wounded continues, aided by the reconstruction and enlargement of the hospital now contemplated and so much wanted, so long shall we maintain our freedom from these dire diseases.

I think I have said enough to prove that pyæmia is a preventable disease in hospitals. Mr. Erichsen says, in his excellent lectures on Hospitalism, "that when once a hospital has become thoroughly impregnated by these septic influences for a length of time, no hygienic measures can restore it to purity and safety." In this opinion, I hope he has erred, and the evidence I have produced seems to prove it; for in all those numerous English and continental hospitals in which freedom from pyæmia has been secured and maintained, in some instances for years, it had been constantly present for a length of time previously.

By what has been said, the chief means will have been indicated by which prevention is to be obtained.

Mr. Lister obtains it by antiseptic surgery. He cares little about overcrowding or ward cleanliness, but he secures most completely surgical cleanliness of wounds. It is true that no amount of overcrowding will produce pyæmia in unwounded patients; and Mr. Lister, by the carbolic spray and real cleanliness, takes care that no poison or impurity shall reach his patient's wounds.

Mr. Callender, on the other hand, takes care that there shall be no impurity or miasm in his wards; that there shall be no overcrowding, and that the wounds themselves shall be dressed always with scrupulous care.

We, in this hospital, have imitated his care in these respects, but we have, I maintain, discovered this year a source of infection which has, I believe, been too little dwelt upon and too much overlooked hitherto. I mean the infection which creeps along and spreads by impure bed-linen and bed-furniture; by careless neglect in the purification of bandages and linen; and by the disregard of disinfecting and laundry arrangements. As before mentioned, we had taken active steps against overcrowding, and in favour of ward ventilation; but it certainly did not enter fully into our thoughts that here probably the greatest fault of all was to be found in defective nursing. Very probably in other hospitals these same defects are the unsuspected cause of their unhealthiness; and the remedy will be, not merely to look to the structural aptitude of the building, but rather to the more humble but equally important question of nursing and ward-management.

It is probable, as time and experience go on, that the old notion as to the requisite cubic space for hospital patients will change. There is no question, that the enormous development of machinery and the growth of population, and, I may add, the advances of operative surgery, have utterly altered the conditions of hospital management; and I have no doubt that, in these days, operations, and serious wounds and injuries, are vastly more frequent in hospital wards than they formerly were; and, as the proper result of this change, the old idea of 1,500 or 1,600 cubic feet of air as all sufficient will come to be altered to 2,000 or 2,500.

One other suggestion I would make, as tending to hospital salubrity, viz., the adoption of the plan of isolating, as far as possible, in single rooms, all cases of severe operations or serious accidents, and especially cases calculated to emit noisome odours. We have discovered the value of this plan during the past year, and I sincerely hope that in any extension of our hospital, facilities in favour of this principle will not be forgotten. It was found in the Franco-German war, that in single-roomed huts built in the roughest manner, and in the small hospitals, there was almost complete absence of pyæmia. Mr. Spencer Wells has said, and with great truth, of ovariectomy, and the same words will of course apply to all operations, "that the surgeon who hopes to obtain better results than have hitherto been obtained, must place his patient, as nearly as possible, in the position of a person in a private house in a healthy situation."

If then, it be proved that pyæmia is commonly found in large hospitals, so as probably to cause the death of hundreds of patients every year; if it be also proved that by one plan or another it may be wholly or in great part prevented, then it follows that a great and heavy responsibility rests upon those who have the control and management of such hospitals, and I hope and believe that the time is coming when it will be a disgrace, and even an offence, to admit that such a disease exists in wards, which are intended to promote the recovery, and not the death, of the sick poor. It should be compulsory on every hospital to keep and publish a report of its work, year by year; and if it should thus appear that pyæmia and other septic diseases are constantly or frequently occurring within its walls, then I trust that by-and-bye some central authority, either of the Local Government Board or of the Public Health Department, will have the power and the duty to visit such hospital, and suggest and order the rectification or re-

moval of whatever defects, either of construction or internal management, that may be found necessary.

