and an efficient public health service for all will become a first charge on the public purse.

In the meantime rest assured that you will have the teachers in every school in the three kingdoms with you.

Let us not be afraid of beginning with small demands, lest these being granted there be an end. You do not think the men assembled in this room have come together to wring a few pounds out of the ratepayers, and that we are organizing the whole profession for such a paltry end. No. Our end is a position in which we can efficiently and honourably do the work to which our lives are devoted. When that is attained we shall rest, but not till then.

Let it not be thought, however, that because we are making these efforts for our efficiency we are not grateful to our fellow-countrymen for what they have done for us in the past, and for what many of them are still doing. Things are out of shape, but that is due to the fact that medical science has grown fast of late, and society has not yet adjusted itself to the new condition—

The old order changeth, yielding place to new,
And God fulfils Himself in many ways.

We have come in rather suddenly for a great inheritance. Our claims are undoubted, and we are a little irritated because there is some hesitation in these claims being allowed. However, if we press forward temperately and firmly all will come right, because although we may differ as to details we are all animated by the same spirit and striving for the same end; because hearts are hearts, and Irishmen are Irishmen, and because we belong to a profession which, while it recognizes neither north nor south, nor upper class nor lower class, should make us at one and the same time the servants and the masters of all.

CONGENITAL HYPERTROPHIC STENOSIS OF THE PYLORUS: PYLOROPLASTY: RESULT.

A CONTRIBUTION TO THE ETIOLOGY AND TREATMENT OF THE AFFECTION, WITH NOTES OF A CASE.

BY

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To those who are brought much into contact with the ailments of infants it is a matter of common knowledge that failure to make satisfactory progress after the first few weeks of life is not very infrequent, and this, too, in spite of the fact that the child draws its nourishment from the breast of the mother. Suspicion naturally falls upon the secretion, and it is decided to abandon the breast in favour of an artificial mixture. From this time forward the art of infant feeding is taxed to the utmost to find a substitute for the breast that will be taken and retained, and the various cream mixtures, the proprietary foods, and lastly peptonized milk, are given a trial in turn, with the uniform result that the infant not only does not make progress and gain weight but actually loses ground steadily from day to day, and scales at the end of the first six weeks a pound or so less than it did at birth. It soon becomes apparent, not alone to the medical attendant, but also to the mother, that the unsatisfactory condition of the child is due not to any inability on its part to take nourishment, for it seems always ready and eager for its feedings, but to the fact that the greater portion of what it takes into the stomach is returned after a varying interval. Vomiting, therefore, becomes one of the earliest, as it is also the most prominent and persistent, symptom of congenital stenosis of the pylorus, and the characteristics of it merit the most careful attention; but before considering these the following short statement regarding the stomach of the infant may not be out of place. The stomach is very small at birth, its capacity being about one fluid ounce. It increases steadily in size, so that by the end of the first month it will contain three, and at the sixth month six ounces of fluid. Its position is nearly vertical, the fundus being but slightly developed. Owing to the weakness of its muscular layers dilatation is readily induced and gases are apt to accumulate. Gastric digestion is at this early period only a partial one, the stomach serving more the function of a reservoir from which the food is passed on into the intestine. To return now to the symptom of vomiting, we find that it possesses some peculiarities in congenital stenosis of the pylorus. At first the quantity brought up is not very

