but every person of even ordinary intelligence knows that the laws of nature are never suspended for the express accommodation of the intemperate, and never will be. It does not require a medical or theological education to enable one to learn that life and appetite are so closely connected, that the latter can only be 'destroyed' or 'removed' at the expense of the former, whatever exceptions may be taken to this statement to the
contrary. Many of our worst cases have been those from whom it was claimed the appetite had been removed, and those in whom it had been destroyed by some chemical preparation, largely advertised for that purpose by people devoid of conscience, but not of judgment of human nature, who rely on the generally prevailing disposition of everyone to restore friends and relatives to sobriety, and their consequent disposition to act contrary to their own judgment, hoping that by some feat of legerdemain the object may be accomplished.

"I now come to inebriety as a disease. This is a subject upon which there has been much controversy, particularly among those possessing the least knowledge of it, and consequently wholly unqualified to render judgment.

"There is another class also disqualified by nature to even form an intelligent opinion, who have boldly declared that such a theory could not be sustained, notwithstanding the fact that medical science, and most of the eminent regular practitioners throughout the civilized world have declared, and put such declarations on record, that it is a disease pronounced in type, distinguished from all others and confounded with none. That inebriety is a disease needs no more recognition among medical men than the sun in the heavens; and certainly needs no argument from me to support a fact (not a theory) established and promulgated more than one hundred years ago. Therefore I shall make no attempt to argue the matter, but endeavor, if possible, to throw a little light into dark places.

"At the outset I shall claim that inebriety is not only a disease, but one that in many cases is the result of, and acquired by, social indulgence. Also that it is hereditary; that it is transmitted from one generation to another; that it is sometimes transmitted from a parent to a child, as is hereditary vice, hereditary bravery, hereditary cowardice: and the same diseases, such as consumption, scrofula, and numerous others, as well as venereal diseases.

"To answer the question what is disease in as brief a
manner as possible: disease is any departure from a normal condition of health; and if the excessive drinker does not present an illustration of a full and complete departure, even to one of ordinary intelligence, it is owing to defective sight. If the flabby and pallid face, the emaciated body, the trembling or palsied limbs, the tottering walk, and vacillating movements are not conditions of disease, where shall we look for it? If the stammering tongue, the wild, incoherent, and wandering ideas emanating from a frenzied brain are the result of normal action, then there is no abnormal action. If the insane delusions, the hallucinations and insomnia do not denote disease, then there are no such definitions as symptoms. If the insane utterances, the maniacal acts, the suicidal and homicidal tendencies exhibited by an excessive drinker are not a condition of disease, then there is no disease, and medical science and observers should be banished from society."

We shall publish more quotations in our next number.

AUTO-INTESTICATIONS.

Albertoni draws from his experiences the following conclusions: 1. In the human body there is a continual development of toxic substances. 2. The principal seat of their development is the intestine, and, in the first place, the large intestine, while they originate in a lesser degree in the muscles, in the glands, and in other tissues. The best known process which causes auto-intoxication is putrefaction. 4. The known substances which come into play in the intoxication, are: peptoxine, organic bases (leucomaine, ptomaine), products of the aromatic series (indol, skatol, phenol, aromatic acids, etc.), lactose and volatile sebaceous acids, ammonia, methan, hydrosulphuric acid, methylmercaptan, acetone. 5. Many of these substances are forming incessantly during state of health, albeit in small quantities, different according to individuality. 6. The mechanisms which limit or prevent auto-intoxications are: in the
The best place in the stomach-Intestinal canal the presence of hydrochloric acid does not occur in the dilatation of the toxic substances by oxygen and their rapid elimination. The necessary rapidity. Many pathogenic micro-organisms, diseases of the organs of secretion and elimination are always to induce an indirect action of the digestive tract, diseases leading to autointoxication. No conditions tending to induce an alteration of the vital substances by oxygen and their rapid elimination. All conditions leading to autointoxication, in the first place, diseases of the digestive tract, diseases limiting the intestinal absorption of the toxic substances by oxygen and their rapid elimination. The necessary rapidity. Many pathogenic micro-organisms, diseases of the organs of secretion and elimination are always to induce an indirect action of the digestive tract, diseases leading to autointoxication. 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All conditions leading to autointoxication, in the first place, diseases of the digestive tract, diseases limiting the intestinal absorption of the toxic substances by oxygen and their rapid elimination. The necessary rapid
fermentations of toxic products, and how the intervention of oxygen influences the process of auto-intoxication. 14. The discovery of aceton has more significance as demonstrating the presence of a process of auto-intoxication than the toxicity of aceton itself. 15. The toxines deserve an attentive investigation with regard to the agents giving occasion to auto-intoxications.—From the Proceedings of the 4th Italian Congress for Internal Medicine, in Rome. Pacific Record of Medicine.

The following from the Lancet Clinic we fully indorse:—

"Lecons Sur L'Alcoolisme. Faites à l'Hôtel Dieu de Marseille, France. Par le Dr. A. Villard, Professeur de Clinique Médicale, etc., etc., Lecons recueillies par le Dr. Vincent Pagliano, chef de clinique médicale, etc. 267 pp. G. Masson, publisher. Librairie de l'Académie de Médecine, Paris, France, 1892."

