respects she gave evidence of a delicate constitution. There is a history of deep grief, but not of privation. She says that the swelling came on after a pleurisy fifteen years ago which confined her to bed for six weeks, but did not reduce her much. Soon afterwards her eyelids, and in a short time her whole body, gradually swelled, and this went on slowly for years during which she became more and more feeble. As nearly as could be ascertained it was about the same time that menorrhagia commenced, and from this she suffered severely. For some years there was a flow every day and so great was the exhaustion from these distressing evils that about seven years ago she was thought to be dying. There had been no catamenia for some years past, and she believes that the hæmorrhage was checked by treatment. There is still some swelling, but the atrophic stage is well marked. There is no desquamation, which she declares has never been noticed. The pink flushes on the cheeks and nose are the most vivid I have seen; there are marked incoördination and paresis, leading to staggering in gait, stammering in speech, and of late obliging her to hang the head so as to rest the chin on the sternum; there is considerable impairment of hearing. The temperature in the mouth was 97.2°. The treatment was interesting with respect to dosage. In view of her frail condition only one-fourth of a tabloid was ordered three times a day, equivalent to three grains and three-quarters of the fresh gland daily. Her appetite improved during the first week, but towards the end of the second she experienced a peculiar sense of weakness and at the beginning of the third week she was sick for two days, with occasional vomiting, and the remedy was discontinued during this time. Next morning she took one-fourth of a tabloid, and on the same day I visited her. Although, as will have been seen, she had taken none of the remedy for two days, except the dose in the morning, I found the temperature in the mouth to be 98.4° (previously 97.2°). The improvement was astonishing, the pink patches having disappeared. She was ordered to take one-fourth of a tabloid daily in the meantime.

CASE 6.—This was the third of those shown me by the registrar and was one of very considerable myxœdema with a few exceptional features the treatment of which has just been commenced.

CASE 7.—I will barely allude to this case and only in its bearing on menorrhagia. I encountered the patient accidentally, and on entering into conversation with her I ascertained that she was fifty-one years of age, the mother of thirteen children, and that she had suffered from profuse menorrhagia until a few months previously. I found her quite incredulous when I tried to convince her that her case was now curable and she positively refused to have "any experiments." I observed that she could scarcely walk.

At the moment of writing an eighth case has come under my observation, and in a male, the first of the kind I have seen. In addition to these I have had some cases lately which are probably betraying some initial symptoms of myxœdema, and altogether I have been much impressed with the apparent prevalence of this affection to an extent which I little dreamt of.

I will only briefly comment on the above cases in reference to pregnancy and menorrhagia. Case 1 and, notably, Case 4 show the beneficial influence of pregnancy on the cachexia, as noted by the London Committee. The patient in the latter case, indeed, emphatically stated that marriage and child-bearing had saved her life. The committee fully recognise the influence of the affection in giving rise to hæmorrhages, as from the mouth, nose, &c., and from the uterus after parturition, but, whilst they make mention of exhausting discharges as being sometimes a cause of myxœdema, I find no reference in their report to menorrhagia as a consequence. The above cases, I think, show this relationship clearly and point to the importance of looking for signs of myxœdema in intractable cases of uterine hæmorrhage without apparent cause. The effect of treatment in Case 3 is specially interesting. Whilst on this subject it is hard to refrain from awarding a due meed of praise to those who have been pioneers in the clinical observation and experimental research which have resulted in placing such a power in the hands of the profession and bestowing such a boon on humanity. It is one more triumph, proving, if further proof were necessary, that those who oppose such observation and research are beyond the pale of reason.

Partick, Glasgow

REMARKS ON THE MORTALITY AND CAUSES OF DEATH AFTER EXTIRPATION OF THE BREAST FOR CANCER.

By W. ROGER WILLIAMS, F.R.C.S. ENG., L.R.C.P. LOND.

CRITICAL inquiry into the comparative results of extirpation of the breast for cancer shows that modern operations— notwithstanding their increased severity—are attended by a smaller mortality than was formerly experienced, when far less extensive operations were done. That this gratifying result is attributable to the improved methods of wound treatment which have come into use since the introduction of Listerism the following figures prove: Of 167 hospital extirpations done by Velpeau¹ prior to 1854, 32 were fatal, or the mortality was 19 per cent.; of 305 similar operations done by Billroth² prior to 1877 the mortality was 15.7 per cent. Thus in these 472 non-antiseptic operations the mortality was nearly 17 per cent.

