

For the forms of anæmia depending on failure of hæmato-genesis, we find advocates of every form of iron, but as all iron seems to be reduced to a chloride or albuminate in the stomach, the relative interference of different preparations with the digestion is what we have chiefly to think of. Even the pill forms cannot, it appears, claim the minor advantage of not affecting the teeth. Indeed, the great thing is to increase the digestive process, for sufficient iron is, after all, present in the food itself, if we can abstract it. This consideration is strengthened by the beneficial effects we see in the use of aperients. Certainly assimilation is improved by them, whether they act directly on the digestive organs, or, as has been suggested, by clearing away organisms which interfere with their activity. It must not be thought, however, that iron has no specific action. It certainly is absorbed in large quantities, though a proportion passes away in the fæces, and the improvement which follows its careful administration is so frequently seen and so decided that we cannot doubt of its being due to the drug. Unhappily the effects are not permanent, and the defective assimilation of iron is apt to recur both after recovery from chlorosis and after some progress seems to have been made in stopping the progress of the more malignant forms of anæmia.

## SURGERY.

### INGLEBY LECTURES.—No. IV.

Mr. Jordan Lloyd gave his fourth lecture on the subject of "Hernia" :—

Hernias are very common in babies, especially amongst the hospital class of people. Inguinal hernia is by far the most common variety; umbilical is frequently met with, but the femoral variety is very rarely seen.

Hernia is met with in babies of every condition of development—the mature, the immature, the puny, and the strong. It is sometimes met with at birth, but more often during the first few weeks of life. Boys are more often affected than girls.

Many factors have to do with the causation of inguinal hernia, such as any condition giving use to straining, as, for instance, phimosis, intestinal catarrh, &c., but Mr. Lloyd considers the chief predisposing cause to be the way in which the belly-binder is applied to the newly-born infant, a stout, inelastic piece of calico being several times firmly wound round the belly, thereby squeezing the infantile bowels with undue force against the abdominal walls, the popular idea being that babies must be bound firmly to prevent their bellies spreading. Hernias in children are reducible unless strangulated, and never contain omentum. Small intestine usually occupies the sac, occasionally the cæcum descends into it. As for treatment, the majority of cases are easily controlled, and cured by simple mechanical means. The simplest method is to employ the "Worsted Truss"—an appliance but too little known. You merely take a skein of worsted and fasten one portion round the waist, and pass another portion from the circular band in front over the hernia, between the legs to the circular band again behind, thereby using what amount of pressure you like. If this fails to restrain the hernia, then some form of the old spring truss must be employed, taking care that the spring is not too strong, and that it exerts its pressure over the right place, which is over the internal ring and inguinal canal. If the hernia cannot be kept reduced by one of these methods, then its radical cure by operation should be undertaken, for the radical cure of hernia by modern methods is a very safe procedure; and surely it is better to cure the deformity than to allow the patient to struggle on through life in constant danger of strangulation.

As regards the radical cure of hernia, Mr. Lloyd stated

that the operation most suitable for young children is simple excision of the sac. In performing this operation the few following points are worthy of notice: (i.) Do not first reduce the hernia, for the fuller your sac the easier it is exposed, and with a capable surgeon there should be no danger of damaging the gut inside. (ii.) In cutting down on the sac, the several layers are best divided by simply cutting down on them without using a ground director at all. (iii.) Get close down on to the sac before you begin to separate it from its surroundings. Remember in children the cremasteric fascia forms a distinct and well-marked layer of muscle; beneath it is the infundibuliform fascia, also well marked. You will know the sac, because it has no blood vessels on it. (iv.) Strip the sac from its surroundings by the finger nail, or handle of the scalpel. When completely separated, pull it down firmly; ligature its neck as close as possible to the external ring, and then divide the sac below, but not nearer than half an inch to the ligature. (v.) In the majority of cases it is not necessary to suture the pillars of the ring, especially in children under three. In older children, if the opening admits the finger tip, it may be necessary. (vi.) In the congenital variety, i.e., when the hernia and testis are occupying the same cavity, the operation is more difficult, for after dividing the neck of the sac it is still attached at the rete testis. You can now either leave a portion so as to form an artificial tunica vaginalis, or you can cut it through close to the gland itself. (vii.) After the operation a pad and bandage or worsted truss should be worn five or six weeks, and may then be discarded. Mr. Lloyd quoted 25 cases of boys on whom he had operated as above under seven years of age. 24 were done by open incision, 14 without, and 10 with pillar suture. All these made good recoveries. One he did subcutaneously, and this patient died—he believed from secondary shock.