This excellent work presents in an entertaining and instructive manner an exposé of the effects of alcohol upon the human system, being a report of the lectures which the writer delivered at the hospital Hôtel Dieu at Marseilles. The first lecture considers how one becomes an alcoholic. Intemperance is on the increase; strong drink destroys more victims than the cholera, the plague, or wars. The toxicity of the various kinds of alcohol varies according to their origin, that of grapes being the mildest. The United States is designated as "the classic land of drunkenness."

The second lecture takes up the manifestations of acute alcoholism, while in the third and fourth the results of its chronic use are considered—its action on the intestines, stomach, liver, pancreas, heart, blood-vessels, kidneys, and urinary passages. The alcoholic lung is studied in the fifth lesson; then follow, the relation of alcoholism and tuberculosis, the antagonism of emphysema and tuberculosis, alcohol and its action on the nervous system, alcoholic paralysis and pseudo-tubes of alcoholic origin, the mental condition of alcoholics, the relation of pseudo-paralysis of alcoholic origin,
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alcoholism in the female, the influence of alcoholism on the progress of other diseases, the statistics and medico-legal aspect of alcoholism, its prophylaxis and therapeutics, following with the final lecture and some historical citations on this subject. One cannot peruse the work without being impressed with the degenerating, demoralizing, enfeebling, and destructive influence of alcohol on the human race.

May his work see many more editions, of which it is certainly deserving.

F. H. P.

THE HYGIENIC TREATMENT OF CONSUMPTION.

By M. L. Holbrook, M.D., Professor of Hygiene in the New York Medical College and Hospital for Women. This work aims to give the best hygienic treatment for Prevention and Cure. It is divided into three parts, with the following twenty-five chapters: Part I.—Nature and Causes of Diseases. Chaps. 1, The Disease; 2, The Indirect Causes of Consumption; 3, Micro-Organisms as the Immediate Cause. Part II.—Prevention and Treatment of Consumption in its Earlier States. Chaps. 1, Prevention; 2, Preventing Colds; 3, Enlarging the Chest; 4, Indian Club Exercises; 5, Rowing; 6, Vocal Gymnastics; 7, Special Vocal Exercises; 8, Scientific Physical Culture; 9, Horseback Exercise; 10, Toughening the Constitution; 11, Clothing; 12, The House and Home; 13, Climate; 14, Baths and Bathing; 15, The Sun Bath; 16, Food and Drink; 17, Psychic Forces—The Will; 18, Other Psychic Forces. Part III.—Treatment in more Advanced Cases. Chaps. 1, Open Air, Rest, and Light Cure; 2, Enlarging the Chest; 3, Self-help; 4, Difficulties in the Way—Caution. Price by mail, $2.00. Address, Dr. M. L. Holbrook, 46 East Twenty-first Street, New York.

The preface to this work says: "It was written to advocate the treatment of consumption by hygienic remedies which are accessible to all who have the intelligence and..."
wisdom to acquire a knowledge of them and their application. Most important of these remedies is the enlargement of the chest and the lungs, both as preventive and curative measures in the early stages of the disease. The extent to which this is possible by suitable methods is far greater than is generally known; particularly is this the case in early life when growth is more certain, and even in later years much can be accomplished. . . . Great importance is placed upon pure air and light, particularly on sun bathing and agriculture, and several chapters are devoted to these methods. Food, clothing, the dwelling, horseback riding, the will, all will power, and many other psychical agencies too generally neglected are fully discussed. . . . The style is popular and very readable, and the matter and arrangement of topics is excellent.” This is one of the very best works that can be placed in the hands of any one with weak lungs or others interested in this subject. Works like this should be increased and scattered in every direction. Their literary and educational value is beyond estimate.

ANNUAL OF UNIVERSAL MEDICAL SCIENCE

This is the fifth series issued yearly of well printed volumes, in which are condensed a full review of the progress of medical science all over the world. The scope and plan of the work is to furnish clear, concise reviews of all the various topics of medicine. Everything new which appears in book or journal is mentioned and grouped by editors who are familiar with the progress in these fields of inquiry. The amount of research and labor represented in these volumes is very great, and practically represents a cyclopedia of inestimable value. No work extant can be of greater use to the physician who would keep along with the march of scien-
Abstracts and Reviews.

The editor and publisher should receive the warmest support, for this grand effort to rescue and tabulate all the new discoveries along the frontiers of medicine. The coming century will recognize its value, and the work will be an enduring monument to its authors. To all our readers we most heartily recommend these yearly volumes as indispensable to every medical library. The type and appearance of this work is very attractive, and the index and arrangement of topics are exceedingly practical. We can refer with pride to these volumes as without a rival in any nation of the world today.

The Supreme Court of the States and Provinces. By Clark Bell, Esq. Medico-Legal Society, Publishers, New York City, 1892.

This neatly-printed volume is the first of a series in which the distinguished editor of the Medico-Legal Journal begins the work of describing the formation and growth of the higher courts in each State, with biographical sketches and portraits of the chief and associate judges. Also all information about the courts and the famous decisions or work they have done. This work, which will extend over many volumes, is intended to be a complete history of the Supreme court in all the States and will be of great value to the legal as well as other professions. The illustrations and appearance of the first volume give promise of a work of great value.

