

by me in the body-guard: that had any of us Europeans fallen, our saddles would have remained unoccupied; whereas, of the Natives, all were up (although feverish) and doing well, when next day we marched back upon Prome.

The dangerous character of the disease is sufficiently exemplified in all the medical narratives which speak of the sun-stroke, and is statistically shown, by Mr. Marcus Hill, in the fact that, out of 504 seizures, there occurred 259 deaths. Of the remaining number, this intelligent and promising officer (since killed by the mutineers) states that eight were doubtful; leaving the deaths to seizures at 51·38 per cent., while the recoveries were but 45·03 of those attacked. The statistics of Dr. Gordon, of the 10th Foot, are still more melancholy. Out of 28 cases treated by this able officer, but one recovered, and that imperfectly. He estimates the mortality amongst European soldiers at 80 per cent., and that of officers at 66·66 per cent. Dr. Lindsay, of Bengal, again, states that, "once seized, he has never saved a patient." His patients, and most of Dr. Gordon's, must have been beyond the reach of cure when cure was attempted. This would appear the only fair construction.

During the mortal and ever-memorable struggle within the intrenchments of Cawnpore, under Sir Hugh Wheeler, where "death and mutilation, in all their horrors, were daily before the garrison," the sun did its worst by the British soldier. The heroic Captain Moore, writing "by order" of his commander, says: "Our loss has been chiefly from the sun and their heavy guns."

(To be continued.)

## ON ARSENICAL PAPER-HANGINGS, AND THE MODE IN WHICH THEY PRODUCE NOXIOUS EFFECTS ON HEALTH.

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A FRIEND, whose library-walls were covered with an arsenical paper, had suffered for some time from chronic inflammation of the eyes, especially affecting the conjunctivæ of the eyelids. On the discovery that arsenic was contained in the green pigment of this paper in rather large quantity, he caused it to be removed during the summer, and to be replaced by another containing no arsenic. The inflammation from which he had suffered disappeared; but within the last few weeks it has returned. He informed me that he had been dusting some books in a book-case belonging to this room, and he supposed that the dust which had accumulated for two or three years, had affected his eyes, and had caused a return of the inflammation. Some of the dust was carefully removed on Tuesday, the 21st of December, from the tops of a few books by a feather, and submitted to a chemical analysis. The dust weighed one grain and a half: it had an olive-green colour, and under the microscope it presented the appearance of fibres, with numerous particles of various colours, chiefly of a greyish-black. Treated by Reinsch's process, a portion of this dust yielded a deposit of arsenic, and there was, therefore, clear evidence that some of the arsenical pigment, formerly on the walls, had found its way through the glass doors of the book-case, and had been deposited in the form of a fine dust on the tops of the books.

On Thursday, the 23rd December, after having made this chemical examination of the dust from a private dwelling, I procured from the shop of Messrs. Marratt and Short, Opticians, King William-street, London-bridge, a quantity of dust for the purposes of analysis. The walls of this shop are covered with an unglazed arsenical paper, and, as I am informed, they have been so covered for a period of three years. In collecting the dust from the tops of the instrument cases, great care was taken not to touch the walls. The quantity thus collected for examination amounted to about 450 grains. It was nearly black, and under the microscope it appeared to consist of fibres

and sooty particles. It was very light and flocculent. One hundred and fifty grains of the dust were examined by Reinsch's process, and enough metallic arsenic was obtained from this quantity to coat about ten square inches of copper foil, in addition to a piece of copper gauze. From the deposit on the latter, by the application of heat, octahedral crystals of arsenic were readily obtained. The cases had not been dusted for a period of nine months.

The instrument cases are secured by glass doors, and they are lined inside at the back with arsenical paper. A small quantity of dust was removed by a camels'-hair pencil from the projecting portions of the thermometers and barometers which are kept there. The quantity thus obtained weighed about eight-tenths of a grain, of which five-tenths were taken for examination. This half-grain of dust sufficed to cover with metallic arsenic a square inch of copper gauze. A portion of this, when heated, yielded a large number of well-defined octahedral crystals of arsenious acid.

These facts lead to the inference that the air of a room, of which the walls are covered with an unglazed arsenical paper, is liable to be charged with the fine dust of the poisonous arsenite of copper. Those who inhabit the rooms are exposed to the risk of breathing this dust. The poison may thus find its way by the pulmonary membrane into the system, or it may affect the eyes, nose, and throat by local action. That but few cases of actual poisoning under these circumstances have occurred is fortunate; but cases involving serious symptoms only, would be likely to attract attention. There may have been numerous instances of a disturbance of health depending on this arsenical paper, which, from absence of suspicion, has been referred to other causes. The degree of exposure, the state of health, peculiar susceptibility, and the eliminating power of the system, may account for the comparative rareness of these cases. The mode in which the pigment is laid on the paper may be such as to prevent, in some instances, the fine particles of dust from escaping. The fact, however, now demonstrated, that arsenical dust is breathed by those who occupy rooms thus papered, explains the similarity of symptoms observed, justifies the statements made by Dr. Hinds, Dr. Halley, and others, and proves that those who have experimented on this subject with negative results, have not taken the right course to arrive at the truth. Their results have, to a certain extent, misled the public by teaching them to rely on what is now proved to be a false security. If, as a general rule, the quantity of arsenic which can penetrate the body from this source is small, it is still desirable that arsenic should not be breathed, day by day, in any proportion. The defenders of this noxious manufacture will hardly go to the length of asserting that this arsenical green, which is a potent poison in the stomach, can exert no injurious effect when taken into the lungs; and yet, unless this assumption be made, the inevitable inference is that these papers should not be used for covering the walls of our dwellings.

St. James's-terrace, Regent's-park, Dec. 27th, 1858.

## ON A CASE OF EPILEPSY TREATED BY TRACHEOTOMY.

By EDWARD JACKSON RICCARD, M.D.

ANNE V—, aged thirty, single, has been subject to fits for the last seven years; for several months she has had two or three fits in a day, caused, it is supposed, by the neglect of her parents. She is one of four children; one of whom died in infancy, and the other three are all living. Her mother died of dropsy, aged fifty-nine years; her father is still living, and a hale man of sixty-seven years of age. Previous to having a fit she feels "lost in her head." She has a vacant look, and her intellect has been decidedly suffering for the last two or three years. She has always had sedentary employment.

On the 5th of October, 1856, at eleven A.M., assisted by my pupil, Mr. Waterworth, I performed the operation of tracheotomy, my patient being under the influence of chloroform. The skin and integuments being first divided, the beak of the instrument (the most perfect of its kind, made by Messrs. Weiss and Co.), was introduced through the trachea, between the first and second rings, and traction steadily persevered in until the opening was large enough to admit the tracheal tube