*Strangulated Hernia* in children is comparatively rare. Of its symptoms the most important is "plus tension," i.e., when the tension of the sac wall is greater than that of the belly wall. A tense hernia with a softer abdomen means strangulation, and demands immediate relief. A tense hernia rapidly becoming soft means gangrene or rupture of the bowel.

Strangulated hernias in children call for earlier operation and more gentle taxis than in the adult. Herniotomy in children is a less dangerous operation if it is supplemented by the operation already described for radical cure. A hernia into the sac of an undescended testicle should be treated by excision of the sac, and the gland should be removed.

*Hydrocele.*—This, again, is a very common condition in young children. All hydroceles are transparent, and so are easily diagnosed from herniæ. They are often cured by small patches of iodine on the scrotum, or by simple friction. If they persist, Mr. Lloyd says he has abandoned the old-fashioned ways of treatment, viz.: Injection of irritating fluids, or the introduction of a seton. He recommends excision of the sac, an operation very similar to that for the radical cure of hernia. The operation varies somewhat according to the kind of hydrocele. Thus, in (i.) *The Vaginal Hydrocele*, simple dilatation of the tunica vaginalis, you treat by excision close up to the tritum of the testicle. (ii.) *Infantile Hydrocele*, distension of the unobliterated funicular process as high as the inguinal rings: this you treat as in the first variety. (iii.) *Congenital Hydrocele*, distension of an unobliterated funicular process which freely communicates with the peritoneal cavity: here you ligature the neck of the sac, and then remove it, as in the last variety. (iv.) *Funicular Hydrocele*, distension of the funicular process which is cut off below from the tunica vaginalis testis: here you operate just as you do for hernia, you ligature the neck of the sac, and excise it. (v.) *Encysted Hydrocele of Cord*,

distension of a portion only of the funicular process, which is separate both from the peritoneal cavity and the tunica vaginalis: here you merely cut down on the sac and shell it out of its bed. In these operations it is important to ligature every bleeding point, so as to keep clear of a subsequent hæmatocele forming.

## THERAPEUTICS.

### PIPERAZIDINE.

This base and its hydrochlorite was brought under the notice of the meeting of the Therapeutical Society of Paris on the 23th of January. It is entirely new to most English practitioners, but it is a drug that promises to be of service in lithiasis. It has already been administered as a medicine both in Germany and in Russia. M. Bardet states that piperazidine  $C_2Az_2H_{10}$  is allied to piperidine. Attempts have been made to demonstrate its chemical identity with the spermine of Scheiner, to which, as a matter of fact, it bears a resemblance; but M. Bardet has never observed in its action the stimulating properties attributed to the latter substance. The urate of piperazidine is soluble in forty-seven times its weight of water—that is to say, the urate is very much more soluble than the urate of lithium, which requires three hundred and forty times its weight of water to dissolve it. This fact had encouraged M. Bardet to administer piperazidine in gout. The trials that he made on three patients had proved that one can easily inject, without setting up any degree of irritation, as much as forty centigrammes of the hydrochlorite of piperazidine in the neighbourhood of the affected joints. In the case of one patient, an old sufferer from gravel, he had induced, by doses of thirty centigrammes daily, a diminution and even an abolition of deposits, together with an increase in the amount of soluble urates. At the same time, M. Bardet states that he quotes these facts merely as an instance of its action, and not to form the basis of premature conclusions. This action of piperazidine in dissolving uric acid was of greater importance, to his mind, than its stimulating properties. M. Vogt had also made use of piperazidine, but, contrary to the experience of M. Bardet, he had observed a diminution in the amount of soluble urates and an increase in the urea, and stated that according to the chemist who had prepared the substance this could be explained by the oxidation of the urate formed. M. Bardet had not noticed any stimulating effect from taking piperazidine, and, as M. Boymond remarked, this general absence of stimulation confirmed the opinion of several chemists who refuse to consider piperazidine as analogous to spermine. Ebstein and Sprague, in the *Berlin. Klin. Woch.*, report a case treated with piperazidine. The patient was thirty years of age, and dated his troubles from exposure on a cold, damp night nine years ago, setting up some bladder inflammation. He had attacks at intervals, till he was admitted to the hospital wards. He then complained of pain in the glands and in the groin, on micturition. The urine contained uric acid crystals and was faintly acid; no albumen. Piperazidine was administered in daily doses of from fifteen to thirty grains simply dissolved in water, and were well borne by the patient. A careful analysis of the urine was made nearly every day, giving the amount of uric acid and of urea (as well as other facts of importance) passed in the preceding twenty-four hours. Their observations did not confirm the reports that by the administration of piperazine the total quantity of uric acid is reduced to one-third, and that an excess of urea is excreted. This remedy, possessing in so eminent a degree the property of dissolving uric acid in the form of urates, is certainly well worth a careful investigation.