System of Practical Therapeutics. Edited by H. A. Hare, M.D., Professor of Therapeutics and Materia Medica in Jefferson Medical College, Philadelphia, Pa., etc. In three volumes, with illustrations, etc., etc. Philadelphia, Pa., Lea Brothers & Co., Publishers, 1892.

The second and third volumes of this work have appeared, and it is now offered complete to the public. A cursory examination reveals a rich mine of practical facts, which
seems to be confined exclusively to these works. The plan of the editor to provide the physician with a practical work of reference which will deal solely with the medical treatment of the various diseases which affect man, has been in a large measure accomplished. While the captious critic may find many faults and errors, the merits and value far exceed that of any other work that deals with this side of medicine. It can be said authoritatively that in no other works can be found so many practical facts—facts that every physician needs to the successful practice of medicine. Both the editor and publishers are to be congratulated on giving the world an encyclopedia that will go into the libraries of thousands of physicians, and be a power in practical medicine for many years to come.


Dr. Romanes, the distinguished naturalist and author of this work, is both a charming writer and a scientist of a broad philosophical cast of thought, one who never becomes lost in details or overlooks the broad fact that however clear the present conclusions may seem, other evidence may give an entirely new appearance to the facts. In dealing with so great a subject as evolution, natural selection, and Darwin's wonderful researches, the breadth and suggestiveness of the author's views carry the reader along with increasing interest on to the end of the volume, leaving regrets for more. Darwinism never seemed clearer or more fascinating than in this volume, and we advise our readers to take up the subject again with this author as teacher. Every medical man and specialist should be acquainted with the facts of evolution and what Darwin taught. It is the living thought of the age, on which will turn the most profound revolutions of life and living that concerns every thinking man. This volume is a
very timely contribution to this subject which will have a wide circulation among students and scholars everywhere. Send to Open Court Publishing Co. for a copy.

A CHART OF TYPICAL FORMS OF CONSTITUTIONAL IRREGULARITIES OF THE TEETH. By E. S. TALBOT, M.D., D.D.S., Professor of Dental Surgery, Women's Medical College, etc., etc. Published by the Wilmington Dental Manufacturing Co., Philadelphia, Pa., 1891.

Sixteen colored lithographs of the various typical defective jaws and teeth are given. They are selected from three thousand models and illustrations by the author, to show arrested or excessive development of the maxillary bones, common among the defective classes. The author is a distinguished student and worker in this field and has contributed many new facts to science, which bear directly on the action of alcohol on the teeth and jaws of inebriates. His paper in this number of the Journal will attract renewed attention to this subject. This chart is a valuable contribution to a new field of constitutional irregularities that should attract great attention in the future.

The Scientific American, published by Munn & Co., New York, during forty-five years, is, beyond all question, the leading paper relating to science, mechanics, and inventions published on this continent. Each weekly issue presents the latest scientific topics in an interesting and reliable manner, accompanied with engravings prepared expressly to demonstrate the subjects. The Scientific American is invaluable to every person desiring to keep pace with the inventions and discoveries of the day.

No monthly published comes to the physician's office with a greater variety of clear authoritative thought in science than the Popular Science Monthly. It is a grand supplement to the study of medicine, in rounding out the intelligence and
keeping the reader familiar with the best thought of the world. Send to the publishers, D. Appleton & Co., New York city, and try this magazine for a year.

The Phrenological Journal, Fowler, Wells & Co., New York city, always brings the reader a great deal of very interesting matter. As a journal of the science of practical life, it is unrivaled and unique. A noted physician said that no other periodical published was so helpful to young people by stimulating observation and thought, and creating an ambition to higher personal culture and development.

The Homiletic Review, Funk & Wagnals, publishers, New York city, is an excellent current journal of the higher ranges of theologic thought and criticism. Many of the articles are thoroughly scientific in tone and treatment, and the reader is conscious that both revolution and evolution are going on in these fields of thought.

In Mr. Goschen's Budget speech he made an interesting comparison between the consumption of alcoholic spirits, coffee, and tea, at the present day, and fifty years ago. In 1841 the average of alcohol absorbed per head of the population was 30 ounces, while of coffee 17½ ounces were consumed, and of tea 18½ ounces. In 1891 56 ounces of alcohol per capita were consumed, while the consumption of coffee and tea had risen to nearly 100 ounces. It is curious that while the consumption of coffee as compared with fifty years ago has gone down five ounces a head, the consumption of tea has gone up nearly 80 ounces.—Brit. Med. Jour.

Sixty-two thousand pounds of opium came through the custom-house into this country in 1891. It is estimated that over one hundred thousand pounds came in without paying duty. Of this amount less than a third was known to be used in a legitimate way in medicine and the arts.
EDITORIAL.

DRUG TREATMENT IN INEBRIETY.

