

banished the "sweet restorer." Many chloral inebriates were found among the large and—at that time more than now—enlarging number of morphine habitués who were impelled to its use by the inroads of the poppy along insomnic lines.

So, too, among rum-takers; the marvellous power of chloral, in wooing the drowsy god, after a big debauch, led to its use—with or without medical counsel—that, at times, could only be called reckless, and that again and again brought the long last sleep.

Besides the use of confirmed addiction from the uncareful use of chloral, it has a pernicious power *per se* that is unique—greater than morphine, though the latter is more snareful and more difficult to cure. Regarding this effect, along various lines—psychic and somatic, no more complete picture has ever been presented than that by the writer, eleven years ago, in a paper—"Chloral Inebriety"—read before the Medical Society of the County of Kings, April 15th, 1879 (at command of any one who may desire and will write for a copy), which contains a striking case, akin to the one presented in this paper, noting a special effect of chloral, and mainly peculiar to that drug.

Quoting from that paper:—"I refer to peculiar pains in the limbs, simulating neuralgia or rheumatism, yet unlike the former, as they are not limited to the course of the nerves, and differing from the latter in not being exactly *in* the joints, but rather *girding* the limbs just above or below them, without pain or pressure, and unaggravated by movement. Their diagnostic import is that they may be mistaken for the diseases they resemble; and their origin being unsuspected, prove obstinate to treatment."

Similar pains are sometimes noted in chronic chloroform-takers. Anstie thought the latter fact afforded some support to the theory that chloral acts by evolving chloroform in the blood. He expressed the opinion that some cases of supposed rheumatic or neuralgic pain would be found on careful inquiry to be due to chloral taking, and cited the following case in which this symptom was prominent:

A. B., physician, began the use of chloral February 1st, 1873, in 30 grain doses, to procure sleep when kept awake by great anxiety. In two months noticed

inflamed and weakened eyes, with scalding tears. Continued the drug, however, sometimes increasing the dose and repeating it. From April to August the usual amount taken was one drachm; in the latter month he commenced using it during the day, one to three times. About December 1st he began to realize the amount he was daily taking, and found it half an ounce, sometimes more. He now began to complain of severe general pains, especially about the joints, which grew worse in the moist air of London; there was no tenderness, and they were not increased by motion. Chloral did not relieve them, except when it put him to sleep. Soon after this he made a mistake in his dose, using from a stronger solution, which brought on the pains with frightful severity, and Dr. Anstie was summoned. He found him with suffused eyes, haggard features, sleepless, peculiar, broken speech, partial paraplegia, loss of co-ordination, and excessive joint pains. An examination disclosed that he had taken more than an ounce of chloral the preceding day. It was at once withdrawn. Cannabis indica was used to relieve the nervous disturbance, tonics given, and under this treatment he recovered.

The following case under our care is of interest:

Mrs. A., æt. 37; began to suffer from insomnia sixteen years ago, which persisted in varying degree until Dec., 1889, when a severe injury, confining her to bed for fourteen weeks, increased this wakeful condition until it became essential to compel sleep. Chloral secured it. The initial dose was 15 grains, at bedtime. This amount sufficed for 14 months, when she began to suffer severe limb pains—not increased by pressure or movement—which soon resulted in a sharp and prolonged bout of hysteria and nervous prostration with increased agrypnia. The chloral dose was doubled, but without effect. During several weeks various hypnotics were tried, with ill success; her physician declared, "In the endeavor to give her sleep I almost exhausted the Pharmacopœia." Finally hyoscyamine was given. This broke the insomnia, but for some reason, after a week's use, recourse was again had to chloral, and this was continued until a week before coming to us, when a new medical adviser decreased it and gave hyoscyamus, with the result of much lessened pain but little better sleep.

At time of placing herself under our care, Mrs. A. was weak, sleepless, anorexic, and greatly depressed; her physician wrote, "This chloral taking, with the shock from the horrible injury she received, has almost entirely wrecked