maniac, manifesting cunning and judgment in concealing her real condition.

As in opium cases, each one presents different phases and has to be judged by the facts peculiar to it. Crimes of such cases often come from concealed hallucinations, particularly of threatening voices. The act in its sudden impulsiveness indicates some condition of aural or visual disturbance. One very prominent symptom of mental derangement is loquaciousness, and uncertainty and indecisiveness of thought. Correspondence never comes to an end, one letter suggests another, and so on indefinitely. The same feature is noted in conversation; continuous, random, vague thoughts and opinions, all tinged with delusions of vigor and strength, and boasting of what they have or can do.

The fact that cocain is used medico-legally is presumption of general brain debility and various degrees of irresponsibility. In a disputed case, the same thorough history should be obtained of the heredity, previous health and present condition as in opium cases. This, in connection with the fact that cocain used continuously rapidly develops mental confusion and intellectual disorders, making it impossible to understand the nature and character of the acts and conduct, would go far toward proving irresponsibility in a given case.

A number of drugs have recently come into medico-legal medicine in similar questions. It may be stated as a general fact that all narcotics or drugs which may possibly cause intoxication are poisons. The brain both functionally and in its organic structure is injured, its integrity is impaired. Hence any form of drug addiction is open to the suspicion and most reasonable certainty of lowered consciousness of right and wrong, and general incapacity of reason. These drugs are taken for their effects, which give relief in most cases. Alcohol and opium are the most prominent. Cocain, chloral, chloroform, ether, camphor, belladonna and others less prominent are used in the same way. The effects are intoxications or states of poisoning in which the brain is exalted, depressed, narcotized and changed, and precipitated into states of partial insanity.

The use of these drugs may be a symptom and point to some degeneration and arrested development, attended with irritation and exhaustion for which these drugs bring relief. In all cases they have no food element to build up the brain, but by irritation and depression break up and tear down the higher processes of cell and brain activity. When such cases come into court and the soundness and unsoundness of certain acts are to be examined, then these general facts appear and form the basis for a wider and more exhaustive study.

The medical witness should never try to draw dividing lines as to where mental health and disease join. He should assume justly that from certain causes certain effects are always to be expected. That continuous use of drugs for their effects is always injurious, and no one can be rational and sound who poisons his brain with narcotics. Also, that each case is a law to itself, and from the facts and conditions clear, general conclusions can be affirmed that will bear the test of examination and study. Forensically, the question of responsibility determines the measure of punishment, and here the judgment of the physician should be clear, independent and unbiased.

THE POST-ACTIVE TREATMENT OF NARCOTIC HABITUÉS.

Read in the Section on Neurology and Medical Jurisprudence at the Forty-sixth Annual Meeting of the American Medical Association, at Baltimore, Md., May 7-10, 1895.

J. B. MATTISON, M.D.

MEDICAL DIRECTOR BROOKLYN HOME FOR HABITUÉS.
BROOKLYN.

Very largely among the laity, and, to no small extent, in the profession, an opinion obtains that narcotic inebriety is a cureless disease. My experience, covering a quarter century and compassing the history and treatment of many hundred cases, has convinced me that this opinion is a mistaken one, and in two papers, "The Curability of Opium Addiction," *Journal of Inebriety*, 1885, and "The Curability of Narcotic Inebriety," *Cleveland Medical Journal*, 1893, cases were cited in proof.

Years ago, the opinion was advanced that 30 per cent. of proper cases, properly treated, resulted in permanent recovery. I am no less optimistic now than then, and when the value of a certain post-active régime in the treatment of the disease is fully appreciated, and is insisted on and persisted in as its importance demands, my optimism will assume more generous proportions, and a blot on the scutcheon of professional success along this line will be largely removed.

It is not surprising that this non-hopeful feeling concerning a continued good getting on after quitting a long-used narcotic should so largely be held. The common idea that the habitual user of opium, chloral or cocain is simply the victim of his own vicious indulgence, implies a damaged morale on the part of the patient that militates strongly against any lasting good from a strictly therapeutic endeavor. The somatic factor in causation being denied; the crippled condition being deemed due to impaired psychique rather than physique; and these unfortunates being looked upon as moral lepers, who, having knowingly "sown the wind" must "reap the whirlwind," that measure of sympathetic succor which would bring to them what the resources of modern medicine can surely extend is withheld them, and they are given over by their pessimistic commiserators to a bondage binding for life.

I have held and still hold that this largely prevalent idea as to the etiology of narcotic inebriety—in the immense majority of patients—among the better class (and I assert and insist upon well-marked class distinction in these cases) is a mistaken one, *vide* "The Ethics of Opium Habitués," two papers, *Brooklyn Medical Journal* and *Medical and Surgical Reporter*, 1888; that a physical necessity, not a moral obliquity, is the great genetic factor, and that a full recognition of this fact, in both active and post-active treatment of this disease is absolutely essential to a large and lasting success. And, *en passant*, it is a pleasure to express my belief that the trend of professional opinion is growing along this line, as regards both alcoholism and morphinism, the two forms of inebriety that to-day most menace private and public weal.