The results obtained by the earliest antiseptic operations are much more favourable than this. After 53 mammary extirpations by Lister³ (1871–80), in the majority of which the axilla was also cleared, 4 patients died, or 7.5 per cent. After 110 similar operations by Voldk-mann⁴ (1874–77), in 75 of which cases the axilla also was cleared, 6 died, or 5.4 per cent. After 68 antiseptic extirpations by Billroth⁵ (1877–79), in many of which the axilla also was cleared, 4 died, or 5.8 per cent. Thus in these 231 strictly antiseptic breast extirpations the mortality was only 6 per cent. The causes of death in the 14 fatal cases were as follows: Septicæmia in 4; erysipelas, 3; shock, 3; exhaustion, 2; hæmorrhage, 1; and anthrax, 1. Recent operators have had still better results, for Gross' latest mortality is only 3.7 per cent.; Gussenbauer's, 2.8; and Küster's, 2.5. Referring to these progressively favourable results Billroth says: "I should not be surprised if an experienced operator were to succeed in doing 100 consecutive extirpations with but a single death."

The superiority of strict Listerism over other less carefully devised antiseptic methods is shown by the following data, which I have compiled from the registrar's reports of four large metropolitan hospitals. At the Middlesex Hospital during the years 1882–89 the breast was extirpated 100 times for primary cancer, with 10 deaths. At St. Bartholomew's Hospital during the years 1886–90 157 similar extirpations were done, with 15 deaths, or 9.5 per cent. At University College Hospital during the years 1884–89 94 extirpations were done, with 9 deaths, or 9.5 per cent. At St. Thomas's Hospital during the years 1886–90 138 operations were done, with 12 deaths, or 8.7 per cent. Thus at these four hospitals 489 mammary extirpations were performed for cancer, with 46 deaths, being a mortality of 9.4 per cent. In nearly all these cases some form of antiseptic treatment was employed other than strict Listerism. The figures show the marked superiority of the results thus obtained over those of pre-antiseptic methods, and at the same time they demonstrate the superiority of true Listerism over other forms of antiseptic treatment.

Mr. Butlin⁶ is averse to clearing the axilla in every case of mammary cancer destined for operation because of the greater mortality thus entailed, which, he says, is much more than twice as great as when the axilla is not opened. I think he has over-estimated the danger of this proceeding, for of the above 489 hospital operations in 332 the axilla was cleared as well, with 36 deaths, being a mortality of 10.8 per cent., whilst of the other 157 cases operated upon—in which the diseased breast alone was removed—10 died, or 6.3 per cent.

An analysis of the causes of death in the above 46 fatal cases gives the following results: Septicæmia, 14 cases; erysipelas, 9; pyæmia, 6; pleurisy, 2; pneumonia, 2; bronchitis, 2; shock, 2; and 1 each as follows: traumatic delirium, syncope, suppuration in the anterior mediastinum, secondary hæmorrhage, acute recurrence, peritonitis (perforation), exhaustion, mania and renal disease. Thus, of these 46

¹ *Traité des Maladies du Sein*, tome ii., p. 151. Paris, 1854.

² *Deutsche Chirurgie*, Lieferung 41, p. 155.

³ W. Cheyne: *Antiseptic Surgery*, 1882, pp. 373 and 382

⁴ *Op. cit.*, p. 388.

⁵ *Op. cit.*, p. 155.

Operative Surgery of Malignant Disease, 1887, p. 371;

deaths 29, or 63 per cent., were indubitably due to septic disease. In most of the above cases the disease began as erysipelas.

Velpeau⁷ relates that after his 235 breast extirpations for cancer 54 patients were subsequently attacked by erysipelas, or 23 per cent., whereas after 395 of the above hospital operations only 40 were subsequently thus attacked, or 10 per cent. This shows that the liability to septic disease has been much diminished by antiseptic treatment. The supervention of erysipelas after mammary extirpation is an exceedingly grave complication, for of 40 cases thus attacked I have found that 20 ended fatally.

Preston, Lancashire.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL AND THERAPEUTICAL.

A NEW PHYSICAL SIGN FOR THE EARLY DIAGNOSIS OF CROUPOUS PNEUMONIA.

By F. H. MORISON, M.B., C.M. EDIN., D.P.H. R.C.S.I.

