

now unscrewed, and the half-cylinder fastened on to it by two screws—one at the needle-point, the other near the handle of the instrument. This is now screwed down moderately, so as to compress the wall of the abdomen and of the inguinal canal between it and the cylinder within the canal. If thought desirable, the invaginated skin can be denuded by acids. The apparatus is left on a number of days, until sufficient adhesive inflammation has taken place. This operation has met with some success.

M. Leroy d'Etoile has proposed an ingenious method for a slow, radical cure, by having a short invaginating plug fastened to a truss, which latter will keep up a constant, spring pressure on the canal.

That of *M. Sottcau* has many points of resemblance to Wurzer's operation, only it is more complicated. He drives needles through the invagination in the inguinal canal, from without inwards, and from within outwards, and, fastening blocks of wood over the points, compresses the skin.

According to Mr. Wood, these operations of invagination have failed for three reasons:—

First; because the skin of the scrotum tends to draw out the invagination by its weight and elasticity.

Second; they dilate the rings, and make them more patulous than before.

Third; they fail to act on the posterior wall of the canal.*

AN ARSENIC-EATER.

[Read before the Medical Society of Quebec, Canada East, and communicated for the Boston Medical and Surgical Journal.]

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DURING the winter of 1864–65, there appeared in the *Quebec Gazette* a series of articles under the heading of "Arsenic vs. Consumption," in which the writer maintained that arsenic was a powerful remedy against pulmonary consumption, and stated that he himself had used it as such, with good effect, for many years, and was still in the habit of doing so from time to time.

Wishing to elucidate more fully what appeared to me an important fact, I waited on the Editor of the *Gazette*, and requested him to put me in communication with the writer. He promised to do so, and a few days after, a person called on me, assuring me that he would readily give me all the information I required.

We proceeded to my laboratory in the Laval University, and on my asking him what quantities he usually took, he said he knew little about doctors' weights and measures, but that he sometimes took

* NOTE.—We are indebted for the historical part of this paper, to a very great degree, to Dr. Bryant's Boylston Prize Essay, on the Radical Cure of Hernia, for 1847.

larger and sometimes *minor* doses. He then, with a small silver coin, scooped out a from a bottle of pure arsenious acid what he termed a large dose, and which, on weighing, I found to contain somewhat over three grains; then a minor dose, weighing about a grain and a half. B. swallowed the last dose in my presence. I afterwards weighed another half grain, which he mingled with the tobacco that he was smoking, filling the laboratory with a strong odor of garlic. He remained with me three hours, after which he departed in perfect health, and without having shown the least symptom of disorder.

I lost sight of B. for some time, when, on the 26th of April last, I met him casually, and asked him if he still used arsenic. He answered by taking from a paper in his pocket several grains of arsenious acid, and swallowing it without hesitation. I requested him to call upon me the next day at two in the afternoon; he did so, and we proceeded to my laboratory. I shall now take the liberty of transcribing, almost *verbatim*, the notes which I took during the course of the experiments.

April 27th.—At twenty minutes to 3, P.M., B. requested me to weigh him what I considered a reasonable dose. I accordingly, by aid of a small balance, the precision of which I had previously ascertained, weighed *two grains* of arsenious acid, chemically pure, and taken from my own laboratory. I presented him the dose. "Is that all?" said he; "you may treble the dose." Fearing to add too large a dose, I added but two more grains. B. then took the *four grains*, placed them on his tongue and swallowed them. He immediately afterwards lighted his pipe and conversed freely. I watched him constantly, to assure myself that he did not reject the poison.

3, P.M.—I asked B. if he felt any unusual symptoms. He answered that the dose had produced on him no more effect than if he had taken a glass of cold water. At his own request, I weighed another grain, which he mingled with the tobacco in his pipe, and smoked it.

3.30.—B. has not ceased conversing since he took the dose. He spoke chiefly on the wonderful properties of arsenic, related what he had heard said of the Chinese on this point, and explained his theories on the mode of action of this medicine. He alternately sits and walks, and smokes unceasingly.

3.45.—He again assures me that he does not feel the least unusual symptom; he expresses a wish to take a glass of wine. Accordingly, I ask him to accompany me to a hotel, and at 4 o'clock B. took a glass of port wine and lighted a cigar.

At twenty minutes to five, exactly two hours after he had taken the arsenic, I told B. that he was at liberty to go away, on condition that he should call on me in a few hours, and consent to repeat the experiment another day. "Better do it at once," said he; "at any rate, I shall be at your house at half past six, when I will take a

second dose and stay with you until midnight, if you wish it." I accepted his offer, and we parted.