 Clinically, the free use of narcotics after the withdrawal of alcohol or opium is followed by many confusing symptoms whose rapid change and disappearance point to the drug given as an active cause or factor. Not unfrequently inebriates will suddenly abandon alcohol or other drugs, and use large doses of chloral and opium, under the care of the family physician. Later, delirium and melancholia with suicidal impulses will follow. The case will be sent to an asylum, and very quickly these symptoms will disappear. Great mental prostration with muscular feebleness and slow convalescence follows. The inference seems supported by many facts, that these mental symptoms were due largely to the action of drugs on an enfeebled brain. It is not generally recognized that inebriates have hyperesthetic and anaemic brains, also vaso-motor palsy and degenerative growths of both the vascular and nervous systems. Organic and other degenerations of cell and function are also present. The inhibitory and co-ordinating forces are perverted, and cell nutrition is impaired. These, together with various unknown changes, both pathological and psychological, are present in greater or less degree in such cases. The effect of the removal of one narcotic and the substitution of another or combination of others, must still farther injure the brain, and impair its vigor and power.

The brain centers may be anæsthesized, and respond very slowly to the action of other narcotics, or in exactly the opposite condition, and be extremely sensitive to certain drugs. This clinical experience is seen in certain cases where a small dose of chloral or atropia produces marked toxic effects, while double the dose is not noted in other cases.
This uncertainty of drug action is commonly observed. The use of bromides in large doses long continued is followed by melancholy and suicidal impulses; often these symptoms come on suddenly with low delirium, and disappear rapidly from appropriate treatment. Combinations of bromide and choral, cannabis-indica, hyoscyamine, and other narcotics, when given to inebriates to break up the alcoholic impulse or the irritations and neuralgias which follow, are often followed by varied delusions and deliriums, also hallucinations. These gradually wear away as the drug is withdrawn, and the strength of the patient improves.

The removal of alcohol in all cases brings to light complex states of brain anaemia, and marked degenerations not apparent before. To substitute other equally powerful drugs and expect from a cessation of acute symptoms that the effect is curative, is an error. Such drugs may be termed chemical restraints whose effects are unknown, because the brain state or condition they are supposed to relieve is unknown. The effects of strychnine and atropine will naturally vary widely on the damaged brains of these cases compared with others who have not suffered in this way. Neither of these remedies should ever be used except in the most guarded way, and long after the previous narcotics have been withdrawn. The attempt to find a specific in certain combinations of sedatives is like the search for perpetual motion or the philosopher's stone. The mental symptoms following the withdrawal of alcohol or opium, where other narcotics or remedies (which have a direct action on the brain) are given, are always the direct or indirect result of such drugs on an enfeebled brain. Drug restraint is always dangerous, and all experimentation on inebriates with such drugs is open to so many sources of error as to be practically worthless. Accurate study of mental symptoms of inebriates where other narcotics are given are equally worthless. The use of drugs as sedatives after the withdrawal of spirits should be limited and abandoned at the earliest moment. No one can determine how much injury will follow their
Editorial.

use; that such injury occurs is beyond all question. The drug specific delusion of the present, which is chemical restraint, affords abundant illustration of this fact. Practically and clinically, all drug restraint and use of narcotics or sedatives must be regarded as dangerous and uncertain in the treatment of inebriates.

MORAL OF CAPITAL PUNISHMENT IN INEBRIETY.

The Voice gives the ghastly record of twenty murders committed while under the influence of alcohol, in St. Louis. Sixteen of these cases were notoriously intoxicated at the time of the act, and four were drinking men, not apparently intoxicated while committing the crime. All were hung, and the moral of the story is made to turn on high license. The expense and loss to the city by these criminals and their acts, compared with the money received from license is, of course, insignificant. There is another moral to this story that buries all questions of prohibition and license beyond recognition. That society should tolerate and ignore the presence of these inebriate lunatics, permitting them to grow up and become more dangerous and destructive than the insane; allowing them full personal liberty to destroy themselves and others, based on the delusion of free will to abstain from spirits, and become well again; that when such persons violate laws, punish them as of sound mind and full capacity to do otherwise; finally, when by neglect and culpable ignorance on the part of the community, the inebriate has been born, bred, and trained to commit crime, he is punished by death. The legal force of vengeance to the criminal and intimidation to others, is the same old medieval superstition that exorcised devils and hung witches, and increased the very acts they sought to suppress. The moral of this is that St. Louis and every other city will have murders and all forms of atrocities, daily, with mathematical certainty, as long as the active causes are fostered and encouraged.

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the disease of the inebriate criminal, and place him under legal and medical control for an indefinite time, in a hospital where he can be trained back to mental and physical health, is the teaching of all scientific progress to-day.

To continue the present methods of punishment and suffering, for the purpose of forcing by fear a higher brain control and mentality, in jails and prisons, is to perpetuate a barbarism that is deplorable. The discussion of the boundary lines of vice, disease, and responsibility has no practical interest except as indications of the breaking up of old superstitions and theories of the brain and the so-called free will. The real questions are these: How long shall the present insane methods continue of destroying the criminal inebriate on the theory of vengeance, fear, and suffering? When will the new era begin of training and culture, of restoring the criminal, of lifting him into conditions of permanent health, or keeping him continually under care and surveillance, thus protecting him and saving society?

SYMPOSIUM ON THE TREATMENT OF INEBRIETY.

The weekly Times and Register of Philadelphia, Pa., edited by Dr. Waugh, has lately presented a very interesting résumé of the treatment of inebriety.