CROUPOUS PNEUMONIA is, I believe, one of the commonest of the acute chest diseases of children which a practitioner is called upon to treat. This statement is based upon a careful examination of many cases, commonly called bronchitis or broncho-pneumonia, which accurate records of temperature and the after progress have proved to be croupous pneumonia. The various writers I have consulted are agreed that the physical signs of pneumonia in both adults and children are impaired resonance on percussion or fine crepitation on auscultation, and that in children especially there is no definite physical sign till the disease is well advanced. The early diagnosis is thus as difficult as it is important. Dr. Francis Moinet, in "Keating's Cyclopædia of Diseases of Children," says: "In not a few cases no satisfactory results are obtained by auscultation and percussion until a comparatively late period owing to the limited extent of the affected region and its position in the centre of a lobe surrounded by healthy lung tissue." In several cases recently seen where the general symptoms of pneumonia were present but none of the ordinary physical signs I have discovered what I am venturing to describe as a new physical sign. On careful auscultation of the chest I have heard jerky expiration over a limited area and on noting the position of this area have found developed in it subsequently the usual signs of pneumonia. This jerky expiration is the first physical sign developed and can be heard soon, if not immediately after, the rigor, before dulness or crepitations appear. It is much more distinct in children, but I have also heard it in adults. The following cases sufficiently illustrate what I wish to point out, though I have notes of several others: 1. A girl aged four years was first seen by me about 9 P.M. on April 29th of this year. Her mother stated that she was seized with a shivering fit about 12.30 P.M. on the 28th, having been previously quite well. Her hands were cold and she was drowsy and thirsty. There was pain in the limbs in the afternoon and her breathing was short. She became delirious about 9 P.M. When seen by me on the following day her breathing was very rapid. She had a slight cough and a very quick pulse. The temperature was 104° F. Except that expiration all over the right base was markedly jerky, nothing abnormal was found in the chest. On the 30th her temperature was 102°. The physical signs were the same. On May 1st there were slight dulness on percussion and fine crepitation over the right base. The pneumonia ran a normal course and the patient made a good recovery. 2. A young man aged twenty was first seen by me on April 3rd of this year. He complained of pain in the right side and shortness of breath. On April 1st he became very heated whilst playing at football and during the following night he had a rigor. His respiration was rapid, the pulse was quick, and the temperature was 103.4°. Except for jerky expiration at the right base posteriorly there was nothing abnormal on examination of the chest. Pneumonia was diagnosed at the right base. This was subsequently verified by ordinary physical signs. The disease ran a typical course, although convalescence was somewhat prolonged.

Dr. Douglas Powell, speaking of pneumonia in his book on "Diseases of the Lungs," says: "The breath sound at one base has, however, at a very early period a peculiar rough, harsh quality, very like that of exaggerated breathing, and slight crepitation may be audible." The explanation of this jerky expiration I am not prepared to offer, but suggest that it may possibly be due either to the primary congestion interfering with the elasticity of the lung, thus making the expiration puffy or jerky, or to propagation of the heart beat through a more readily conducting medium than the healthy lung. I am more inclined to think that the former explanation is the correct one, because it is difficult to see how the heart beat could so much affect the air leaving the right lung, and I have been unable to satisfy myself that the rhythm of the jerk corresponds with the cardiac impulse. Further observation will show how much value is to be attached to this sign, but I note it with the hope that it may prove as useful to others as it has been to me.

West Hartlepool.

LARGE TUMOUR OF THYROID GLAND; REMOVAL; RECOVERY.

By M. P. MAYO COLLIER, M.B., M.S. LOND., F.R.C.S. ENG.

TUMOURS of the thyroid gland, apart from general enlargements classed under the headings "bronchocele" or "goitre," are sufficiently rare to warrant my offering the following somewhat remarkable case for notice.

A single woman aged thirty-eight consulted me about seven months ago for a swelling in the throat, accompanied with some difficulty in breathing. She was very pale and anæmic, but not of spare habit. A median enlargement of the thyroid gland was apparent. The larynx was normal, but a distinct flattening of the trachea could be made out below. The growth was limited to the isthmus and was firm and closely adherent to the trachea. Removal by operation was advised as the only means of mitigating permanently the dyspnoea. This was refused and the patient was lost sight of till quite recently. One month ago the growth had invaded the neck in the mid-line to an enormous extent, had dislocated the trachea and larynx on to the left carotid vessels, and had pushed the œsophagus to the right, causing some difficulty in swallowing; further, the tumour had descended into the thorax behind the sternum and invaded the whole of the space between the apices of the lungs and the base of the heart as far posteriorly as the vertebral column. Dyspnoea was most urgent at times, necessitating something being done as soon as possible. After a consultation with Mr. Bernard Pitts the patient was sent into St. Thomas's Home, and there, with Mr. Pitts' and Dr. Edmunds' assistance, the growth was completely removed. Not much difficulty was experienced, the growth shelling out of its bed with comparative ease. Very free hæmorrhage was our chief trouble. On section it was found to be a solid growth composed of thyroid-like tissue, dotted with several cysts containing blood-stained serum. The patient has done well and is now convalescent.

New Cavendish-street, W.

HOSPITAL SATURDAY AT BRIGHTON.—The inhabitants of Brighton on Saturday, Sept. 16th, made special efforts on behalf of the Hospital Saturday Fund. Flowers, bunting, and mechanical contrivances were used with a lavish hand to attract the benevolent and much help was rendered by the railway companies, who afforded facilities for collecting on their platforms, and by the shopkeepers of the town. The subscriptions from the very poor showed how well the fund was appreciated by those for whose benefit it was mainly inaugurated.

PRESENTATION.—On the 7th inst., at the Police Seaside Home, Hove, Dr. F. J. A. Waring was presented with a well-finished picture of the Home, of which he is the hon. physician. The presentation was made by Inspector Weidner on behalf of the subscribers, and in the course of his remarks he spoke of the skill and kindness manifested at all times by Dr. Waring to the patients under his care, as well as of the urbanity shown by him to all with whom he was brought into association. Dr. Waring, in returning thanks to the donors, said he should always look upon the picture as recalling some of the happiest events in his life.