years since. The fact that we cannot keep an edition of any standard work on surgery for more than a few years proves this. Antiseptic surgery itself has a history of but a few years, ophthalmic surgery is completely revolutionised; the laryngoscope is of recent date; the most recent discovery in the treatment of spinal disease is hardly one year old; gynaecological surgery is, comparatively speaking, a new science. You may recollect my advocacy of the general substitution of ether for chloroform in this city hardly a year past: these and a thousand other "innovations" are easily recalled to mind when we are reflecting on the progress of a modern surgery.

[After a few remarks on the necessity of a proper supply of appliances in hospitals, and a reference to the assistance which good nurses afforded to the clinical teacher, Dr. Jones addressed the students present, giving them advice as to their conduct in the hospital ward and the operating theatre.]

CASE OF SUDDEN DEATH OCCURRING DURING THE INHALATION OF ETHER.

By GEORGE MAY LOWE, M.D., Lincoln.

THE patient was a healthy looking moderately stout lady aged 48, and standing about 5 ft. 4 in. in height. She was a thoroughly amiable and cheerful person; but subject occasionally to fits of depression, on account of the fact that she had a tumour affecting her left breast, which she had dreaded for many years would turn out to be cancerous. Her mother died from cancer in various parts of her body, ultimately affecting the scalp, and had been operated on by the late Sir B. Brodie. One of her sisters has undergone two operations for the removal of tumours in the breast at the hands of Professor Wood of King's College Hospital, and another sister died suddenly from "the bursting of a blood-vessel in the lungs" whilst running upstairs.

The tumour itself was hard, elongated in shape, extending across the upper part of the left breast from the left edge of the sternum to the outer margin of the pectoral muscle; it was movable, but somewhat firmly attached to the muscle below; the nipple was much retracted; there were no enlarged glands in the axilla, and the usual excruciating pain from the disease was only occasional, and not acute. An operation for the removal of the breast was arranged for three o'clock on Monday, November 5th. The patient was placed under the care of a trained nurse from our Lincoln institution, and was carefully attended to and dieted, with a view to the administration of the anæsthetic. She had been out the previous day attending the parish church and cathedral services; and, on the morning of the day of operation, she went about her ordinary duties by way of keeping her mind free from her natural dread of the approaching operation. She had always had the greatest horror of the event, and always expressed herself with regard to it in the gloomiest of terms, concealing the disease from professional eyes as long as possible; she only yielded to the necessity of its removal with passive reluctance.

Exactly at three o'clock, the patient came into the room in which the operation was to be performed. Dr. Mitchinson, senior physician to the Lincoln County Hospital, and Mr. Joseph Lowe, as well as myself and two trained nurses, were present; and an assistant was in an adjoining room with the necessary instruments, which were meanwhile kept from her sight. She was apparently calm and very cheerful. Dr. Mitchinson and Mr. Lowe both examined the chest with the stethoscope, and the former asked for, and administered to her, about half an ounce of brandy in a little water. She then lay down near a large bay-window on a camp-bed, with the head slightly raised, the body inclining to the right side, and dress open on the chest, the left arm being removed from the sleeve and simply covered with a light shawl. I knelt at her right side, taking her hand and keeping a finger on the pulse. She seemed quite composed and confident. Dr. Mitchinson then sprinkled about half an ounce of ether on the muslin of a crucial-shaped inhaler, and held it lightly over her nostrils. She clasped my hand tightly, and almost immediately called out my name in a half-unconscious manner, as though already partially under the influence of the anæsthetic. After two more inhalations, she turned turgid about the forehead and nose, the hands being pinched and white; there was no pulse at the wrist. I dragged forward the tongue, turned her on her side, and cold water was dashed on to her chest, having the immediate effect of obtaining several forcible inspirations. These were repeated with less and less power and at greater intervals as friction and stimuli were continued, and, at fifteen minutes past three, she was dead.

