

medy in large doses, for the arrest of acute inflammation. His usual way was to bleed his patient freely, then give him from half an ounce to an ounce of the tincture, and repeat it in 24 hours if the pulse remained unsubdued, or its regularity unaffected. After long experience, he pronounces it not only a safe, but a very successful remedy, and declares that any inflammation that has not gone as far as disorganization, will surely yield to it.

Dr. Pareira himself, through Dr. King's representations, gave half an ounce of the tincture several times, in cases of fever and pneumonia, and did not find it to produce the poisonous effects that he more than half expected.

Dr. Withering, in 1780, prescribed 15 grain doses of the dried leaves (equal to two and a half drachms of the tincture) every two hours, in the case of a young lady that had been suffering for a month from an attack of puerpural mania, with dropsical swellings of the legs; and both, he says, disappeared together in a short time.

The same physician, the year before, prescribed foxglove with wonderful success in doses of 34 grains of the dried leaves in decoction (equal to nearly six drachms of the tincture) to a man in furious delirium tremens, repeating the dose every three hours, until it made him sick at the stomach, which it did by the fourth draught; then the remedy being stopped, the man remained sick but about four days, during which time he made a great deal of urine, and gradually became more rational; on the fifth day his appetite returned, and sickness ceased.

A man several days ill with delirium tremens requires a repetition of his mixture of prepared opium, but the patient with heart disease is to have her medicine as well; the two bottles lie side by side, and the delirious man gets an ounce of tincture of digitalis. Hours elapse, the physician, horror struck, discovers the mistake, he never went to see a patient so quickly before, nor never gave a dose so successfully; for the man had recovered, and the world profited by the accident.

To the late Mr. Jones, of Jersey, Eng., we are indebted for drawing the attention of the medical profession, during the last few years, to the treatment of delirium tremens by means of heroic doses of tincture of digitalis. He directs half an ounce at first, and half an ounce in four hours, which if unsuccessful in causing sleep, is again repeated in six hours; making an ounce and a half in ten hours. He says that in doses of one or two drachms it has proved quite useless in his hands.

Now that the attention of physicians is fairly awakened. Dr. Ballard of Islington, Dr. A. W. Williams of Liverpool, Dr. Peacock of St. Thomas' Hospital, and a host of others come boldly forward, and give their testimony in favour of these enormous doses of digitalis; and no fatal cases have been yet recorded from them.

But rarely as it may occur, people do die from the effects of large doses of digitalis. Beck, in his medical jurisprudence, gives an account of a death from this poison, by convulsions and coma, produced by a strong decoction of the leaves; it was in a young lad, and a quack was tried for having given it.

Dr. Taylor mentions a case also of a young man, who took a strong decoction by mistake; he also died in like manner.

A case where the infusion of the root proved fatal is reported in the *Lancet* of 1849.

Mr. Forget, a physician of Strasbourg, tells like-

wise of a case of phthisis, where he prescribed 15 drops of the tincture daily; increasing it carefully, until the woman was taking 100 drops in a day, when vomiting and convulsions set in, and she expired.

Professor Guy remarks that the quantity of digitalis required to destroy life, has never been accurately ascertained.

There are very many vague assertions in authors, of sudden deaths of patients, whilst under the influence of digitalis, but every one of them decline mentioning any individual cases; this certainly argues a great want of candour in the profession. But although these uncertain statements cannot be implicitly relied upon, there is little doubt but that there is much truth in them, for it must be allowed that it requires much moral courage in a medical man, striving for professional reputation, to come forward and say that he has killed, or even hastened the death of one of his patients, by means of this remedy.

It seems that of the few deaths on record, from having taken large doses of digitalis, all had convulsions, and that those that recovered had not experienced them. If this then be allowed to be the cause of the fatal result, what has produced them in the one case, and not in the other? Certainly not the quantity taken, nor the time of its remaining unrejected in the stomach.

It is an old aphorism, handed down from Hippocrates, and repeated by thousands of physicians since his time, that convulsions arise either from repletion or depletion. That it is not the former is self-evident. Is it not rather that the heart does not possess sufficient power to prevent, by its propulsive action, the coagulation of the blood in the sinuses of the brain? And that the very effort to overcome the obstruction is sufficient to account for the slight congestion found after death in these cases. But, apart from this, are there not other pathological changes of which we are at present ignorant, and that the post mortem examinations have failed to detect?

I am aware that Dr. Fuller considers hypertrophy of the heart, the change to be guarded against, but is he prepared to say that without this hypertrophy we may safely push the doses of digitalis? And would the spasm mentioned by him, cause the convulsions produced by the action of the remedy? And has post mortem rigidity, which sets in late in such cases, nothing to do with this alleged spasm? And finally, can the effect of foxglove on animals be applied to man?

Verily we have much yet to learn of this remedy, but with so many master minds as are at present at work, it cannot be long before our knowledge and experience on this subject shall have materially increased.

Few, comparatively, die with delirium tremens, and the question naturally arises in the present unsettled state of opinion concerning the virtues of digitalis, whether we are justified in putting our patient's life in jeopardy, by employing such large doses as now recommended. Until we have the report of some fatal case, I say decidedly, yes. And let any physician like myself, stand at the bedside of a patient suffering with the "horrors," and feel that in a few hours, at most, he can end all these frightful dreams, and his hand too, will be willing to pour out the remedy, and perhaps like mine, falter at the first measuring, but to steady wonderfully when it is again needed. There certainly was not a drop over the half ounce in the