## A FAMILIAR CHAT ABOUT VACCINATION.

BY A FAMILY DOCTOR.



HESITATED for a moment before I took up my pen to write on the subject which gives its title to my present paper. But duty whispered me to go on, and speak the truth in a noble cause.

Well, and I mean to. In my plain old-fashioned way, I will try to point out to the reader the benefits of judicious vaccination, as a preventive of

one of the most direful and horrible diseases that ever afflicted the great human family. What I have to say, will only confirm the views already held by the great majority of my readers. Of that fact I am pleasantly aware. But I have, moreover, the audacity to believe that this paper will win not one, but many others over to our way of thinking. At the same time, I wish to put no undue pressure upon any one, save perhaps the pressure of common sense.

Long, long ago, reader-long before either you or I was thought of, or dreamt of-when our great-grandfathers were children, or perhaps not born, a terrible and loathsome scourge was raging rampant in our land. I refer to the disorder called variola, or smallpox. In some epidemics it was almost the exception, rather than the rule, if any one escaped; and it is not overstating, but rather understating the fact, to say that one in every four of those attacked was hurried to the grave, a corpse that no one dared look upon. No rank in life was able to boast of immunity from the terrible plague, it spared neither age nor sex, nor beauty itself; and most of those who escaped death were sadly disfigured, sometimes rendered sightless for life. The mortality was frightful to contemplate. Just hear what Marson says :- "It [the small-pox] is a most fatal disease at all periods of life, but most so in infancy and old age. Under five years of age it is fifty per cent.; still greater, however, under two years. After the age of twenty the rate of mortality suddenly rises, and increases gradually; at thirty it exceeds the mortality of infancy, and after sixty hardly one escapes." Terribly significant words these. Just fancy, if you can, a happy family of, say, ten in all, living in comfort, if not in affluence. This family had hardly ever known a sorrow; the little afflictions which are inseparable from all of us in this life, had but served to tighten the ties of affection that bound them together. Happiest of all happy hours of the day was the hour when father returned from business in the evening; soft, warm, wee arms were stretched out to meet him, lips pouted for kisses; then around the bright parlour fire, when supper was over, what a happy circle! What need to describe the scene? We all of us, I trust, know something of the quiet joys of the family fireside. What matters it then to them that the wind is roaring in the chimney? it only makes the fire burn the brighter, and the knowledge that there is frost and snow without just but serves to make things more

snug within. The very tabby cat partakes of a share of bliss, and has just sung wee "Johnnie" sound asleep on the hearth. The kettle is singing, too; and Annie, the eldest, "sweet and twenty," and beautiful and fresh as only an English maiden can be, is quietly preparing her father's tea. There is a dreamy, faraway look in Annie's blue eyes. Annie is thinking of something very pleasant, for Annie is soon to be married. Soon, did I say? Stay, the plague is at the door. This is the last pleasant evening they will spend together upon earth. Succeed to it weeks of sad suffering and sorrow. Within a fortnight, two, then three of the youngest are laid in their little graves, and shortly after grandpapa succumbs and dies. How the gloom deepens around the devoted house! for, overcome with grief on the death of still another child. both father and mother sicken, and father and mother Hardly is sufficient medical attendance procurable; nursing is scarcely possible, for the servants have fled, and out of all that family but three have escaped-two brave lads that battled through it all, and poor Annie-but Annie is blind.

If the reader will refer to the accounts of the ravages of the small-pox in preceding centuries, he will see that my picture is by no means overdrawn. And still there are people living in England at the present day who are, in their ignorance, doing all they can, both by word and deed, to make such pictures as these once

again stern realities in our fair land.

I shall not venture for one moment to harrow the feelings of my readers by describing the symptoms of small-pox; many, unfortunately, know them too well from experience. I ask such, as a particular favour, to describe to their neighbours in plain language what

they have suffered, and what they have seen.

All honour to the name of the immortal Jenner, who sleeps in his quiet grave on the green cliffs of Folkestone. What a glorious morning "for England, home, and beauty" was that of the 14th of May, 1796, the birthday of vaccination! "On that day, matter was taken from the hand of Sarah Nelmes, who had been infected while milking her master's cows, and this matter was inserted by two superficial incisions into the arms of James Phipps, a healthy boy of about eight years of age. He went through the disease in a regular and satisfactory manner; but the most agitating part of the trial still remained to be performed. It was needful to ascertain whether he was free from the contagion of small-pox. This point, so full of anxiety to Dr. Jenner, was fairly put to issue on the 1st of the following July. Small-pox matter, taken immediately and directly from a small-pox pustule, was carefully inserted by several incisions, but no disease followed."

