

advertised by Watson, has answered well with me in some cases, but not, I think, better than Strychnia and such general remedies as the compound tonic syrups and so forth. One more important point remains. Piorry pointed out thirty years ago, that migraine was due to the strain upon some local defect in the eye, although he was necessarily then without more precise knowledge of these defects. That headaches—severe and recurrent headaches—are often to be traced to such defects is now well known, but Mr. Heweston, of Leeds, on a recent occasion produced several patients who had been cured of migraine properly so-called, by correction of astigmatism. Mr. Heweston's paper was a remarkable one, and his statements required the closest attention. Migraine however spares no rank and no age, and has in the past no fewer victims among the illiterate than among the learned. Dr. Liveing has suggested that even epilepsy itself may be excited by optic defects in persons so disposed; in any case the researches of the next few years will do much to enlighten us on these points and I trust to increase our power of relieving one of the most harassing of the minor ills of mankind.—*Medical Times and Gazette*.

INCONTINENCE OF URINE IN CHILDREN.

Dr. J. Lewis Smith read a paper on this subject (*Obstetric Gazette*), in which he mentioned eight causes, two of which might sometimes be present in the same case:

1. Too great acidity of the urine, causing undue contraction of the bladder.
2. Increased quantity of urine.
3. The presence of stone in the bladder, in which case the incontinence is both diurnal and nocturnal.
4. Abnormal contractile power of the muscular coat of the bladder. The importance of this cause is shown by the fact that belladonna, which controls muscular irritability, is useful in such a large number of cases of enuresis.
5. Weakness of the muscular fibres constituting the sphincter of the bladder. This is rare in children in good health, and Dr. Smith gave an account of one case in which it was associated with spina bifida.
6. Reflex action through the agency of the nerves supplying other organs in addition to the bladder. In this class are the cases due to structural disease of the spine, ascarides in the rectum, phimosis, preputial adhesions, etc.
7. The dreaming of the child that it is in a convenient place for urinating. To this psychological cause attention has been directed by Dr. Roberts Bartholow. That the enuresis is to a considerable extent under the control of the will is shown in cases where the habit has been broken up by the sending of the child among strangers or to a boarding school, where the sense of shame has constituted an influence sufficient for the purpose.

Numerous instances are also on record where a flogging has permanently broken up the habit.

8. Malformation of the bladder or its appendages. Dr. Madden has reported the case of a young lady who suffered from a constant dribbling of urine, both by day and night, in which he found, on examination, that there was a malformation of the right ureter, which discharged the urine from the kidney on that side directly into the vulva instead of into the bladder.

In the treatment the great point was to discover the cause. If the affection seemed to depend on the character of the urine, this was to be rendered as bland and unirritating as possible, and Dr. Smith said that since he had recognized the acid character of the urine as a frequent cause of incontinence he had been able to treat very satisfactorily quite a large class of cases which had formerly proved troublesome. It was his practice to endeavor to render the urine as bland as tepid water. If there was acidity he gave from three to five drops of liquor potassæ, well diluted, three, four, five, or six times a day, until the urine became neutral in reaction, and then to continue the alkali in just sufficient quantities to maintain the neutral condition.

When there was increased functional activity the great reliance was to be placed on belladonna. The tincture was the preparation commonly used in this country, and of this five drops might be given every night and morning, the dose being increased by one drop each day until the desired effect was obtained or the physiological action of the drug had become apparent. When belladonna was found efficient it was to be kept up for some weeks in full doses, and the quantity then gradually diminished. This agent had been highly lauded by Trousseau, who used it in large doses. Dr. Smith related a case in his own practice in which a girl eleven years old, who suffered from both diurnal and nocturnal enuresis, and who had previously taken belladonna and other remedies, was cured. The urine was highly acid, and the treatment which he prescribed was five drops of liquor potassæ three times a day (or more, if this was necessary to keep the urine neutral in reaction) and tincture of belladonna in nine-drop-doses, the quantity gradually to be increased to fourteen or fifteen drops.

If the enuresis were simply due to the large quantity of urine secreted, the liquid food was to be restricted, especially toward evening, and if diabetes were present, of course the treatment appropriate to that disease was to be adopted. In diabetes insipidus ergot was found to be of great service. Suspicion of the presence of a stone in the bladder would be excited by painful micturition, increased quantity of mucus in the urine, and sudden stoppage of the full stream. The use of the sound would confirm the diagnosis, and the stone could then readily be crushed. In every case of incontinence it was important to make a careful examination of the parts contiguous;