The first paper, by Dr. Moyer of Chicago, reviews the question of the vice origin of inebriety, and wisely concludes that it can not be settled at present. He doubts any specific treatment for this disease, or combination of drugs that will relieve the craving for alcohol, except they are intoxicants, or when exhibited in large doses produce marked toxic effects. While they may have some tonic and restorative effect, they may also produce profound disturbances in the nutrition of the nerve centers, which may lead to insanity, or other grave degenerations.

Dr. Mann of Brooklyn, N. Y., writes on the treatment of inebriety. He is emphatic as to the disease, and its cura-
bility in asylums under the care of experts, and cites cases to sustain his statements. All inebriates he believes are neurotics, and require the most careful care and treatment addressed to the entire organism, continued for a long time. No permanent cure will follow the use of any special drugs for a limited time. This disease is not a craving for spirits which can be cured by checking this alone.

Dr. Searcy of Tuscaloosa, Ala., writes of the treatment as the same as that of insanity. These cases are clearly "Border Liners" on the frontiers of insanity. They are cerebrasthenics who have grave conditions of exhaustion and nerve instability which cannot be reached by drugs or specifics so called. He asserts "that the inebriate is diseased before he begins drinking; his drinking in a majority of cases is the result of two cerebrasthenic symptoms: the first, a state of periodical malaise, general discomfort; the second, a weakened brain ability to hold to a purpose. His power of control and tenacity is lost in a measure." He believes that, like the insane, they need asylum treatment covering long periods of time.

Dr. Elliott of Mercer, Pa., discusses the Keely cure, denouncing it as very dangerous and doubtful. He believes the effects of the treatment very profound and degenerating for the general nervous system. He thinks the treatment the substitution of one poison for another, worse and more lasting than the first.

Dr. Baker of Baldwinville, Mass., writes: "The routine use of drugs is useless in the cure of inebriates. There is no specific for the treatment of inebriates. The real cure comes only from the most careful and skilled combination of every physical and moral means that will build up and restore the entire manhood of the patient.

Dr. Cheney of Boston, Mass., writes some thoughts on the Alcohol Disease. He believes prohibition the great factor of treatment, and doubts the disease question.

Dr. Gray of Laporte, Ind., urges that the inebriate be considered as a sick man, and his treatment should be on
broad scientific principles. He uses chloride of gold and sodium, and the nitrate of strychnine in combination with other remedies, and believes it has an excellent effect.

Dr. Mays of Philadelphia, Pa., urges that inebriety and pulmonary consumption are very closely allied and should receive the same constitutional treatment. Alcohol is always a nerve poison, and the lungs are likely to suffer seriously from its use. He has found strychnine and capsicum very valuable remedies.

Dr. Waugh, the editor, gives a good résumé of the common remedies used, and points out that no one has found gold of sufficient value to use as a remedy.

Then follows a number of excellent selections from leading journals and reputable authors, supporting the same general principles of disease and general constitutional treatment. By way of contrast and as a good illustration of the theories of half a century ago, an extract is given of Dr. Hawle's recent paper "On the Drink Habit." This symposium is a very pleasing outline of this subject as at present understood. Coming from general practitioners, it echoes the general experience of the profession, showing full accord with the scientific specialists in this field.

Dr. Waugh is to be congratulated on giving in his journal such clear outline views of the march of science in the different fields of rational medicine.

We regret to note that many excellent medical men are perplexed with the present epidemic delusion of specifics for the cure of inebriety. The hysterical dogmatism of the positive cure of incurables, and the brazen effrontery in which this idea is pressed on the public mind, are not the methods of truth and science. This set in the background of mystery, demanding faith alone in the assertions of the cured, is still farther removed from the scientific work of to-day. No truths of science have ever been discovered along such levels, and no real facts or truths have ever required such methods
Editorial.

or means to become known to the world. Falsehood, deception, and trickery are never essential to support facts, no matter how much the facts are opposed. No discoverer of great truths has urged them on the world for the pecuniary profit alone. It would be a sad reversion of science to go back to the natural bone setter, to the clairvoyant, to the traveling quack and Indian doctor, for new truths of medicine. It is equally a reversion to the credulous childhood of human thought to expect truth from the unknown by unknown methods and mercenary means. There are great new lands to be discovered in inebriety and its treatment, but the specific vaunter, the dogmatist, and the stock company invested in mystery, are not on the line of discovery. All such methods and means are limited and will die as error always dies when brought face to face with truth. All our numerous friends and correspondents will discover from a little reflection, that specifics for the cure of inebriety are beyond the range of scientific possibilities. The most advanced studies of medicine to-day give no possible encouragement to the hope that any drug or combination of drugs will be found to restore nerve force and repair cell and nerve injury in inebriety. As long as the condition called inebriety is so largely unknown, the impossibility of finding anything of the nature of a specific for its cure, is a certainty of science.

The Section of Neurology and Medical Jurisprudence of the American Medical Association at the Detroit meeting, discussed the following papers:

"The Law of Periodicity in Inebriety," by Dr. Crothers;
"Insanity following the Keely Treatment for Inebriety," Dr. Dewey of Illinois; "Additional Evidences of the Somatic Origin of Inebriety," Dr. Talbot of Chicago, Ill.; "On the Successful Management of the Alcohol Habit," by Dr. Hughes of St. Louis; "Recent Judicial Evolution as to Criminal Responsibility of Inebriates," Hon. Clark Bell, N.Y. city; "Delusions as to Locality a Symptom in Alcoholic
Dementia," Dr. Mason, Brooklyn, N. Y.; "Some Characteristics of the Human Mind, a Psychological Study," by Dr. Wright of Bellefontaine, Ohio; "Moral Insanity and Insane Morality," by Dr. Everts, College Hill, Ohio.

