

exerting a powerful depressing and paralysing influence upon the heart. The symptoms of opium thus acting on the heart are these:—The patient continues wakeful, excited, and delirious, but grows rapidly weaker; the pulse becomes quick, small, and feeble; the pupils are contracted; the skin is bathed in a profuse sweat; and, if the opium be continued in large and frequent doses, the patient rapidly sinks, but remains wakeful and conscious until perhaps within a few minutes of the end. The opium in these cases acts as a powerful sedative on the heart, and in proportion as it does this it fails to exercise any soporific influence. If you find that opium is acting thus injuriously, you must immediately discontinue it, and give liberal doses of brandy, or the stimulant to which the patient has been accustomed. Full doses of quinine, too, will be of use as a tonic; and nutriment, either in the liquid or solid form, should be freely given.

It is an undoubted fact that the soporific effect of opium is often much more certain and decided when the medicine is given with some alcoholic stimulant than when it is given alone; and I have seen not a few cases of delirium tremens in which, after repeated large doses of opium have failed to procure sleep, a liberal allowance of the patient's accustomed stimulant, more especially when combined with food, has been followed by a long sleep, and this by an entire freedom from delusions and delirium. I scarcely need impress upon you that these unquestionable facts are quite irreconcilable with the hypothesis that the proximate and essential cause of delirium tremens is the presence of alcohol in the blood. If the patient refuse to take the opiate or other medicine which you are anxious to give, he may sometimes be induced to take it mixed with his beer or other beverage. Both food and stimulants may be given by the rectum in case of need; and morphia may be introduced subdermically; but this mode of giving morphia requires at least as much caution as the administration of opiates by the mouth.

Chloroform vapour has the immediate effect of quieting the delirium and excitement; but the quiescence is only temporary, and I have seen no permanent good result from it. The fat and flabby state of the heart in these cases is a bar to the incautious administration of chloroform.

When there is much flushing of the face and heat of the scalp, cold lotions or iced water in a bladder may be applied to the head with advantage.

You may have heard or read of large doses of tincture of digitalis having been given for the cure of delirium tremens. I consider this a very dangerous remedy. I have no doubt that some patients have recovered in spite of the treatment. When half-ounce doses of the tincture have been given, it is to be hoped that the digitalis was of bad quality; the patient would then, at any rate, have the benefit to be derived from the stimulant action of the rectified spirit. I have heard of several instances of sudden death after the administration of large doses of digitalis, and it is only natural that these calamitous results should not, as a rule, obtain equal publicity with the cases of apparently successful treatment. A consideration of the natural history of delirium tremens suffices, I think, to show that the treatment by large doses of digitalis is irrational and dangerous.

To sum up, then, the main practical points which I have endeavoured to impress upon you. Bear in mind that an attack of delirium tremens, as a rule, subsides in a few days without help from medicines of any kind. Let the patient be carefully watched and guarded and fed, and the excitement and delirium will gradually subside. In many instances opium is a valuable aid in the treatment, and it will often cut short the disease; but remember that it is powerful for evil as well as for good. Its use, therefore, requires much care and discrimination. Some form of alcoholic stimulant will often be of great use in calming the nervous excitement and procuring sleep. Lastly, when the patient has recovered from his attack, do not fail to impress upon him the moral lesson which his sufferings have been designed to convey. The tortures of delirium tremens are most assuredly intended to exercise a wholesome deterring influence on the self-indulgent and the intemperate, and in that light he should be taught to view them. The poet Wordsworth has given the true interpretation to such spectral visions as form so marked a feature of delirium tremens, in the following lines from his "Sonnets on the Punishment of Death":—

"Ye brood of conscience—Spectres! that frequent
The bad man's restless walk and haunt his bed,—
Fiends in your aspect, yet beneficent
In act, as hovering angels when they spread
Their wings to guard the unconscious Innocent."

STATISTICAL OBSERVATIONS ON FRACTURES AND OTHER INJURIES.

By HOLMES COOTE, Esq., F.R.C.S.,
SURGEON TO ST. BARTHOLOMEW'S HOSPITAL.

PUBLIC attention having been of late directed to the number of street accidents, I propose reporting from time to time on the nature and character of such injuries, as shown by the cases admitted into the accident wards of St. Bartholomew's Hospital under my care, and contrasting them with accidents from other causes.

In the male ward there are at the present moment twenty-one patients, and of these fifteen are the subjects of street or out-door accidents, the remaining six being instances of injuries received in homes, factories, and other places. These six cases may be disposed of as follows:—

John M—, aged fifty-six. Fracture of lower third of the femur, caused by a fall of twelve feet from a window into a yard.

Fred. T—, aged twenty. Extensive burn of both arms and of the face, caused by his falling, when asleep, on a fire.