This, however, is a question of the future. In the meantime, it is to be hoped that hospital physicians and surgeons will probe these vital questions to their foundations, and by increased knowledge and experience, will of themselves be enabled to detect the fault, and surely to apply the remedy.

CASE OF TRACHEOTOMY WITH ARTIFICIAL RESPIRATION IN A CASE OF APPARENT DEATH FROM CHOKING.

By JOHN HARKER, M.D., Surgeon to the Infirmary, Lancaster.

ON Monday, January 25th, I was requested to visit a case of choking. The patient, a man aged 38, with imperfect sight, could obtain but a precarious living by job-work at public houses. On the day in question, being hungry, he was eating in a ravenous way some cold meat which had been given to him, when he was observed suddenly to choke. Some beer was given to him to drink, when he became worse, livid, and unconscious. At this stage, I was sent for. On examining the patient's glottis with the finger, I found that a piece of meat could be felt, but could not be immediately extracted, as it was large and firmly fixed in the larynx. As respiration had by this time entirely ceased, I proceeded to operate for tracheotomy thus. The patient being seated in a chair, with the head thrown back, I selected a convenient part of the trachea; and, with Trousseau's very serviceable double knife, made a small opening, and introduced a tracheotomy tube. Next, with the aid of a bystander, I used artificial respiration, accomplished by raising the patient's arms well above his head forcibly. This process was known to be effective; as, with each upward movement of the arms, air was distinctly heard to enter the chest with a whistling sound through the tracheotomy-tube. At the end of seven-and-a-half minutes, the patient made a gasp of inspiration, and, after that, became able to breathe. I now tied the tube in position, and took the patient in a cab to the Lancaster Infirmary. When we arrived there, he had so far recovered as to be able, with assistance, to walk up a number of steps to the small ward where I wished to place him in bed. As he continued to recover, he began to make vigorous efforts to bring up the foreign body; a great quantity of mucus frothing came up from the larynx. I now, with a pair of curved throat-forceps—the house-surgeon, Dr. Scott, forcing open the patient's mouth with the handle of a fork—succeeded in extracting a piece of tough meat, which, when spread out, was as broad as two fingers, and about a quarter of an inch in thickness. The cannula was removed from the trachea in the afternoon of the same day. The patient was retained in the Infirmary a week after the occurrence. On Wednesday, he complained of soreness in the lateral regions of the chest; but as his temperature as registered by the thermometer was normal, and there were no abnormal physical signs on auscultation, this I considered to be owing to fatigue of the respiratory muscles, by reason of the artificial respiration, and no medicine was ordered for him. On the following Monday, he was dismissed, quite well. On recovering, the patient gave this account of the accident. He was in the act of swallowing the piece of meat, when he attempted to speak, and the meat at once entered the windpipe; he was choked, and motioned for a drink; some beer was given to him; he tried to drink, and became unconscious, remembering no more.

A CASE OF SPINA BIFIDA TREATED BY IODO-GLYCERINE INJECTION.

By MARK LONG, M.D., Hackney.

W. II., A WELL developed male child, rather above the average size, was born on October 12th, 1875. On examination, it was found that both feet were clubbed (*talipes varus*), the knees and hip-joints were rather stiff, and in the sacral region there existed a spina bifida about the size of a small orange. The tumour was semitransparent, not very tense, but became more so when the child cried or was placed in the erect posture; and the skin covering the upper part was extremely thin, and superficially ulcerated over a considerable space. The tumour was protected from pressure, and the ulcerated part dressed with zinc ointment, under which treatment it slowly healed, and became skinned over in about four weeks. On October 27th, it became so tense, that I punctured it with a small trocar, drawing off about half an ounce of straw-coloured fluid, and then closed the opening with collodion. The child seemed to suffer no inconvenience whatever from this procedure. On Novem-