

Convalescence extended over four months, and was repeatedly interrupted by attacks of irritative fever. In the case of J. H., on the other hand, the diseased organ was removed, and recovery was completed in three weeks. This leads us, then, to the conclusion that excision of the organ is as a rule the proper treatment for chronic suppuration of the testicle; for, besides the danger of exhaustion attendant on a protracted recovery, no useful end is achieved by saving the disorganized testicle, and the patient's life is risked in the attempt.

ARTICLE III.—*History of an Epidemic of Rötheln, with Observations on its Pathology.* By HENRY VEALE, M.D., Royal Artillery.

THE attention of the medical profession has occasionally been directed of late years to the occurrence of a peculiar form of eruptive disorder, which has certain points of resemblance both to measles and to scarlet fever, and which would appear to stand nosologically about midway between them. In Germany it has been regarded as a distinct disease, and has received the name of Rötheln. Amongst the English physicians who have written concerning it, Dr Richardson¹ is said to be of opinion that, although it simulates scarlet fever, it is really a different affection. He considers it to resemble scarlet fever in its tendency to produce renal disorder, but to be unlike that disease by being variable in its course, not contagious, and being probably excited by the irregular digestion of some particular forms of food. The name which he proposes for it is *Rosalia idiopathica*. The late Dr Babington,² speaking of the exanthem which he saw in London in 1864, describes it as a papular eruption, in many respects resembling measles, which "is ushered in during several days by constitutional disturbance, headache, loss of appetite, febricula, coryza, and sneezing. When the eruption appears," I continue the quotation, "the papules are less distinct than those of rubeola, are not arranged in crescentic clusters, and appear on the face and trunk, but not upon the upper or lower extremities, or at most very slightly. The general febrile symptoms are somewhat relieved by the external eruption, which is most vivid on the second day of its appearance, but does not entirely disappear until the third." From its general resemblance to measles, Dr Babington proposed to designate it *Rubeola notha*.

In thus referring to the descriptions of Drs Babington and Richardson, my object is to invite a comparison between the disease, or diseases, noticed by them, and an epidemic which I had an opportunity of observing a short time ago, and of which I shall endeavour to give some account on the present occasion. It occurred at Mount Aboo, a hill station in the Presidency of Bombay, and

¹ Half-Yearly Abstract of the Medical Sciences, vol. xli.

² Op. citat., p. 293.

chiefly affected the children belonging to the school instituted by Sir H. Lawrence.

I shall, in the first place, briefly describe a few of the cases which presented the disease in the most distinct form, or those to which I may have occasion to refer in the observations which I purpose to append.

CASE 1.—A. G., girl, *æt.* 12 years, was attacked on the 1st of March 1866 with slight coryza and febricula, and with an eruption on the face, arms, and body, very similar to that of measles. No cause whatever could be discovered to account for the rash. There was no measles in the neighbourhood, and so far as could be ascertained, there was nothing peculiar in the diet or habits of this child which could be assigned as the cause of the disease. She had previously been in excellent health, and had slept well the night before. Her bowels were regular, and her digestive powers were generally good. Moreover, it was found on inquiry that she had already had measles. On the following day there was neither coryza nor fever, and the eruption appeared on the legs, but was hardly perceptible on the face. On the third day the eruption was rapidly fading from the body; and on the day after, it had entirely disappeared. During the last two days there was no sign of any constitutional disorder.

CASE 2.—A. B., girl, *æt.* 13, attacked on the 20th of March with an eruption similar to that just described. There was, however, no derangement of the child's health, and the rash, after passing from the face to the feet, had disappeared at the end of the third day.

CASE 3.—J. C., boy, *æt.* 6. In this case the eruption made its appearance on the 6th of April, and was not attended with any constitutional disturbance. It passed from the face to the extremities and disappeared towards the end of the third day.

CASE 8.—H. S., boy, *æt.* 15, was seized on the morning of the 17th of April with slight coryza, feverishness, and pains in his limbs. Towards evening an eruption, similar to that observed in Case 1, appeared on his face. On the following morning the coryza and feverishness continued, and the rash affected his whole body. On the 19th, the feverish symptoms had left him, and the rash was fading rapidly. On the 20th, at 9 A.M., there was no trace of the eruption, and the boy was quite well.

CASE 9.—C. L., boy, *æt.* 12, attacked on the evening of the 18th of April with coryza, slight fever, pains in his limbs, and sore throat. On the next morning the rash appeared on his face, arms, and body, and there was slight swelling of the submaxillary glands and tonsils, with increased redness of the fauces. These symptoms decreased on the 20th and 21st, and had entirely disappeared, along with the eruption, on the 2d. I should add that he had but very little eruption on the lower extremities.