An examination of the body was made at nine o'clock on the morning of the 6th by Mr. T. Sympton and Mr. C. Brook, surgeons of the

Lincoln County Hospital, in the presence of Mr. T. M. Wilkinson and myself. The rigor mortis was well developed; the body was well nourished; there was a cancerous tumour affecting the left breast. There was some subarachnoid effusion, and the ventricles of the brain contained more fluid than usual; otherwise the brain presented no abnormal appearance. On opening the body, the section displayed a large deposit of fat beneath the skin, over one inch in thickness. There were about two drachms of clear fluid in the pericardium. The surface of the heart was covered with fat. The surface of the lungs was healthy, and they were slightly emphysematous. The valves of the heart were perfectly healthy; there were small patches of atheromatous deposit on the inner surface of the aorta. There was about an ounce of fluid blood in the right ventricle of the heart, but the left was firmly contracted and empty. The muscular coat of the right ventricle close to the valves was not more than one-twelfth of an inch in thickness, and covered with a layer of fat of twice that thickness. The base of the right lung contained a very considerable quantity of fluid blood; the base of the left lung was also in a similar state to a smaller extent. Studded throughout both lungs, but more particularly towards the base, were numerous small hard cancerous nodules. The whole of the upper surface of the liver was adherent to the diaphragm, and inseparable from it. There were a few small melanotic deposits on the upper surface, and at the lower surface there was evidence of old inflammatory mischief on its peritoneal covering. The kidneys were healthy; the stomach and bowels were healthy; the spleen was soft and pulpy; the ovaries were hard and cartilaginous, apparently studded with cancerous deposit. The trachea and œsophagus were carefully removed and examined, but nothing abnormal was discovered. There was nothing else noted.

The ether used was that known as the pure sulphuric ether, and was the same as had been used for a similar operation, though on an apparently much more delicate patient, the day before. The inhaler consisted of a bag of muslin covered with a leather case, having a valvular opening at the apex and another larger one at the lower edge.

THERAPEUTIC MEMORANDA.

USE OF SIALAGOGUES IN HYDROPHOBIA.

THE apparent increase in the prevalence of hydrophobia at the present time renders any suggestion as to even a possible remedy important. The following case will therefore, I think, be found not devoid of interest.

A lady, in defending her pet dog from the attack of a cat (rearing young ones), was bitten in the hand, through her glove, a portion of the glove being driven into the wound. This occurred on Saturday afternoon at four o'clock. At the time, except the immediate slight pain, nothing was thought of the occurrence. By evening, however, the pain increased, with throbbing, which extended up the arm to the shoulder. She had some sleep through the night, and even fancied it was better next morning, so that she set out, as usual, for morning service. On her way to church, she suddenly felt ill, and found herself forced to return home, calling on a medical friend on her way back, who, forming a very grave prognosis, and feeling surgical intervention now (twenty hours after receipt of injury) almost useless, applied lunar caustic to the wound and over the forearm, giving directions to take liberal diet, including alcohol. By evening, the pain and swelling had increased alarmingly, and at 8 P.M., twenty-eight hours after the bite, the first symptoms of trismus declared themselves, or, as the patient expressed it, she felt as if two iron cramps had seized her jaws. This lasted about an hour, when salivation set in, giving her immediate relief, so that she slept through the night. On waking, she found her bed literally soaked through with saliva. Shortly after, a return of the locked jaw took place, lasting now only about ten minutes, when, with a recurrence of the salivation, it relaxed. This alternating condition—short tetanic spasms with profuse salivation—lasted for three days, the flow of saliva being so great as to saturate a sheet in a few minutes, and necessitating the patient to sit up with her head over a basin. During all this time (of salivation) the appetite was ravenous, constituting almost an acute bulimia, six mutton-chops forming the flesh portion of a day's diet, with a bottle of claret and two bottles of ale; yet, withal, a sensation of starvation not to be appeased. On the fifth day all the symptoms gradually abated, and by the end of ten days the patient was out and felt as well as ever. Since this, although several years have elapsed, any scratch or wound, however slight, gives a "starchy feeling" in the jaws, which is instantaneously relieved by a glass of brandy and water, or any equivalent alcoholic stimulant. This