James C—, aged fifteen. Burn of both thighs, caused by his falling asleep before a fire. A coal flew out, and set his trousers alight.

Giles A—, aged sixty-seven. Fracture of the patella, from a fall on the stairs.

Robert F—, aged thirty-five. Fracture of the right hip, from a fall.

Charles L—, aged twenty-six. Severe compound comminuted fracture of the right tibia and fibula, extending into the ankle-joint, with wound of the anterior tibial artery, caused by a weight of one ton of iron falling suddenly on the limb. Immediate amputation; convalescence.

All these injuries proceeded from causes for which the individual alone was responsible.

Of the remaining cases, fifteen in number, comprising accidents received out of doors, one must be excepted, the accident having occurred off Bombay.

John M'D— received a severe blow when on board ship, in a heavy gale, from the top-sail yard. In consequence of the injury the left eye became inflamed, and the sight was lost. The injured eye affected the vision of the sound organ, and in consequence was extirpated with good result by Mr. Thomas Smith.

There are, therefore, fourteen cases left, all accidents received in the streets and roads, and of these, seven proceeded from causes referable to the individual alone—namely:

Wm. C—, aged fifty-one. Fracture of the patella, from a fall during the frost.

Samuel R—, aged fifty-nine. Severe sprain of the left knee, from missing the step of an omnibus in the act of alighting.

Alfred G—, aged twenty-three. Partial dislocation of the head of the fibula outwards, from a fall with the limb bent under him.

John S—, aged twenty-one. Sprained ankle, from the fall of some brickwork which he had been undermining.

Charles H—, aged fifty-four. Fracture of the lower third of the femur, from a fall in wrestling.

Thomas K—, aged fifty-four. Bruised foot, caused by his own cart-wheel passing over it. The horse became restive in Seven Sisters'-road.

David H—, aged fifty-four. Injury to the ankle without fracture, caused by the wheel of the van which he was conducting passing over him.

The remaining seven cases proceeded from the fault or carelessness of others, and of these five are cab accidents, two caused by carts.

Cab Accidents.

Onesiperus T—, aged seventy. Fracture of the neck of the right femur, caused by his being knocked down by a cab while walking on the kerb-stone.

James B—, aged eight. Run over by a cab. Extensive laceration of the scalp. Detachment of a flap, five inches by four in measurement.

Henry A—, aged twenty-five. Injury, without fracture, to the hip. Knocked down on the pavement by a cab.

Edward M—, aged sixty-seven. Fracture of the tibia and fibula; severe bruising of the integument, from a cab having knocked him down. The horse trampled on him.

John E—, aged seventy-three. Severe comminuted fracture of the os calcis, with laceration of the integuments of the heel, and complete severance of the tendo-Achillis, caused by a cab-wheel passing over it. In this case the wound has sloughed, the patient was delirious, but is now likely to recover.

Cart Accidents.

Wm. L—, aged fourteen. Knocked down by a cart. Bruise of the right arm.

Alfred D—, aged nine. Fracture of the right femur through the lower third, caused by a cart-wheel passing over it. All the patients are convalescent.

The injuries received by women differ in some important respects from those received by men. An analysis of twenty cases yields the following results:—

Harriet H—, aged twenty-four, was stabbed in the chest by a man with whom she was quarrelling. The exact cause of the disturbance could not be ascertained. Many persons were involved, and the quarrel continued many hours; it originated in jealousy.

Eliza C—, aged twenty-four. Fracture of the jaw from a blow, supposed to have been given by her husband.

Louisa C—, aged thirty-seven. Compound fracture of both thighs, and fracture of the left great toe; compound fracture of both arms; severe cut of head and eyebrow. She sprang from the parapet of a house in a fit of mania. Death.

Anne J—, aged fifty-five. Fracture of the os calcis, with separation of the fragments, from slipping off a step.

Mary W—, aged seventy-one. Severe cut-throat, self-inflicted; insanity; death.

Injuries received in parturition. To be removed to another ward.

Mary D—, aged forty. Vesico-vaginal fistula, admitting three fingers; prolapsus of the bladder; obliteration of the urethra.

Mary R—, aged twenty-two. Supposed fistulous passage between the vagina and rectum, proceeding from her first confinement two years and a half ago. Examination at present impracticable, on account of ulceration of the external organs.

Burns and scalds.

Rose M—, aged thirteen. Burns of legs and arms from falling asleep over the fire.

Charlotte H—, aged thirty. Extensive burn of arm and chest, caused by her falling into the fire in a fit.

Thomas W—, aged ten months. Burn on both hands while being carried by the father from a house on fire.

Mary N—, aged seven. Extensive burn over the whole body; clothes caught fire; death.

Injuries received in the streets (three in number).

Alice M'G—, aged fifty. Bruise of lower extremities. Knocked down by a van.