At half past six, B. came to my house, as well as ever. During the interval he had gone to the Lower Town, to several places, and had not yet taken supper. "Hence," said he, "as I have come to remain with you till midnight, you must give me supper." I told him that after some reflection, I did not like to assume the responsibility of administering him any more of the poison that day; that we would resume the experiment another day. B. remained with me till 7½, and left in perfect health.

28th.—At 10½ A.M., I saw B. at his work. He was in high spirits, and assured me that he had not experienced the slightest inconvenience from the dose of the previous day. I again saw him at 1, P.M.; he was just dining very heartily, and to my inquiries whether he had had any evacuation from his bowels, he replied that he had not since ten o'clock the preceding morning, viz., four hours and forty minutes before he took the four grains of arsenic.

On the 27th (the day of the experiment), B. had breakfasted at 9½ A.M., on toast and chocolate, and at noon had taken a plate of pea-soup.

History of B.—Age, 47; temperament, lymphatic; good constitution; hair and whiskers reddish, both abundant—the latter sprinkled with gray. An Englishman by birth, B. has been in Canada since 1837.

B. has had three severe illnesses during his life; typhus (?) in 1839, an attack of cholera in 1849, and later *pulmonary consumption* (?). Besides these, he has always been subject to what he calls bilious headaches. He lives regularly, but was formerly addicted to an inordinate use of strong liquors. His appetite is good; nevertheless, he has never been a great eater. His complexion (notwithstanding the popular opinion as to the effect of arsenic) is not clearer than ordinary. He has frequently made use of emetics and purgatives, which have produced on him the same effect as on others; he even asserts that he is very susceptible to the action of the latter. He takes a great deal of exercise, and smokes inordinately.

Phthisis pulmonalis is hereditary in his family. His father died of it at the age of 39. Four of his paternal uncles and several of his cousins have died of the same disease. His mother, however, died at a very advanced age, and there have been no symptoms of phthisis in her family.

In the year 1853 or 1854, B. thought he was attacked with consumption. He coughed painfully, was hoarse, became emaciated, and had profuse night-sweats. He one day read an article in an old periodical, in which arsenic was suggested as an excellent remedy for consumption, and determined to make a trial of it. He accordingly bought two ounces of white arsenic, and immediately began to use it, without having the least idea of the quantity to be taken. The doses which he then used were as large as those he now takes.

When he first began to take arsenic, he used it six or eight weeks consecutively without any interval. Sometimes he took it five or six times each day; at other times three times a day, and sometimes only once or twice. He consumed the two ounces which he had bought in those six or eight weeks. He always took the first dose in the morning, about two hours before breakfast. At first, the morning doses had the effect of clearing his throat of a certain quantity of mucus, after expectorating which he usually felt weakness accompanied by cold perspiration—sensations, according to him, similar to those felt by a person who has just vomited. But the arsenic, he says, never made him vomit, nor even created nausea. While in this state, he generally dozed for a few minutes, and then smoked a pipe, mingling another dose of arsenic with the tobacco. In less than five minutes all these symptoms disappeared. B. does not now experience the same feeling after the use of arsenic. He is firmly convinced that he should have died of consumption long since, had he not taken to the use of arsenic. He says that arsenic never caused any relaxation of his bowels.

B. is married and has a family of six children, all healthy; the eldest is 29 years old, the youngest 11.

B. is intelligent, and has received a good education. "I have read," said he to me, "all that the doctors say about arsenic, and feel convinced that they know nothing at all about the matter." He would not, on any consideration, take arsenic in a state of solution. His reading has made him familiar with the constitutional symptoms produced by arsenic, which he declares never to have experienced in the slightest degree, even after six weeks constant use of the doses.

He withholds his name in connection with these experiments, lest, as he says, he might be looked on as a walking curiosity, and has consented to them simply from a desire to render some service to science.

He places greater confidence in the arsenic he smokes than in that which he eats; and whenever he has a cold, he takes or smokes arsenic, which he always carries with him as a cure. He refrains from drinking water for some time after eating arsenic, but takes willingly a glass of wine or of beer.

His general health is good, never suffers from pains in the stomach or bowels, which are regular in their action.

Quebec, June 17th, 1866.

The Degree of D.D.S.—The number of graduates at the Pennsylvania College of Dental Surgery this spring, was 36; at the Philadelphia Dental College 15, and at the Baltimore College of Dental Surgery 10, among whom three were from New England.