Other papers were read indirectly bearing on the question of inebriety.

The effect of alcohol on the teeth and maxillary bones was discussed in the dental section. The sanitary side of the drink question was taken up and excited a warm debate in the section on medicine. It is a pleasure to note that inebriety received more attention than ever this year in the national medical association. Medical men are at last realizing that it is a medical topic and not a moral question.

The Medical Temperance Association had an enthusiastic meeting. Dr. Davis, the president, gave an excellent address. Papers were read by Drs. Quimby and Crothers, and several important committees were entrusted with the gathering of statistics, and arrangements for the next meeting. A large number of new members joined and the old officers were re-elected, and beyond all doubt this society will be a very important adjunct to the national association.

Mr. Gustafson, in a very frank review of Frank Leslie's late symposium on moderate drinking, says: "This medical declaration, when scientifically and practically considered, brings little weight and light to the solution of the drink problem." He further states, very truly, "That the responsibility of careless authoritative utterance is little short of criminal." It is a curious fact that physicians not unfrequently assume a degree of knowledge of alcohol and its action based entirely on theories urged half a century ago.

The amount of beer and spirits consumed per capita in this country in 1891 was sixteen gallons. In 1840 the amount per capita was four gallons.
Clinical Notes and Comments.

Inebriety cures are "boomed" in America on the joint-stock principle with astonishing energy and temporary success. So long as the boom lasts, the secret remedy cures, the main being apparently the enthusiasm bred of credulity (or "faith") and association. A number of repentent drinkers come together in an institution where alcohol is withheld, anxious to break their bad habits, assured of cure if they will take the secret remedy, submit to hypodermic injections, and throw all that is left of manhood and hope into the effort to break the chains of the drink habit. These seem to be the chief elements in the fruitful successes which follow the creation of "joint-stock secret-cure establishments" for inebriety in America. The secret of the financial success is, of course, the affirmation of the peculiar virtues of the secret medicine of hypodermic injection. But the formula is probably of minor importance. It only furnishes the central point of the system; it is the punctum stigmatum, the starting point suggestive of faith and contributing to mental effort, and the occasion of the ceremonial fetish of each day which keeps hope alive and applies the spur to daily mental resolve. By itself and away from the influence of institution life and the magic of contagion among a crowd, the medicine or injections is by no means so effectual, although the charm of secrecy and the tradition of its success, help it sometimes to enable the believing and striving slave of alcohol to work out a reformation. Probably hypodermic injections of water would often be as effectual under like circumstances as the injections of strychnine and atropine, and the alleged precious metals which are the basis of more than one much-advertised success. Institutions for the curious combination of mental discipline and hypodermic secret injections and joint-stock finance are multiplied in America, and an attempt is now on foot to float a
similar institution in this country, subject, of course, to payment for the use of the "secret remedy." We have received from more than one source a preliminary prospectus, setting out figures which do not err on the side of modesty. But with the financial aspect of such an enterprise we have no more to do than with the prices at which other secret remedies have been "placed on the market." Medical men who respect their professional position have long since decided that they will, in this country, have nothing to do with secret formulae. The analysis of such remedies generally indicates that there is nothing novel in their composition, and that the main elements in such outbursts of passing success, as from time to time attend them, are to be found in the high hopes confidently raised, and the tendency which, especially in the psychological state of the inebriate, these hopes have to fulfill themselves; in the strength which the association in an institution gives to the many to form new habits and discard old abuses; and in the revived health and mental power which come from withdrawal from the trials, temptations, and degradation of the city life of a victim to drink. Their combination with a secret medication of doubtful value is the factor which will deter the British profession from joining in any way with the ingenious financiers who propose to transplant this marketable "notion" to this side of the Atlantic.—British Medical Journal.

THE CARE OF INEBRIATES.

At a recent conference of asylum physicians, held at Weimar, Professor Jolly, the director of the wards for the insane in the Charité Hospital, Berlin, opened a discussion on the legislation necessary for inebriates. Discussing Section 18 of the new bill now before the German parliament, which proposes to enact that habitual drunkards shall be shut up until cured, the Professor insists that the administration of this proviso should be committed to medical men and not to magistrates only. He says that in the asylums for inebriates
hitherto existing, most of which owe their foundation to religious bodies. Medical direction has been almost entirely want- ing. This did not signify much so long as the inmates were voluntary recluses, and could terminate their confinement when they pleased, but persons who may be put under enforced restraint for months or years ought, in Prof. Jolly's opinion, to be treated as patients requiring constant medical supervision and curative methods, as to which few general rules can be laid down, seeing that each case must be dealt with according to the nature and antecedents of the individual. The professor contends that drunkenness should not be regarded as a punishable offence, but should be viewed as an infirmity. The retreat for inebriates should, he says, be no prison, but something between a hospital and a lunatic asylum. It should be governed by medical men, and persons should only be consigned to it by doctors' certificates. These propositions were embodied in three resolutions and passed.

