

and various other remedies must then be used with caution, or we may initiate an irritable condition of stomach and bowels which all our skill may not readily remove. In dealing with general principles, therefore, let it be understood that I refer to children over one year in age, and, perhaps, before beginning the consideration of special instances in favor of my views, I may briefly touch upon the explanations which most naturally suggest themselves of the peculiarity which forms the excuse for my remarks. In prescribing for adults, we are frequently annoyed by the very various results obtained in different persons from a precisely identical quantity of a particular drug. Thus, one patient will develop a copious crop of acne from a few grains of bromide of potassium, whilst another can take ounces without such effect. Another will be salivated by a small quantity of mercury, or be unable to swallow quinine without uncomfortable nervous symptoms or a specially irritable rash. Children, however, do not present in anything like the same degree these special peculiarities of idiosyncrasy; the effects of medicines are pretty constant in their case and we may generally anticipate the satisfaction of finding that our remedy has acted as we wished, and without any of that excess or eccentricity of action which too often brings undeserved discredit on the medical man. The reason which tells us why young children bear heavy doses of potent medicines must also cover this difference from their elders, and we might at once shut up further enquiry by concealing ourselves behind the dense cloak of ignorance implied in the assumed fact of an ultimate difference of constitution. But, true as this may be as an abstract proposition, we must look a little deeper, and ask, in the first place, whether some peculiarity of digestion may not come to our aid, and whether infants may not emulate some of the lower animals in the power which they possess of neutralizing or destroying poisonous principles, as rabbits harmlessly browse on belladonna, and pigeons baffle the deadly action of strychnia, etc. But of such powers in the human being, at any period of life, we have no shadow of proof, pre-emptive or otherwise; and it is probable that remedies reach the blood of children in the regular way, and through the same chain of physiological processes as in the case of adults. So we must again go forth in search of our explanation; and I think we may find some approach to it, at all events, in the view that, in consequence of the rapid growth taking place in the body during early life, the blood and tissues are in a condition of specially active destruction and renovation. Drugs, such as the metals, which probably combine with the albumen of the circulating fluid, are here rapidly cast out of the system. Other remedies, which act more particularly on the nervous system, are cast out with effete matters before they have had full time to produce their physiological effects, or, at all events, before these effects have attained to anything like completeness. Thus we do not often find developed in children that accumulation which occasionally, if rarely, is observed in patients of older growth, because the drug is removed before it can produce that continuous

and ever intensifying influence on the nervous system which eventually finds expression in what we may call a discharge.

So much, therefore, for my explanation, such as it is, of the facts which I shall now proceed briefly to lay before you.

Now, in the first place, I am bound, of course, to confirm the usual opinion of the dangers of opium in very early childhood; and it is not long since I saw an infant of eight months nearly narcotized to death by six two-minim doses spread over two days. But those within the period of life which I have selected for consideration can bear moderate quantities, and chloral seems always well borne. For instance, I have lately had under treatment a little rickety girl suffering from recurring attacks of laryngismus stridulus, to whom three and a half grains were given with benefit thrice daily. The same patient took ten, and finally fifteen grains of bromide of potassium, before any beneficial effect was attained; and I have always observed that this drug is well taken by children. Twenty and thirty grains have been no uncommon dose to reach in patients of from eight to ten suffering from epileptic seizures, and in them I have never observed any symptoms of bromism. The opposite seems to hold good of iodide of potassium, so far as my limited experience goes; for I have three times seen papular and petechial eruptions produced by one-grain doses of this drug, and I should specially like to ask whether this corresponds with the observation of others.

Arsenic is usually well taken. I should have no hesitation in ordering five minims of Fowler's solution for a child six years old. Ten minims have been occasionally ordered; and I had recently under care a little girl, aged ten, whose somewhat obstinate psoriasis only began to yield when the dose was pushed up to sixteen minims. When physiological symptoms present themselves, as they sometimes do, it is important to know that they do not assume the usually described type, and that vomiting is the most usual symptom. I have seen this follow a single one minim dose, and more rarely we meet with a red and irritable tongue, dry lips, injected eyes, and abdominal pain; girls being in my experience, contrary to the statement of Ringer, more susceptible to the overaction of the drug than boys.

Prussic acid may be pretty freely prescribed, and I have given nearly two minims to a child of two years with some slight benefit, for pertussis; and at the age of seven, I have given nearly three minims for the successful arrest of sickness.

We know that emetics must be given in very full doses. The intestinal canal of young children seems strangely insusceptible to the action of purgatives, and large quantities of Gregory's and compound jalap powders must be given before satisfactory action is attained.

I have by no means exhausted the instances to be gleaned from my own experience or that of others in support of my main proposition; but time presses, and I will conclude with a reference to belladonna, whose comparative harmlessness to young children