## NEW DRUGS, APPLIANCES, AND THINGS MEDICAL.

[All preparations, appliances, novelties, etc., of which a notice is desired, should be sent for The Editor, to care of The Manager, 140, Strand, London, W.C.]

### COCA WINE.

Coca wine is so much used now as a tonic and general restorative, that there is a great variety of brands in the market. These, like the unmedicated article, must be chosen with care to suit the digestive peculiarities of the patient. Messrs. Walters and Son, 33, Eastcheap, have forwarded for examination a case of their coca wine. On evaporation and extraction, the presence of coccoaine was easily demonstrated. It is stated that a wine glass-full represents the medicinal virtues of a dram of coca leaf. The wine is pleasant to the taste and undoubtedly restorative. We have tried it in cases of simple fatigue, exhaustion from overwork, and the weakness following acute febrile conditions with very favourable results. More especially do we think that it is useful in the case of overwork; it seems to act in a more prolonged way, and not to leave the patient in a worn condition as merely alcoholic stimulation does. Patients speak of this brand very favourably as regards taste and odour, and no objections are made on the score of its being "medicine-like."

### PURE CANE SUGAR.

Recently some considerable attention has been called to the fact that a very large trade is being done in "doctored" sugars. Mr. Cassall has pointed out how beetroot sugar is crystallised and coloured with aniline dyes so as to simulate the genuine cane sugar coloured. Not content with imitating the colour, the beet sugar has been scented artificially in order to cover the characteristic disagreeable odour attached to this form of saccharine material. The reason these sophistications are made is to enable the fraudulent dealer to make a profit out of the cheaper material which has been altered to appear like the best products of the cane. The objections to beet sugar are: (1) Its poor sweetening power, which is much below that of sugar from the cane. (2) Its inability to preserve fruit for long in jams, syrups, &c. It is noticed that when these preserves are made with beet sugar they quickly ferment and go bad, to the great disgust of the careful manufacturer or housewife. Pure cane sugar is a most powerful preservative of organic materials, but sugar from the beet seems to undergo the process of fermentation with considerable ease. (3) Its peculiar smell, which to many persons is very disagreeable. The smell of cane sugar on the other hand is but slight, and what little there is is pleasant. We have been led to make these preliminary remarks from the examination of a series of sugars which the above firm have sent to us for notice. They comprise varieties which come under the head of moist crystallized, refined cane, fine, and pure cane. They all answered to the tests for pure cane sugar only, and consequently can be highly recommended. Messrs. James Philip and Co., Fenchurch Buildings, Fenchurch Street, E.C., have started a novel idea; they put up the sugars in bags of 14 lbs. and upwards, and so labelled that one can tell at a glance whether the sugar is from Demerara, Trinidad, or Barbadoes. We were pleased to find among the series a bag of real old-fashioned brown sugar, with those delightful little crystalline lumps in it. It is a good many years since we have come across such really "sweet" sugars as these are. Where pure cane sugar is used we are of opinion that it will be found far less unwholesome for dyspeptics than sugar that contains "beet" in any form. Besides the sugar we received a tin of excellent "golden syrup;" this on analysis proved to belong to the same series of pure products.