pair and recovery, which look like evidences of extraordinary nutritive action. This paradox, to which I have already referred, may receive some explanation from the lowered irritability—the lessened nerve-susceptibility—which is a well known feature of the senile frame, and which gives it much immunity from disease. Repair, after all, makes but slight extra demand on nutritive or circulatory activity. It, like developmental work, to which it is in some sort a return, goes on best in the quiet and with little excitement. The granulation and new and tissue-forming, or tissue-repairing, cells are very easily disturbed in their delicate work, and are liable to be so by the vascular or nervous excitation which is easily engendered in the neighbourhood, and which is induced in the young more easily than in the old, and is the source of the festering, and the irritation, and inflammatory surroundings which prove so troublesome in the treatment of the wounds and sores of children. Indeed, it is over-action that we have most to fear as the enemy to repair. Hence, the limitation of irritability or responsive action, the passive condition of the structures, is probably one cause of the large reparative results which we see in some of the lower animals, and may, in like manner, be to some extent the cause of the good and quick reparative results which we often see in the aged. But whatever may be the cause, this capacity for recovery is a factor that must be taken into account in our treatment of the aged, encouraging us to use our best efforts for their restoration, and telling us that, as we are reluctant to give up a child, so, also, we should be slow to give up an old person.

SANITARY REFORM A HUNDRED YEARS AGO.

Abstract of a paper read before the Lancashire and Cheshire Branch.

By CHRISTOPHER JOHNSON, F.R.C.S.

MR. JOHNSON said that there was a growing disposition to underrate the importance of the results which had accrued to the people of this country from the application by the Legislature of the teachings of science to the regulation of social life. He proposed to take a retrospective glance at the state of this country when no such regulations existed, and setting grandfatherly neglect and "grandmotherly legislation" side by side, to see which was preferable.

He quoted from the *Transactions* of the College of Physicians for the year 1785 certain facts contained in a paper by Sir George Baker, Bart., Physician-in-Ordinary to the Queen. Seventy-three poor children, chargeable to the parish of St. James, Westminster, had been brought from a house at Wimbledon to a home prepared for them in King Street, Golden Square, on September 24th, 1782. The children were all in good health when transferred; but on October 8th, 1782, a girl, aged 13, was suddenly seized with excruciating pain in the region of the stomach, and in the back, followed by violent headache, delirium, and convulsions. Fresh cases, with similar symptoms, occurred in quick succession. Sir George Baker found that in one room, containing beds for eighteen children and one servant, nine of the girls and the servant were all suffering from the same malady; and that the disease was confined to the inmates of this room. In this chamber, which measured twenty feet in length by sixteen in breadth, and eight feet in height, there were ten beds—nine for the use of the girls, who slept two in a bed; and one for the servant. The chimney had been stopped up with bricks; and at night the door was shut, and the windows closed with shutters. Three candles and an oil-lamp were burnt in the room, but gave little light, often becoming almost extinguished. In an adjoining room of the same size, where eighteen girls slept in nine beds, but where the chimney was not blocked, no cases of illness had occurred. The nine sick children, who were the only girls in the first room over 13 years of age, were removed to a more airy room, and had a better night; but the symptoms recurred on the following morning, and did not entirely disappear for some days. Sir George Baker concluded that the symptoms were due to vitiated air, though the respiratory organs were not affected, and was confirmed in this by the case of a young man related to him by Dr. Heberden, who had been shut up in a room with burning charcoal. The symptoms noted in this young man were of a similar character, and he also suffered from a relapse. Mr. Christopher Johnson inquired whether deficient ventilation may not have had as much to do as overpressure of mind in the case of school-children, who scream at night, and have other anomalous symptoms.