large, an ounce or so, but this amount is vomited at frequent intervals, for the reason that dilatation of the stomach to any considerable degree has not as yet taken place. Gradually, however, with increasing dilatation, larger quantities are brought up, and the intervals between the vomitings are increased, until in a well-marked example of this affection the child takes and retains several feedings and ejects a large portion of them at one time. Such a sequence of events is very characteristic of pyloric obstruction and should direct attention to this condition. The vomiting is unaccompanied by nausea or sign of collapse, and the fluid returned is never seen to contain bile—a further evidence of the condition of the pylorus. The vomited matter consists largely of a fluid resembling whey, and contains some flocculi or small curds. The tongue is usually clean and raw-looking; the breath is sweet, and not rarely the buccal cavity is affected with parasitic stomatitis. Where large quantities of fluid are vomited at one time dilatation of the stomach is assumed, and the condition may be verified by inspection, palpation, and percussion. With the infant stripped and placed in a good light the outline of the dilated stomach can be clearly defined, and it will be seen to extend downwards as far as, or it may be to beyond, the umbilicus. Visible peristalsis of the stomach is generally well-marked, the contractions passing across the abdomen in waves from left to right. It is most important to palpate the pylorus if this is possible, but it is not always practicable, owing to its deep position, to the struggles of the child, and to the resistance of the abdominal muscles. A few whiffs of chloroform may be given, and under its influence it can, as a rule, be located. It is generally felt as a hard nodule about the size of a hazel nut but more elongated, and it gives one the sensation of a firm, fibrous body. This pyloric tumour, then, which consists of hypertrophy of the circular muscular fibres, is undoubtedly the prime factor in the causation of this affection, but that it ever gives rise, of itself, to complete obstruction to the passage of the food out of the stomach we have good reason to doubt. In a paper published in the *Lancet* of March 5th, 1904, in which Dr. Cautley gives a detailed account of a case that ended fatally "from marasmus, induced by starvation, from insufficient food passing through the pylorus," the necropsy disclosed the fact that while a probe could be passed through the pylorus it was not found possible to squeeze any of the contents of the stomach through this opening, and he therein expresses the view that the obstruction was due "to hypertrophy with secondary contraction of the hypertrophied muscle." This view may be correct, and with it we have no fault to find, but examination of the stomach immediately after death in our case has convinced us that there is another and most important factor at work which is of paramount importance in making the incomplete pyloric obstruction absolutely complete, and this fact or is the condition of the gastric mucous membrane. With a condition of more or less stenosis of the pylorus the efforts of the stomach to overcome the obstruction lead to hypertrophy of the muscular and mucous coats, and the longer such obstruction remains unrelieved the greater this hypertrophy becomes. In our case life was prolonged sufficiently for quite an astonishing degree of hypertrophy to develop, the stomach walls having become very thick and the mucous membrane abundant and corrugated. On testing the patency of the pylorus by filling the stomach with water, not a drop passed through in spite of pressure made to force it along, although the pylorus admitted an ordinary cedar pencil, and on examination this very effectual obstruction was seen to be caused by two folds of the much hypertrophied mucous membrane falling down over the pyloric orifice in a way that vividly recalled the action of the mitral valve. We are, therefore, persuaded that this hypertrophied condition of the mucous membrane becomes a most important factor in these cases, inasmuch as we believe it effectually blocks the already contracted pylorus, and whatever form of operation is adopted it should be done with the object of, first, relieving the obstruction; and secondly, of dealing with the mucous membrane in such a way as would prevent the possibility of the valve-like action referred to. The condition of the bowels in pyloric obstruction in infants is one of constipation as a rule, but the character of the motions will vary with the amount of nourishment that finds its way out the stomach. Speaking generally, the motions are small, infrequent, and dry, and scybala may be felt in the colon, but it is by no means unusual for two or three small and fairly normal motions to be passed daily.

The following statement gives the most important points in the history and course of our case:—

L. G. C., was born at full term, was healthy and well-developed in all

respects. For the first fortnight the mother's breast was the sole nourishment. About this time, according to the mother he began to vomit, and thereafter he steadily lost ground. The vomitings were small in quantity and occurred shortly after the nursings. Thinking that the breast was not agreeing with him, it was abandoned, and a mixture of condensed milk and water substituted. This change was given a trial for a fortnight, and no benefit or progress being apparent, I was asked to see the child in consultation with the family physician, Dr. Dempsey. I visited the infant on August 29th, 1903, on which date he was four weeks old. The child was fairly nourished, but the mother said he was not as weighty as when he was born. The bowels acted about twice daily, and the motions were small, not constipated, and contained some curds. There was a rather copious eruption of thrush over the tongue and cheeks. No dilatation of the stomach was noted at this visit. A whey and cream mixture was recommended, and a powder consisting of hyd. c. cret. gr. $\frac{1}{2}$, and salol gr. j. was ordered to be given each night and morning. I was asked to see the baby again on September 20th. For a fortnight the whey and cream mixture agreed well and was retained better than anything previously tried. After this the child became much worse and the symptoms assumed a more definite character. The intervals between the vomitings became much longer and the quantities brought up much larger, indeed the description of the mother at this visit was most graphic as well as very suggestive, namely, "that the child drank well all day and threw it all off at night." Dr. Dempsey, who had seen the child at frequent intervals, was now of opinion that some obstruction existed to the onward passage of the food. On examination I found the child greatly wasted. The stomach was now much dilated and extended downwards to the umbilicus.

Peristaltic waves crossed the abdomen from left to right at short intervals. The pylorus was not palpable. The temperature was 97.4° F. in the rectum; the pulse was 130 and feeble. The motions were small in quantity, dark in colour, not constipated and were curdy-looking; two or three of these small motions were passed daily, but occasionally a day passed without any action of the bowels. The urine was very scanty and stained the diapers a brick-red colour. Stenosis of the pylorus was diagnosed, and operative measures recommended, but the parents were unwilling to consent to this. A nurse from the Children's Hospital was obtained, and under her skilled attention matters improved considerably, and the child gained one pound in weight. Eventually, however, the obstruction became more complete, and the operation of pyloroplasty was undertaken by Mr. Campbell under anything but encouraging conditions.

DESCRIPTION OF OPERATION BY MR. CAMPBELL.