Now by this one simple and brave experiment upon the lad James Phipps, Dr. Jenner established a law which the experience of millions upon millions of human beings, in generations since, has only served to strengthen. It is, too, wonderful to think that

there can be a single individual in these islands who cannot see at a glance the simplicity, beauty, and truth of this law. There is no contagion in the world so certain and sure as the contagion of small-pox—not even that of hydrophobia or rabies in the dog. The very emanations or exhalations from the body of any one sick in small-pox, if breathed by a healthy person, are in many instances sufficient to induce the disorder; and yet here is this healthy young boy James Phipps, who receives the small-pox matter into his very blood, and still he does not take the disease!

Hundreds of years before Dr. Jenner's time it had been known as a well-established law, even among such semi-civilised nations as the Chinese, that some diseases granted a complete immunity from subsequent attacks to those who had once suffered from them. The small-pox is one of those diseases; and inoculation as a preventive had long been known in this country. By inoculation, I of course mean taking the small-pox matter from a sick man, and inserting it into the body of another. The person thus inoculated had the disease, to be sure, but had it in a very much milder form; pitting was to a great extent prevented, and he was free from all future attacks. Inoculation entailed immunity from future attacks, it is true, but it was often a painful price to pay for it, as there were always constitutional as well as local symptoms. As a proof of the benefits of inoculation in cases where vaccination is impossible, I may simply instance the case of a man-of-war ship in the tropics, on which virulent small-pox broke out. The men were all unprotected. Sixteen took the disease naturally; the remainder of the healthy crew, 360 in all, the surgeon inoculated from the sick. Now mark this: of the sixteen who took the disease in the natural way, no less than nine died; of the 360 who were inoculated not a man perished.

It is strange that some of the greatest truths, and those most beneficial to the whole human race, have been first revealed not to the high and mighty, either by birth or in mind, but to the lowly. Jenner might be called the prophet of vaccination; but it was the humble peasants among the dairy-farms down in Gloucestershire who first received glimmerings of the great truth which, "matured," as Dr. Baron says, "into a rational and scientific form, by a mind deeply imbued with the best principles of sound philosophy," was destined to do so much good to, and save so much suffering in the world, at home and abroad. Dr. Jenner, then, found a belief common among those peasants, that no one whose hands had been inoculated with the matter from the pustules on the udders of the cows they milked could take the small-pox. Jenner soon convinced himself of the truth of this; and shortly afterwards the happy thought struck him, that having inoculated one individual directly from the cow, there was no necessity to have recourse again to that animal; that the vaccine-lymph could be taken from one person to another. And this is true; for pure lymph taken from the cow at the proper time is transmissible from one human being to another, from

generation to generation. During a period of six-and-twenty years, the surgeon of the London Small-pox Hospital has successively vaccinated through the same strain of lymph no fewer than 50,000 children, and distributed lymph to 25,000 medical practitioners.

Now, it may be said that many cases have been known of people taking small-pox who had been vaccinated. Granted; but this does not for a moment overturn my argument on the virtues of vaccination. In some persons the protective influence of vaccination may be more speedily exhausted than in others, and the operation ought to be repeated.

Again, there are certain conditions attached to proper vaccination, and these may not always be fulfilled. For instance, the lymph may not have been pure and strong enough; it may have been obtained from a vesicle either before the sixth or after the eighth day. But the lymph itself may have been pure enough, and taken at the right time, and from a proper vesicle, but the vesicle formed by such lymph may have been broken before ripe, and healed up. Some folks will tell you it is against the laws of God to inoculate a man from a brute. They do not hesitate to drink the milk and eat the flesh of that brute nevertheless. But do such folks really know that the vaccine matter taken from the cow is simply small-pox matter filtered, so to speak, through the cow? For the disease on the udder of the cow has been proved to be the result of inoculation from human sufferers in small-pox.

Another objection anti-vaccinators bring forward is, that disordered blood may commence from the very term of vaccination. This I grant too, but defy any one to prove that that disordered blood was caused by the lymph from which the child was vaccinated. In so short a paper I have not space to attempt to confute a tithe of the many groundless complaints some people raise against vaccination; but there is one thing which, if mothers would remember, would save them many needless alarms—viz., if the blood of the vaccinated child or person be not quite pure, he is liable under the slight fever induced by vaccination to have some little eruptions on other parts of the body, and even swellings in the axillary glands.