He next referred to the description, published by Dr. Campbell, of Lancaster, in 1785, of an epidemic of fever which prevailed so extensively among the cotton-mills in various parts of Lancaster and Backbarrow, and was of so malignant a character as to excite a panic

among the operatives and their neighbours. Dr. Campbell, by attention to ventilation, fumigation, disinfection, and cleanliness, succeeded in checking the epidemic. At about the same time, an inquiry was held by four Manchester physicians, Drs. Percival, Cowling, Easton, and Chorley, into the cause of a similar epidemic prevalent in the cotton-mills at Radcliffe. The report of these physicians fully recognised the importance of ventilating the workrooms by means of large windows on opposite sides, and open fire-places; it recommended that the rooms should be kept clean, and whitewashed thrice yearly; that the privies should be washed daily, and properly ventilated; that the hours of labour should be shortened, and a longer rest allowed in the middle of the day; and that children under 14 should be specially exempted from long hours of labour, and given opportunities for attending school. In these recommendations there was, Mr. Johnson pointed out, the outline of a complete Factory Act. The necessity for legislation was demonstrated, and the direction and extent was clearly defined.

Passing next to the condition of prisons in the last century, he referred to the essays of John Hunter, Dr. Heysham, of Carlisle, and Dr. Campbell, of Lancaster, on Typhus Carcerum (Jail Fever), and described the circumstances under which forty persons, including the Lord Mayor, two judges, an alderman, and other officials, died of a fever contracted at the Old Bailey sessions in 1750. Dr. Heysham stated that the first private house in which the disease appeared was occupied by half-a-dozen poor families, and that not only were the rooms small, but that, to avoid the window-tax, every window that even poverty could dispense with was shut up.

Mr. Christopher Johnson next described the method of inoculating for small-pox, and showed that, though it was followed by a great reduction in mortality, several hundred persons having been inoculated in Carlisle during the last six months of 1779 without a death, while 90 of 300 persons who caught the disease in the ordinary way succumbed, it yet presented many disadvantages.

As showing that the spirit of inquiry was alive at the date referred to, Mr. Johnson mentioned some experiments made by Dr. Home on the relation between the pulse and temperature, and quoted from Duncan's *Annals* a passage with regard to the antiseptic properties of "rectified oil of tar," which showed that Dr. Edmund Saunders, of Plymouth, if he had not discovered carbolic acid, had prepared something very like it.

In conclusion, Mr. Christopher Johnson said that any expenditure on sanitary improvements by this country had been repaid a hundred-fold, and reminded those members of the medical profession who considered every duty imposed on them by Government a tax, that they ought rather to look upon it as a legacy duty, a light legacy duty on the rich inheritance which their forefathers by their energy and perseverance, by their honesty and courage, by their patriotism and self-denial, accumulated for them.

TRAUMATIC ENTERITIS AND PERITONITIS: ANOMALOUS CONDITION OF INFERIOR VENA CAVA AND ILIAC VEINS.

By G. A. HARRIS, M.R.C.S., L.R.C.P. Lond.,
Surgeon Bengal Medical Service; Joint Civil Surgeon, Simla.

THE details of the subjoined case are of some interest, inasmuch as the anatomical condition found at the *post mortem* examination is, to the best of my belief, unique.

O. L. W., aged 22, Eurasian, was admitted into the General Hospital, Calcutta, under my care, on the evening of May 24th, 1884, with a history of having suffered for the past twenty-four hours from "colic." On admission, he himself gave no history of an injury, and it was not until the next day, that one of his friends told me that on the day previous to coming to hospital, W. had met with a serious injury at football, being violently struck in the abdomen. The chief symptoms previously to coming to hospital were severe and constant abdominal pain, and almost incessant vomiting; and on admission to hospital these were the most important symptoms, with also some collapse.

The following day he was much worse, pulse small and wiry. Temperature 102.4°. He had excessive abdominal tenderness and pain, with some tympanites, anxious expression of the face, restlessness, intense headache, and vertigo. The bowels were moved very frequently during the day, sometimes in his clothes, and with intense tenesmus, the motions being scanty and of a grass green colour, and containing shreddy mucus streaked with blood; the skin was pungently hot and dry, and the tongue thickly coated.