As the child was in an extremely weak and emaciated condition, it was evident that no prolonged operation for the relief of the obstruction could be borne. I consequently determined to perform pyloroplasty, because I considered that it would relieve the obstruction more satisfactorily than dilatation, and would not be attended with the same immediate risks as gastro-enterostomy. When the abdomen was opened, a tumour the size of a walnut was at once seen at the gastro-duodenal junction, and the stomach was found to be greatly dilated and to have an abnormally thick wall. When the longitudinal incision was made through the pylorus, the mucous membrane was found to be loose and redundant, a very well-marked longitudinal fold being seen on the posterior wall. The incision was quickly closed transversely by three Halsted sutures covered by a continuous Lembert suture. The child bore the operation fairly well, but the vomiting continued as before, and it was noticed by the Sister in charge of the case that the vomiting was more frequent when the child was nursed on the right side. In the account of two other cases published by Mr. Clinton Dent, I had been struck by the fact that the vomiting only gradually ceased, and I came to the conclusion that this was probably due to the redundant mucous membrane. To obviate this I had determined to insert a bone hobbin to keep the canal patent, but was unfortunately unable to obtain one small enough. The vomiting continuing, the child gradually became weaker and died on the sixth day. At the necropsy the line of suture was found perfectly intact, and so covered in as to be only visible on close inspection. The peritoneum was quite normal. When the stomach was opened I found that the pylorus readily admitted a cedar pencil, but when the stomach was filled with water under the tap not a drop passed into the duodenum. This was found to be due to the redundant mucous membrane at the pyloric orifice falling together in folds and blocking the canal. The transverse suturing had also produced a slight bend in the canal, which possibly facilitated the obstruction by the mucous membrane.

The small intestine was so small and collapsed that its lumen was almost obliterated. It would therefore have been absolutely impossible to have performed a satisfactory gastro-enterostomy, which in such cases has been attended by a prohibitive mortality. Dilatation also appears to be accompanied by considerable risk from laceration of the bowel. Notwithstanding the unfavourable termination of this case, I should be inclined to try pyloroplasty again, endeavouring to obviate the danger of blocking by free resection of the redundant mucous membrane and the insertion of a small bone hobbin.

DONATIONS TO HOSPITAL.—The Tunbridge Wells Hospital has received donations of £1,000 each from Miss Stanley Puckle and Mr. Stanley Puckle, of Tunbridge Wells.

ACUTE DERMATITIS PRODUCED BY SATIN-WOOD IRRITATION.

By H. E. JONES, M.B., C.M. GLASG.,

Ibros.

IN 1898 an outbreak of acute dermatitis occurred amongst a number of joiners and cabinet makers employed in the joiner's shop of a Govan shipbuilding yard. At that time I saw several of the patients and made a careful study of the cases.

The first of the patients who consulted me at that time was a cabinet maker about 35 years of age. He called to see me regarding the condition of his face and neck, hands and wrists, which were all in a state of acute inflammation and much resembled that of erysipelas, so much so that I called the following day at his house to satisfy myself on that point. His face, neck, and ears were very red and swollen; his eyes were almost closed, his skin was hot, yet he was not fevered. He had no pain and no sickness. He said that for five weeks his skin had been, on and off, in a condition such as when I saw him, and in consequence he had to cease working from time to time. He had on several occasions during that period been well or almost so, but whenever he commenced his work the inflammation almost immediately reappeared in all the exposed parts—face, neck, ears, hands, and wrists, and soon again compelled him to leave off work. The inflamed area became moist, and this was followed by desquamation.

He told me that several of his fellow-workers were similarly affected. I saw a number of them and found exactly the same state of matters. In each case improvement followed cessation from work, and in each case the illness reappeared when work was resumed.

The history of the illness was sufficient to satisfy me that the cause was some irritant in the dust arising from foreign wood with which the men were working at the time—East Indian satin wood.

I consulted an eminent professor interested in diseases of the skin, and he corroborated my previously-expressed opinion that the cause was due to something connected with the wood, and suggested that the men should paint the exposed parts with a preparation of gelatine. Some of the men preferred going idle; one or two went to work elsewhere and got along without any further trouble.

Within the last few weeks another outbreak, almost identical with the foregoing, has come under my notice. It occurred in another Govan joiner's shop where five of the men working with satin wood have been affected. Three of these have had to cease work; the other two, not being so bad, are still at business.

As in the first outbreak, so with this, the exposed parts are those affected. The men state that they first experience a feeling of irritation on the skin, that later on the parts become hot and red, and subsequently become swollen and uncomfortable, and although not painful, sufficient to keep them off their sleep. This is followed by moisture and complete desquamation of the skin over the affected parts.

The first attack is rather slow in its onset, but relapses come on with great rapidity.

One of the men, a joiner of about 40 years of age, tells me that he was handling satin wood for about six weeks before he had to discontinue his work. Having remained off work for some time he made a fair recovery and again made a start, but was only able to remain at work for three days. He kept off work for eleven days more, and then made another attempt, but was only able to continue on duty for two days. After another interval of ten days' idleness he again resumed his work, but had to discontinue in two days. For ten days more he went about idle, then entered the shop once more, but had to cease work after three and a-half days. Since then he has remained idle.

Another joiner, 50 years of age, stated that he commenced to feel uncomfortable one month ago, but was able to continue at work for two weeks; after remaining off duty for nine days he made a start, but was compelled to cease in seven hours, and has not since tried to resume his work.

Assuming that the satin-wood dust be the cause of the dermatitis, the question may be asked: Why are not all the men who work with it similarly affected? My answer is, that some skins are more easily irritated than others, and that probably those affected were of that type. This is practically borne out by the fact that three of the sufferers who came under my notice showed slight traces of eczema.