I must now conclude with a few words of advice to

As only those vesicles on a child's arm, that run through a regular course, confer perfect immunity from small-pox on the child, it is but right that the appearance of the pustule in its different stages should be known. On the third day, then, you perceive a small red pimple at the seat of puncture. On the fifth day a little bluish-white vesicle is raised, rounded as to its borders, and slightly falling in at the centre. On the eighth day the pock is ripe, round, and plump, and depressed in the centre; around it is a red areola, the vesicle itself being pearly in colour. Dr. Jenner used to term the perfect pock the "pearl upon the rose." At this time the lymph, if wanted for use, should be taken; but one vesicle at least ought to remain unbroken, and fade and fall off in a scab of its own accord. On the ninth and tenth days, young mothers are often alarmed at the extent of inflammation around

each vesicle. They need not be, however, even if three inches or more in extent. The skin is intensely red, swollen, and painful; and of course you must expect a delicate infant to be more or less fevered, fretful, and puling.

In times when the disease is raging, it is always

the safest course for every one to be revaccinated, for three very potent reasons: first, because it gives faith; secondly, because the person may have outlived the protection granted by the first vaccination; and thirdly, because there is the possibility that that first vaccination may have been a spurious one.

## "AUTONOMY," AND WHAT IT MEANS.

E have heard so much of this term of late, and so many questions have been asked about it, that we have thought a brief and familiar explanation of the subject would be of some use, as well as very interesting, to our readers.

Autonomy, as a word, is simply the elegant equivalent of self-government. In politics it expresses a state possessing a separate administration, but attached to and forming part of a larger empire, under whose general designation it may be included. But as understood in reference to the Eastern Question it goes farther than this, and requires not only a distinct ruler, but internal freedom in the shape of representative institutions. There must be a deliberative body, or local Parliament, elected by the inhabitants, making laws, and to some extent controlling the executive, before there can be real autonomy.

Our own country affords several capital illustrations of this kind of government; indeed our whole system may be described as autonomy within autonomy. Each parish forms a small separate state with settled boundaries, and its own little Parliament-the vestry. A number of parishes combined make a poor-law union, which is a larger autonomy, governed by an elective body-the guardians-representing every parish. This local council is independent, and yet it is controlled by general principles laid down by the central board in London. To go a step higher-the counties are still better instances. The Lord Lieutenant, appointed by the Government of the Empire, answers to the Prince or Governor-General of an autonomous state. The magistrates from each district assemble in Quarter Sessions, and besides trying prisoners they form a species of Parliament, which administers the finances of the county. Yet imperial law, the law of the realm, is observed throughout, and is visibly represented in the persons of the judges at the Assizes. The City of London is a striking example of autonomy, electing its own prince, so to say, in the Lord Mayor; having its own councils and courts, and its own special police-corresponding to the troops of an autonomous state. It even claims the right to close its gates-as Temple Bar-against the Sovereign, who formally asks permission to enter. There could scarcely be greater liberty, or more complete autonomy; still at the same time the authority of the Queen and Parliament is complete. Imperial troops enter when necessary, and actually at the present moment garrison the City, in the Tower. The great railway companies enjoy considerable autonomy. They make bye-laws, which

upon their premises have the force of law; they appoint police, who have the power to arrest or remove offenders. But they may be sued in the ordinary courts. Ireland was an autonomy with a separate Parliament until the Act of Union; there is still a Lord Lieutenant, distinct courts of justice, dioceses, and much of the substance of self-government.

The colonies of Great Britain exhibit the most perfect and complete system of autonomy the world has ever seen: the Australian colonies for example. They possess an elective Parliament, make their own laws, and enforce their own taxes; even imperial laws are abrogated in their favour, as in the sanction given to marriage with a deceased wife's sister, if contracted there. They raise their own troops, as in New Zealand during the Maori wars. They even coin their own money: sovereigns from the Australian Mint circulate in England in large numbers. But they acknowledge the Queen, whose Government reserves the right of garrisoning; as for instance at Quebec, in Canada. On the other hand, in case of war the colonies claim to be defended, and imperial troops and ships are sent to their assistance. This really is autonomy. Some of the states of India partially under British rule are almost free; they are governed by native princes, over whose courts supervision is exercised by English officers, to prevent excesses; and something of this kind has been suggested for Bulgaria. These, however, can hardly be held to exhibit true autonomy, for they are not in any sense representative governments.

Outside the Empire of Great Britain various forms of autonomy may be observed. The United States of America are each and separately autonomous. They govern themselves, elect representatives, and are at the same time amenable to the central authority. They obey the national laws, use the national money, and are liable to be garrisoned by national troops. Much in the same way the cantons of Switzerland are autonomous. Hungary is a most curious example of autonomy, under the term of duality. There is a national assembly and a special crown, all the attributes of independence, yet it is joined to Austria. In this case the autonomy is politically the equal of the empire itself: an anomaly almost unprecedented. The kingdoms which acknowledge the Prussian monarch Emperor of Germany are autonomous, with separate courts, distinct customs, and their own armies. They give the Emperor precedence, obey the imperial laws, and each in time of war has to furnish its contingent of troops.