East London Hospital for Children, Shadwell, where, however, there is practically no restriction on the number of infants admitted, must be taken for what they are worth. Usually 40 per cent. of the admissions into the hospital are patients under two years old. Moreover, the diagnoses for the most part were made by physicians not only well versed in, but recognised authorities upon, the medical diseases of infants—namely, by the then three senior physicians, Dr. Eustace Smith, Dr. J. A. Coutts, and Dr. Dawson Williams. Now at Shadwell during the three years 1899–1901 311 patients were admitted into the hospital suffering from croupous pneumonia. Of these 121—i.e., 40 per cent.—were under two years of age, 137 were between two and six years (a large proportion of these were patients between two and three years of age) and 53 were between six and 14 years. It is obvious from these figures that amongst children the commonest age-period for croupous pneumonia is during infancy.

Next as to the frequency of croupous pneumonia relative to broncho-pneumonia. From the Shadwell statistics it would seem—and here again my experience leads me to agree with the broad facts revealed by those statistics—that croupous pneumonia in infancy is relatively to broncho-pneumonia rather more frequent than is generally supposed. In a series of cases collected by Dr. Holt he found that 25 per cent. of his acute primary pneumonias during the first two years were lobar and 75 per cent. were broncho-pneumonias. Now in the three years during which 121 patients under two years of age were admitted for croupous pneumonia into the Shadwell Hospital 230 cases of broncho-pneumonia were admitted. Of these 172—i.e., 75 per cent.—were under two years of age, 56 were between two and six years of age, and there were only two patients older than six years of age. It must be borne in mind that these figures are from a hospital where very few infectious diseases are treated; and that consequently the relative frequency of croupous pneumonia appears somewhat higher than is actually the case. The figures, however, show that croupous pneumonia, although not so common as broncho-pneumonia in infancy, does not fall far short of it in the frequency of its occurrence.

The question of the prevalence of the two common varieties of pneumonia in infancy is intimately wrapped up with the distinctions between the two forms. Sometimes the primary broncho-pneumonias are difficult to differentiate from the croupous pneumonias of infancy. In a paper⁷ which I read not long ago before the St. George's Hospital Hunterian Society I defined some of the chief points upon which dependence must be placed in making the differential diagnosis between croupous and catarrhal pneumonia in infants. But I was unable there to enter into the question as to the separate entity of each disease. In his book upon the "Diseases of the Organs of Respiration" Dr. Samuel West has brought forward arguments in favour of classifying all the primary broncho-pneumonias of infancy with croupous pneumonia. He advocates the restriction of the term "broncho-pneumonia" to the secondary forms only and holds that many of the primary forms are clinically cases of croupous pneumonia which take on pathologically the broncho-pneumonic lesion because the pneumococcal inflammation is in an infant in whose pulmonary system there are anatomical and physiological peculiarities not present in the adult. It would be entering into the question of etiology too much at the present moment for me to discuss this matter fully, but I can see no *a priori* reason why the pneumococcus cannot set up a true broncho-pneumonia as well as a true croupous pneumonia. If croupous pneumonia in infancy really takes on the broncho-pneumonic type of lesion we are seeking for a distinction where there is no real difference and it would be futile to discuss either the differential diagnosis or the relative prevalence of the two conditions. But I do not agree with Dr. West on this point. To fall in with his opinion is not only inexpedient and uncalled for in the present position of our knowledge as to the etiology of the pneumonias but also dangerous to the precision and accuracy of our outlook upon the clinical aspects of these conditions. There would be a liability to lose sight of the important practical point—namely, the great difference in the prognosis of the two complaints—if this view were generally adopted. It is true that the very high mortality of broncho-pneumonia in infants is less in the case of the primary form than in the secondary; but its mortality rate never reaches that low limit which is associated with the croupous pneumonia of

childhood. In practice some cases of pneumonia, diagnosed as croupous, more especially, of course, in those babies who die, are really cases of primary broncho-pneumonia; for in the primary broncho-pneumonia sometimes the disease spreads so rapidly and signs of consolidation become evident so soon that it may simulate very closely acute croupous pneumonia, especially should the signs be limited chiefly to one lobe. The likelihood of mistaking a primary broncho-pneumonia for croupous pneumonia is further rendered possible by its occasionally having a quite sudden onset, by its being sometimes associated with fever of the continuous type, and by the fact that it is usually of pneumococcal origin. But the opposite error of mistaking a croupous pneumonia in an infant for a broncho-pneumonia is equally common, and probably outside hospitals for children it is the commoner mistake. Moreover, another difficulty arises sometimes from the occurrence of intermediate forms. In the majority of these, in all probability, both varieties of pneumonia are present in different parts of the same lung or in opposite lungs at the same time. Dr. Coutts⁸ points out that small secondary broncho-pneumonic patches may surround a consolidation of a truly croupous nature, that this is especially liable to occur in infants under two years of age, and that it is one of the most important ways in which difficulties arise in discriminating between the two varieties. But he maintains that "where the symptoms are well marked and typical and this, fortunately, is the case in a greatly preponderating majority of both forms, there is no difficulty in distinguishing between them."