—Hospital Gazette.

THE DIAGNOSIS OF DRUNKENNESS.

In a lecture on "Neurological Fragments," Dr. J. Hughs- lings Jackson observes that, for purposes of practice, we have to study alcoholic intoxication carefully. It is well known that men fatally ill from cerebral lesions are sometimes locked up in police cells for drunkenness. It needs insisting on that there may be from grave intra-cranial lesions, soon causing death, not only insensibility, but manner and conduct like that of a person partly intoxicated by alcohol. The author and Dr. Stephen Mackenzie have recorded a fatal case of meningeal hemorrhage, producing a condition which, without the history of onset, would—certainly by the non- medical—have been taken for drunkenness. The patient was violent, swore, and, what is more striking, there was a purposive action; the patient got the chamber utensil from under his bed and used it. At the London Hospital there are, occasionally, under care, men who, after sucking raw spirits out of a cask, are seemingly as deeply comatose as
ON CONCEPTION DURING INTOXICATION.—Some authors believe that the conception during the state of alcoholic intoxication often produces idiocy, etc., in the offspring. I think this is an open problem. For scientifically it is not to be appointed that only that specific coitus, committed in a state of alcoholic intoxication, was cause of the conception. Above this the spermatozooids are substantial cells, already separated from the paternal organism and present in the therefore destined ways and depository (vesicula seminalis); this may be said also for the maternal cell, the ovulum, going as a loose individual its way, since how long? The moment of the congressus of the parents is surely not equivalent to that of the coupling of both the grains: the conception sensu strictior; it is simply unknown when this takes place. That idiotic or otherwise defect children are born, when every or nearly every congressus happened in an-intoxicated state of one or both of the parents, is comprehensible, but in that case the child is not idiotic because that specific conception, from which his existence is the consequence, happened during or immediately after an (acute) alcoholic intoxication, but
because one or both the parents are chronic alcoholics. That the child becomes idiotic, etc., while only one congressus took place and moreover from otherwise temperate individuals, by no means belonging to the famille neuropathique, and who were only at that time intoxicated, goes at least as for man above every scientific evidence.—Dr. Pierre F. Spaine.

Apeldoorn, Holland, 1892.

Germany's Inebriety. — The New York Tribune gives the following item:

"Berlin, June 9.—The Reichstag next week will debate the bill for the repression of drunkenness. The Bundesrat has approved the measure as it was originated by Emperor William, only modifying the severity of the penalties to be imposed upon offending public-house keepers. The ministers, it is known, consider the proposals with disfavor, and the members of the Bundesrat express doubt as to their practical value. However, the Emperor, having set his heart upon trying the effect of legislative restrictions upon drinking, has obtained from them a hesitating assent. The fate of the measure in the Reichstag is doubtful. The Conservatives and National Liberals will support the bill, while the Freisinnige and Socialist parties will oppose it, mainly because its provisions will invest the police authorities with exceptional powers of interference in the private life of citizens. The clause of the measure which has caused the most widespread objection empowers the officials to prosecute all persons denounced to them as habitual drunkards, and to cause them to be imprisoned until they shall have obtained a medical certificate stating that they have been cured of the liquor habit. Their property also may be seized and applied to the support of their families and of themselves during their imprisonment.

"When the bill was before the Bundesrat Chancellor Landmann of Bavaria induced that body to discriminate between the various forms of drunkenness. It was found prac-
tically impossible, however, to classify drinkers of comparatively harmless beer and wine apart from the drunkards who are poisoning themselves with potato spirits. Prosecutions, under the bill, will follow when two witnesses of the offense shall denounce the culprit, and should the measure ever come into active operation in this city there will be a mighty swarm of convictions.

"The Center party is divided upon the question of the wisdom of the measure, the majority leaning toward the bill as moral legislation, approved by the Vatican. The result depends upon the Centrists, and therefore the bill is likely to pass."

The day is passed when upon dietetic and medicinal grounds there is any indispensable call for the moderate or habitual use of alcoholic beverages. In the midst of the various alcohols and of all the manufactured and concocted mixtures which are now sold, as if they were the real and pure products of the grape or of alcoholic distillation, we have better-known tonics and nutrients which effectually take their place, except to those who wish them as pleasure-giving drinks.—Dr. Hunt.

The fourth international congress for the study of the abuse of alcohol will be opened on Sept. 8, 1892, at the Hague. The following subjects will be discussed: Alcoholism from a moral, hygienic, and medical point of view; the preventive and educational means employed to correct the abuse of spirituous liquors (societies, meetings, the press, popular entertainments). The coercive means available by the state and the community to overcome drunkenness.

A woman was brought before the police court of Clerkenwell, London, for intoxication. It was found by examination of the records that she had been arrested, one hundred and fifty-one times for the same offense within eight years. The judge declared that was a most disgraceful state of things—the attempt to cure inebriates by that means.
Clinical Notes and Comments.