The advance of scientific medicine during the last half decade, in the treatment of the last-named neurosis, has been such as to warrant a statement in 1893 before the Pan-American Medical Congress that, at no previous time had it been so simple, so

satisfactory and so successful. Enlarged experience has not lessened this opinion; in fact, the modern and humane treatment of the morphin disease, which so specially attaches to the Mattison method, is securing increased and increasing recognition, appreciation and application; all of which I make bold to say—at the risk of being deemed an egotist—the merit of the method unquestionably deserves.

But while we have reason to felicitate ourselves on therapeutic progress in this field, touching the question of acute cure we are still face to face with the unsettled, because largely unsuccessful, question of what may be termed chronic cure. To the solving of this problem our best effort may well be directed, and it is the purpose of this paper to present certain facts, the outcome of an experience not small, and to commend such details of post-active treatment as will tend in most measure to secure a lasting success.

As stated in a paper, "Morphinism in Medical Men," presented this ASSOCIATION last year, the majority of those who honor me with their care belong to our profession. As fellow-members of a noble guild it is quite natural that we who have not fallen under the poppy blight should feel a more than common concern in their well-being; and, taking them as a class—though the same danger pertains to most ex-habitués—it may be said that three things imperil the permanence of their cure. They are overwork, rum and tobacco.

In laying special stress on these, it need scarcely be said that the full repair of all health infractions—brawn or brain—that stood in causative relation to the initial narcotic using, is a *sine qua non* in doing permanent good. But granting that full repair, and that nothing remains save the entail of a narcotic abuse, many cases present in which the risk of failure pertains to one or other or all of the three causes cited.

Regarding the first of these, overwork, one can easily understand why the varied and exacting demands of an active medical life should make it take first rank among causes effecting an untoward result. And in direct ratio to a premature resuming of the doctor's toil, is the peril of his again falling victim to the poppy need.

It may seem strange that a medical man, who, above all others, should know the disturbing effect of a long-used narcotic on functional well-being of mind and body, does not appreciate the danger of too soon resuming work. Such, however, is the fact. Of course, cases occur where, from conditions beyond control, despite a full realization of this risk it must needs be taken; but too often the lack of good judgment in not recognizing the great truth that a nervous system, battered and bruised for years by narcotic excess, will not in as many weeks or months regain its pristine status, is the main reason for failure in the good work—be it never so well begun. History has repeated itself so often along this line that I emphasize this danger, and warn against it with all the energy at my command.

Alcohol lessens greatly the hope of permanent cure. *No ex-narcotic habituê is safe who uses rum in any form.* The question of kind or quality—mistakenly held by some—is of no import. Pure or impure, beer or brandy, wine or whisky, the risk impends, for it is the alcohol that makes the mischief. Years ago that opinion was reached and each year has but added to this belief. And this prompts me to say that I think the use of alcoholic stimulants in

the active treatment of narcotic inebriety is needless and dangerous. Needless, because success can be secured without them, and dangerous—doubly so—because they retard acute recovery and tend to create a need for continued taking which makes much less hopeful the outlook for continuous good getting on. I am well aware that the opposite idea, both in active and post-active treatment, is held by some—notably among Germans—but, guided by the lamp of my own experience, I am bound to assert my opinion absolutely and everlastingly.

Tobacco endangers recovery. This belief, though more recently arrived at, has become just as fixed as that regarding alcohol; so much so, in fact, that no applicant for my care is accepted unless he or she will agree to abandon the weed. This, it may be, is counter to the common view, but testimony and observation, reasoning and experience have brought me to this precept and practice.

If it be asked why such a radical idea governs my counsel and care in these cases, one broad, general answer is given—this: Large and enlarging experience has convinced me, beyond all question, that the use of alcohol and tobacco by convalescents of this class tends, by lowering nerve tone, special and general, to prevent that return to pristine integrity of health which makes it most largely proof against recurrence of a narcotic need.

While insisting on the eminent importance of this triple abstaining during the post-active régime, care must be taken to continue all those factors which make for good during the early abstinence time. It goes without saying that favoring environment, freedom from worry, care along secretory and excretory lines, and a tonic régime, all play a large part in repairing ravages of narcotic abuse, and must be continued, if need be, for months or years; and when to these are added the special causes that make less vulnerable a post-narcotic state, we shall surely note a lasting betterment in patients' future and in professional good repute.

Prospect Place, near Prospect Park.

REFLEX NEUROSES.

Read in the Section on Neurology and Medical Jurisprudence, at the Forty-sixth Annual Meeting of the American Medical Association, at Baltimore, Md., May 7-10, 1895.

BY JAMES K. KING, M.D., PH.D.

MEDICAL SUPERINTENDENT, GLEN SPRINGS SANITARIUM.
WATKINS, N. Y.

The intricate and complex nature of reflex nervous diseases and the difficulties in the way of studying any pathologic changes that may exist, make them the most complicated of any we have to treat. The long, patient and exhaustive line of experiments, tending to unfold the reflex nerve phenomena, has thrown much light on this subject. You are all familiar with these scientific investigations. When we pass from the physiologic to the pathologic field of investigation we find it still more unfruitful in clearing up our doubts, just as all morbid processes are more difficult to unravel than purely physiologic ones.

When the reflex stimulation is increased, there is an increase of the peripheral irritation somewhere, but where, is the difficult question to settle. Reflex irritation means often an increase in the irritability of the afferent or efferent tract. It may mean an increased irritability of the gray matter of the brain