In spite of these occasional similarities between the two diseases and the occasional difficulties in their diagnosis, however, they should never be confounded, for they differ essentially in their natural history, origin, incidence, course, histology, and especially in their clinical manifestations and prognosis. Dr. Pye-Smith⁹ points out that because these two forms of pneumonia are occasionally difficult to differentiate the one from the other that is no reason why the attempt to do so should not be made in every case, nor any excuse for ever grouping them together either clinically or pathologically. As well might carcinoma and alveolar sarcoma or rubeola and morbilli be classified under the same head because sometimes they are almost indistinguishable.

The peculiarities of the pulmonary system of a baby no doubt explain satisfactorily why broncho-pneumonia is so common in infancy, why cases arise in which great difficulty occurs in the matter of diagnosis, why intermediate and mixed forms are found, and why broncho-pneumonia may come on as a complication of croupous pneumonia. But it seems to me unnecessary to claim that these peculiarities result in the croupous form of pneumonia taking on the catarrhal type in this class of patient, for I believe that the two types are as essentially distinct in the infant as in the adult. I maintain, then, that true croupous pneumonia is common in infants, that the primary broncho-pneumonias are in the majority of cases perfectly distinct from this, and that even those primary cases which occasionally simulate croupous pneumonia closely should be recognised as distinct from that disease and should not be classified with it but should remain in their present position amongst the broncho-pneumonias.

Serjeant's Inn, E.C.

RESPIRATORY CRISES IN GRAVES'S DISEASE.

By J. GORDON SHARP, M.D. EDIN.

GASTRIC crises occurring in the course of Graves's disease are recognised and described, but I cannot recall any description of respiratory crises, yet I have met with at least two cases of very rapid breathing in which the exciting cause was evidently some poison set free in the system. The respirations succeeded each other with rapidity—not less than 60 a minute—the conditions being not unlike that seen in atropine poisoning. A peculiarity of the symptom is the marvellous action which opium, in some shape or other, has in slowing the respirations and restoring the patient to the normal well-being. In describing the two cases I shall omit all unnecessary details and confine my remarks to the salient points.

CASE 1.—A woman, aged 29 years, the mother of four children, had noticed a lump in the neck for two years, but

⁷ Practitioner, April, 1903.

⁸ Edinburgh Medical Journal, September, 1902.

⁹ Clifford Allbutt's System of Medicine, vol. v., p. 104.

had not suffered much discomfort till the onset of the present illness when she began to complain of palpitation, cough, and "difficulty of breathing." On inquiry and examination she was found to suffer from vomiting, cough, and pain over the larynx. The pulse was 210; tremor, moist skin, goitre, with throbbing vessels and exophthalmos were present, but the most marked symptom was the very rapid breathing. There was also a tickling cough which was referred to as originating in the throat. There was little expectoration. Half a drachm of paregoric and two minims of tincture of aconite in two tablespoonfuls of water were administered every four hours. The effect was marvellous. In a few hours the respirations fell to normal and the heart and pulse rates came down from 210 to 120, the usual frequency. The woman made a rapid recovery.

CASE 2.—A woman, aged 65 years, the mother of several children, had for years suffered from "spasms" at regular intervals. These attacks were referred to a stomach condition, but I have reason to believe that they were only crises in Graves's disease. She had no exophthalmos but she had an enlarged, throbbing thyroid gland and she had herself observed that the throbbing was always worst when the "spasms" were present. The other signs and symptoms of Graves's disease were observed—tremor, moist skin, palpitation, pulse 120 to 170, and laryngeal crises—but not till the present occasion had the patient suffered from a respiratory crisis. This was supposed to have originated in a "cold." Suddenly she complained of a so-called shortness of breath, although really the condition appeared to be as if some agent were stimulating the respiratory centre at the rate of from 60 to 66 times a minute. There was practically no cough and when the chest was examined nothing could be found to account for the respiratory trouble. The whole expectoration in the course of the night amounted to less than one tablespoonful of clear viscid mucus. At this time there were retching and some little vomiting of stomach mucus, but vomiting was not a prominent symptom. The patient was placed in a warm, moist atmosphere and the usual expectorant mixtures were tried for 48 hours and without benefit, as might be expected. The woman was becoming exhausted simply from the frequency of the breathing. At this period I gave her a one-grain opium pill, the time being midnight, and ordered another to be repeated in an hour. She slept for four or five hours and awoke practically well, and her respirations were reduced to 18 or 20. She bitterly complained that I had not administered the pills earlier.