Some very interesting statistics occur in the report of Dalrymple Home for 1891. Sixty-eight patients were under treatment during the year. The total number of cases admitted since its opening eight years ago have been two hundred and sixty-six. Of this number 118 remained three months under treatment, 85 remained six months, 15 nine months, and 68 remaining twelve months. The largest number, 144, were between thirty and forty years of age. One hundred and thirteen had a history of inebriety in their families and grandparents. Twenty-three had insanity in the family. Tobacco was used by 234 of this number. One hundred and seventy-eight were regular drinkers, and eighty-six periodical cases. The average time addicted was nine years. The average length of time of treatment was six months. Eighty-nine of this number were reported to be doing well after from one to eight years. Twenty-one were reported as much improved, three became insane, and seventeen died. The distinguished superintendent, Dr. Branthwaite, remains in charge, and Dr. Kerr as consulting physician.

The Sanitarium at Battle Creek, Mich., is one of the most palatial hospitals in this country. The building, appliances, and every appointment are of the very best class, and far superior to any Eastern hospital in many respects. The superintendent, Dr. Kellogg, is a man of great energy and skill, and no invalid could find a better place for rest and treatment.

Prescribe Schieffelin & Co.'s Phenacetine and Sulfonal. They are the best and most reliable preparations in the market.

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Try the Bromide Lithia Water of Georgia. It is a great remedy for nervousness and indigestion.

The Syrup of Hypophosphites, by Fellows, should be used in all cases of brain and nerve exhaustion. No other remedy approaches it in practical value.

Antikamnia has proved valuable in our hands as a safe uniform narcotic in which there is no danger of creating an addiction.

Bromidia excels any other form of this drug and will be found exceedingly valuable in many cases.

Parke, Davis & Co. created a sensation among the doctors at the meeting of the American Medical Association. The extent of their works, and the thoroughly scientific character of their preparations, were a source of wonder to all. The reliability and accuracy of all their preparations seemed assured beyond all doubt.

Spaulding's Home Gymnasium is the most perfect, simple and complete apparatus made. See advertisement.

Warner's Bromo-Potash is peculiarly a summer drink for neurotics and invalids and is without a rival as both a medicine and beverage. Cases of inebriety have been cured by this means alone.
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In certain forms of dyspepsia it acts as a specific.

Dr. T. G. Comstock, of the Good Samaritan Hospital, St. Louis, says: "For some years we have used it in a variety of derangements characterized by debility, as also in chronic gastric ailments. It is approved of, unanimously, by the medical staff of this hospital."

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INCORPORATED 1868.

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High license, or low license, or no license, temperance societies, church efforts, and all the moral appliances of the century are powerless to change it. Recognize the inebriate as diseased and incapable of controlling his acts, and demand that he come under restraint and be forced to live a regular sanitary life, and the alcoholic question will take care of itself. Take away the demand for spirits and the saloons will disappear, and the higher moral of prevention will come into practical use.

INEBRIETY AND CRIME.

The pressure of the great new truth that inebriety is a disease is felt in the higher courts of England, and Sir Henry James writes an opinion on this topic in a letter to the London Times. The following conclusions are stated as principles to govern the adjudication of such cases:

"1. In determining the legal character of the offense committed, drunkenness may be taken into account where it has established a condition of positive and well-defined insanity.

"2. If it produces a sudden outbreak of passion occasioning the commission of crime under circumstances which, in the case of a sober person, would reduce the offense of murder to manslaughter.

"3. In the case of minor assaults and acts of violence it can never form any legal answer to the charge preferred, but it may aggravate or mitigate the character of the act committed—probably aggravate it.

"4. As to the effect that should be given to drunkenness when determining the amount of punishment to be inflicted, no general rule can be laid down. Its existence may be considered, and may tend either in the direction of increasing or diminishing the punishment."

This is a sad confusion of law and theory, and an attempt to find some half-way ground on which judges and moralists can unite. The theory that inebriety which has not taken
on some form of well-defined insanity is culpable and punishable is contradicted by the history of every inebriate. The second conclusion assumes that certain associate conditions of crime committed while under the influence of alcohol should determine the degree of punishment. The question arises, Who can draw these distinctions and say that in such and such conditions it was a criminal act, and in others it was doubtful? No present psychological knowledge has yet pointed out the boundary lands where the motives and physical impulses of acts originate, or how far the consequences are to be understood and measured.

The third conclusion that inebriety in all minor acts is no excuse, and instead of mitigating should rather aggravate the offense, is so far below the scientific intelligence and observation of the present day as to be unworthy of notice. The last statement is equally confessing. The real facts so often stated in this journal, and studied in many admirable papers by Drs. Wright, Mason, Day, and others, may be restated as follows.

The use of alcohol in any degree preceding crime establishes the fact of abnormal brain function, abnormal conceptions, and consciousness of the nature of acts and consequences. The more spirits taken at and before the commission of crime, and the use of spirits for periods anterior to the act in question, are strong confirmatory facts of the inability of the person to act sanely and normally.

Crimes committed by such persons, with the history of alcoholic poisoning, are to be judged from different bases. The doubtful question of vengeance and suffering as punishment for transgression of law should not be considered. The magnitude and nature of the crime should be simply taken as evidence of the brain failure and disease of the accused, also of his incompetency to enjoy the freedom of a healthy man. The disposition of these cases should be in work-house hospitals, for an indefinite time depending on restoration and health. The confusion of theory and judgment of courts will disappear when these facts are understood. To recognize