

On Thursday, February 13th, I was called in haste to come and see a patient—a woman aged forty-four, admitted the previous day with bronchitis and emphysema—to whom a nurse had by mistake administered strong carbolic acid instead of a dose of senna. I found the patient sitting up in bed, labouring under great dyspnoea, and apparently suffering acute pain. She was unable to speak, but kept her hands firmly pressed over the region of the sternum, as if to indicate that there was the seat of pain. She was very restless, and groaned continuously. The breath smelt strongly of carbolic acid, and the interior of the mouth and lips was charred white, and there was a brown scar on the chin. The pulse was quick (140 in the minute) and feeble. An emetic of sulphate of zinc mixed with olive oil was immediately administered, which she swallowed with great difficulty, and I afterwards endeavoured to get her to drink warm water mixed with oil, but without success, as the power of deglutition became lost. No vomiting ensued, and she soon sank into a state of stupor, the breathing became slow and stertorous, and the pulse excessively feeble. Dr. Barclay now saw the patient, and the stomach-pump was introduced by the house-surgeon, and warm water injected. She gradually sank, and died comatose fifty minutes after taking the poison. The amount of poison taken was not known at the time, but it was afterwards ascertained to have been nearly a fluid ounce of the impure commercial carbolic acid.

The post-mortem examination was made twenty-eight hours after death. There was a brown stain on the chin extending to the angle of the mouth. Old pleural adhesions existed on both sides. The left lung was greatly congested; the right emphysematous; the bronchial mucous membrane of both was injected, and the tubes full of frothy mucus. The left ventricle of the heart was strongly contracted; the right partly so; the organ was natural. Larynx and trachea natural. The mucous membrane of the mouth, œsophagus, and stomach was converted into a soft whitish material, giving the organ very much the appearance of being covered with a thin layer of white lead. This easily peeled off, exposing a bright-red surface beneath. These appearances ceased at the pylorus. The stomach was strongly corrugated, and contained about two ounces of brown fluid smelling powerfully of carbolic acid. There were a few congested patches in the duodenum. The ventricles of the brain contained about an ounce of clear fluid; the organ was otherwise natural. All the other viscera were natural. The blood was uniformly fluid, and on exposure became of a bright-red colour. No smell of carbolic acid could be detected in any of the viscera, with exception of the stomach.—*Lancet*, March 1st, 1873.

#### ON THE TREATMENT OF THE FEBRILE STATE.

By WILLIAM T. AITKEN, M.D., Professor of Pathology in the Army Medical School.

(*The Science and Practice of Medicine*, sixth edition, 2 vols., 8vo., pp. 944 and 1290. London, 1872.)

We quote in full Dr. Aitken's chapter on the gen-

eral principles which dictate the treatment of the febrile state:—

"To avert the tendency to death in the febrile state, it is necessary to observe how fevers naturally terminate favorably. Four modes are enumerated by Dr. Parkes, namely:—

"1. *By crisis*, in which the temperature falls suddenly in a few hours, and usually with some abundant excretory discharge, in which, possibly, much of the water which has been retained in the system is poured out.

"2. *By lysis*, in which the fall of temperature is gradual from day to day, till the normal standard is attained. The decline may thus occupy many days, the thermometer being known to take seven days in falling from 102° to 98° Fahr.

"3. *By a combination of these two modes*, namely, by a sudden fall of temperature to a certain point, and then a gradual decrease to the normal heat.

"4. *By a somewhat irregular alternation of febrile and non-febrile periods*, as shown by the temperature and the issue.

"When fever terminates by any of these modes, convalescence commences, normal nutrition is renewed, and the body begins to gain in weight. The blood is poor in albumen and in red particles; and there is now a danger that the rapidity of metamorphosis of tissue will exceed the healthy standard, as shown by the great tendency to lose heat, which convalescents from fever have. The temperature may fall, and the excretions may diminish below their healthy amount. Great care, constant attendance, and watchfulness are required when the patient begins to convalesce, if the fever has been long and severe; and the treatment of the febrile state itself may be thus generally stated as consisting in a combination of measures—(1.) To reduce excessive heat; (2.) To insure sufficient but not excessive excretion and elimination of paralyzed nerves; (3.) To act restoratively on the exhausted and semi-paralyzed nerves; (4.) To neutralize any specific poison which may have set up the fever, and so to improve the state of the blood; (5.) To relieve distressing symptoms; and lastly, To obviate and counteract local complications (Parkes, Murchison).

"(1.) *To reduce excessive heat*.—To accomplish this, the first indication, Dr. Robert Jackson, 'the patriarch of Military Medicine,' and after him, Dr. Currie, of Liverpool, in 1794, practised, to an extreme degree, the application of cold water—a therapeutic agency which is now again challenging attention, so that medicine like history, constantly repeats itself. Jurgenson, Liebermeister, Hagenbach, and Küchenmeister are the most recent advocates and exponents of the application of cold water in the treatment of fevers. In health, such an application tends to increase the metamorphosis of tissue, as shown by Lehmann and Sanderson; and therefore its use in the febrile state requires the greatest care and caution. It is interesting to notice that Küchenmeister confirms the accuracy of Currie's own observation. To be of use, it must be employed very early in the fever, before the third or fourth day. As soon as the temperature rises above 102.5° Fahr.