In searching for an explanation of this increased activity of the respiratory centre I think I am justified in holding that in Graves's disease a poison is thrown into the system which under ordinary conditions is excreted by the ordinary channels and produces only the usual symptoms. Occasionally this poison is present in great amount and the ordinary channels are unable to deal with it sufficiently rapidly and the stomach is called in to aid and one gets then a gastric crisis. Less frequently the poison is present in great quantity or the excretory organs are unable to deal with it and the poison reaches the respiratory centre in great quantity and then one meets with respiratory crises. I know this view is open to objections, but it has the virtue of feasibility. Supposing it to be poison, then it belongs to the atropine, digitalis, or strychnine group as far as its action on the respiratory centre is concerned. Now, opium is antagonistic to this group—that is to say, it has the opposite effect on the respiratory centre—and hence its curative action in the condition which I have detailed.

Leeds.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv., Proœmium.

BRITISH HOSPITAL, BUENOS AYRES.

A CASE OF LIPOMA OF THE CÆCUM.

(Under the care of Dr. JOHN O'CONOR.)

A WOMAN aged 45 years, was admitted into the British Hospital, Buenos Ayres, on Feb. 5th, 1900, with the following history. In October, 1899, she first complained of indigestion

with some pain in the right abdomen near the umbilicus, for which her medical attendant prescribed liquid diet and a mixture of soda, bismuth, and magnesia. She gradually lost flesh and the pain became more intensified, accompanied by flatulence, nausea, and a heavy feeling in the epigastrium after food. On Jan. 3rd, 1900, she vomited for the first time; afterwards this became a matter of frequent occurrence, but blood was not at any time observed in the vomited matter. She had great difficulty in getting her bowels to act; the stools always appeared to be normal in character. On the 28th she felt a lump for the first time in the region where she had previously complained of pain. On admission a distinct hard moveable tumour of about the size of a Tangerine orange was felt one inch below and to the right of the umbilicus; it was tympanitic on percussion and was tender to the touch. As general examination revealed no other organic affection the diagnosis seemed to point to a pyloric tumour.

On Feb. 6th chloroform was administered and a vertical incision was made through the right rectus; on opening the peritoneum a coil of large intestine presented, which turned out to be the ascending colon with a very moveable cæcum. The latter contained a large ovoid mass which seemed to occupy its whole lumen. Taking into consideration the absence of a doughy feeling and the immobility of the swelling inside the bowel, a two-inch incision was made into the cæcum. A gangrenous mass presented, which consisted of sloughing mucous membrane covering a large fatty tumour imbedded between the mucous coat and muscularis mucosæ in a free zone of bowel wall. The gangrenous mucous surface was liberally excised, the fatty tumour was enucleated, and the cavity was as far as possible obliterated by catgut sutures. The parts having been thoroughly irrigated the cæcotomy wound was closed by two rows of continuous silk sutures and the coeliotomy one by tier sutures. An uninterrupted convalescence ensued and the patient left the hospital a month later. When seen in October, 1902, she reported that her condition had continued normal since the operation.

Remarks by Dr. O'CONOR.—As the above affection is somewhat rare, possibly the notes of the only case I have met with in a series of over 1000 general abdominal operations may be of some interest. Taking into consideration the age of the patient, the gradual onset of gastric symptoms, the loss of flesh, and the site of the tumour, I was agreeably disappointed in not finding some serious lesion in the pylorus. Yet on reflection the latter might possibly have been eliminated if full value had been accorded to the absence of gastric dilatation and the history of old-standing stomach trouble.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

The Treatment of Aneurysm by Subcutaneous Injection of Gelatin.—A Case of Aneurysm of the Abdominal Aorta treated by the Introduction of Silver Wire.

A MEETING of this society was held on June 23rd, Mr. ALFRED WILLETT, the President, being in the chair.

Dr. GUTHRIE RANKIN read a paper on the Treatment of Aneurysm by Subcutaneous Injection of Gelatin. After alluding to the work done by Lancereaux and others in connexion with the cure of aneurysm by gelatin Dr. Rankin showed that though not universally accepted there was considerable evidence to prove that the results were due to an increased power of coagulability produced by the gelatin on the blood. The best results were obtained when the use of gelatin was combined with rest in bed, restricted diet, and iodide of potassium given internally. The method of treatment by gelatin subcutaneously had not so far been extensively adopted in this country. Lancereaux advocated the injection of 250 cubic centimetres of a saline solution containing 2 per cent. of gelatin and considered that a minimum of from 12 to 15 injections was necessary. Huchard preferred a 1 per cent. solution as being safer. In four cases treated by Dr. Rankin at the Dreadnought Hospital 100 cubic centimetres of a 2 per cent. solution of gelatin were injected at each sitting after the first and the average number of injections was 17. The inner aspect of the thigh was chosen as the most convenient situation for the operation. The solution consisted