Mary K—, aged sixty-seven. Lacerated wound of the arm. Knocked down by a van.

Anne P—, aged twenty-three. Bruise of the ankle. Knocked down by a cab. In the fall she received a severe cut in the nates from the steel of her crinoline.

Injuries received within doors.

Ronzo Z—, an Italian boy. Fracture of the thigh from trying to walk alone in his father's shop.

Anne M—, aged forty-six. Cut head from fall down-stairs.

Charlotte W—, aged forty-six. Sprained ankle from fall.

Catherine M—, aged eighty-two. Cut head from fall down-stairs.

Alice G—, aged thirty. Simple fracture of the tibia and fibula, from a kick, supposed by her husband.

Georgina H—, aged seven. Bruised elbow, from a fall.

Queen Anne-street, Cavendish-square, April, 1866.

AFTER all the maladies which have attacked useful animals, the noxious animals now suffer in their turn. The reptiles confined in the Jardin des Plantes have, some of them, been carried off by disease, and a post-mortem examination has revealed the presence of worms in the lungs. Other reptiles have been attacked by typhus and have died.—*Land and Water.*

REMARKS

ON THE

SYMPATHY BETWEEN THE AUDITORY CANAL AND THE LARYNX.

By CORNELIUS B. FOX, M.D. EDIN., M.R.C.P. LOND.

THE study of the sympathetic sensations and actions of the human body is one of great interest, not only on account of their number and variety, but in consequence of the obscurity with which so many of them are surrounded. The great importance of a thorough knowledge of this somewhat intricate subject to every medical man is so obvious as to require no demonstration. The sympathy between the ear and distant organs, such as the larynx, liver, uterus, spleen, &c., is adverted to in many old medical works; but the very general nature of the statements made, and the want of accurate investigations into these supposed connexions, oblige us either to accept the assertions *cum grano salis*, or seek to discover the amount of truth involved in them. The sympathy existing betwixt the ear and the larynx in some individuals, although well known to the older writers, would seem to have been overlooked by modern authors. One of the problems of Cassius Medicus was the following: "Why does irritating the ears—as, for example, with a speculum—cause sometimes a cough, just as if the trachea was irritated?" Whytt, in his work on the Sympathy of the Nerves, published in 1767, refers to it, and states that when the trachea has been rendered more sensitive than usual by a catarrh, cough is more readily produced by irritation of the auditory canal. His explanation of this, as well as of other sympathies, need not be referred to, on account of the well-known erroneous nature of his views respecting the influence of the mind on vital phenomena. Coming down to more recent times, we find that Kramer, in his work on Diseases of the Ear, published in 1837, makes the following solitary observation: "Tickling and scratching the meatus excite in the larynx a troublesome irritation to cough." Romberg states that "pruritus of the external meatus auditorius, from hyperæsthesia of the auricular branch of the vagus, is sometimes observed, and is accompanied with cough and vomiting."* The only references to this subject with which I am acquainted, in the principal recent works on medicine, are the following. Dr. C. J. B. Williams, in his Principles of Medicine, whilst enumerating the reflected and sympathetic sensations, writes: "Touching the external auditory meatus causes a tickling sensation of the epiglottis." Toynbee, in his work on Diseases of the Ear, says: "In certain cases, the presence of a foreign body in the meatus gives rise to coughing, and even to vomiting—symptoms which seem traceable to irritation of the auricular branch of the vagus nerve." Yearsley refers in very general terms to the alterations of the voice, as regards its pitch and quality, which occur in cases of deafness dependent on diseases of the ear, but does not otherwise allude to this connexion. Turning from the aurists to the laryngoscopists, we meet with no better success, so finally resort to a work on Cough,† in which, amongst the occasional causes of this symptom, are to be found dyspepsia, giving rise to "stomach cough," hysteria, affections of the tonsils and uvula, uterine derangements, teething, worms in the intestines, organic and functional affections of the heart, disease of the liver, &c. Although irritation of the auditory canal is not referred to as a cause, yet we know that cough is occasionally *idiopathic*, which means in reality that we are sometimes entirely unable to discover the cause concerned in its production.

"Felix qui potuit rerum cognoscere causas."

Let us, then, endeavour to assist in the determination of every "fons et origo mali," that so we may as soon as possible expunge from our vocabulary the term "idiopathic." In my Graduation Thesis, "Concerning the Laryngoscope and some Laryngeal Diseases" (June, 1864), presented to the University of Edinburgh, reference was made to the sympathy subsisting between the external ear and the larynx; and an explanation of this interesting connexion was advanced. The advisability of a careful examination of the auditory canal was also urged

* Vide a review of his *Lehrbuch des Nervenkrankheiten des Menschen* in the British and Foreign Medical Review, April, 1844.

† Semple on Cough, its Causes, Varieties, and Treatment.