CASE 10.—G., boy, *æt.* 13, was seized with slight fever on the 18th of April at 3 P.M. On the following day, at 2 P.M., the eruption suddenly showed itself on his face. On the 20th, at 9 A.M., the eruption was visible on his face, body, and arms, and

slightly on his legs. On the 21st, the fever was rapidly decreasing, but he had some tenderness, redness, and swelling of the fauces. On the 22d, at 3 P.M., he was quite free from eruption, fever, and sore throat, and seemed to be quite well.

CASE 11.—T. A., boy, æt. 15, was seized with slight fever on the evening of the 18th of April. On the 19th, at 7 A.M., he was still rather feverish; but towards evening all symptoms of fever left him. On the 20th, at daybreak, he observed a rash on his neck, arms, and body. On the 21st, it appeared on his legs, whilst it was fading from the body, etc. On the 23d of April, there was no trace of the eruption on his body; but it was still perceptible on his legs. On the 26th, it had entirely disappeared.

CASE 17.—T. J., boy, æt. 14. An eruption appeared suddenly on his face, body, and extremities, about 9 A.M. on the 20th of April. The submaxillary glands and tonsils were slightly swollen, and there was increased redness of the fauces, but there were no perceptible symptoms of fever or other constitutional derangement. On the 23d, the eruption and redness of the fauces had almost disappeared along with the swelling of the glands.

CASE 18.—C. S., boy, æt. 13. The eruption appeared on his face on the 20th of April, without any premonitory symptoms. On the 21st, it came out on his body also, and he had slight coryza with some swelling of the submaxillary glands, and a little tenderness of the fauces. On the 22d, all these symptoms were declining, and on the following day he was quite well.

CASE 19.—J. S., boy, æt. 8, was seized with nausea and vomiting at about 10 A.M. of the 21st of April. At noon, the eruption appeared on his face and body. Next day, the boy felt quite well, and the eruption had disappeared on the morning of the 24th.

The next six cases were of a very mild character.

CASE 26.—J. J., boy, æt. 16, is subject to slight attacks of malarious fever occasionally. Felt feverish on the 1st of May, also on the 3d, and again at 6 A.M. on the 4th, when he experienced some sickness at the stomach. Half an hour after this, having taken some exercise in the meantime, a copious papular eruption appeared on the face, body, and limbs. The submaxillary glands were slightly swollen, and tender on pressure; but there was no soreness of the throat. On the 5th, at 9 A.M., the eruption was less distinct. On the 6th, it was fading rapidly, and the tenderness of the submaxillary glands had ceased. On the 7th, he was quite well, and there was no trace of the eruption remaining.

All of the preceding cases occurred in the school; the following came under my notice in a private family:—

CASE 27.—A. B., a mild case, similar in all respects to No. 2.

CASE 28.—The same.

CASE 29.—H. A., girl, æt. 13. A slight eruption appeared on her face, without any premonitory symptoms, on the 1st of May. On the following day there was slight fever, and the rash extended

to the body. On the 7th, the eruption was visible on the face, arms, and body, but not on the legs. It was of a bright scarlet colour, like that of scarlet fever, but papular, each papule having an areola whose tint was darkest towards the centre. The fever was decreasing. On the 8th, the eruption was less vivid; on the 9th, there was branny desquamation; on the 10th, all redness had disappeared as well as the fever. In this case there was no coryza, and only slight sneezing; nor was there any sore throat; yet, at the first sight, it might easily have been mistaken for scarlet fever. The convalescence was rapid and complete.

CASE 30.—A. A., æt. 18, was attacked at the same time as the preceding, the eruption appearing on her face without any premonitory symptoms. On the second day it spread over the arms and body; on the third it was still visible; on the fourth it was fading rapidly; and on the fifth day there was not a trace of it remaining. In this case there was no coryza, nor was there any sore throat; and although there was a feeling of lassitude and weariness for two or three days, there was no actual fever. The rash bore a general resemblance to that of measles.

In order now to give a clearer conception of this disease as a whole, it will be necessary for me to describe the symptoms more in detail, and particularly the appearance of the rash. In some cases this was of a dusky red colour, similar to that of measles, whilst in others it was of a bright rose colour more like that of scarlet fever, and between these two extremes the hue varied without any perceptible cause. It was always distinctly papular, the elevation of the papules being appreciable even to the touch. As a rule the papules were distributed evenly over the surface, and were never seen in clusters of a crescentic or any other form. Their hue was most vivid on the first and second days, and when the face, body, arms, and legs were attacked in succession, the eruption faded in the same order, and was followed by more or less desquamation of the cuticle.

There did not appear to be any connexion between the colour of the rash and the existence of coryza or cynanche. In the case where the eruption most resembled that of scarlet fever, there was no throat affection; and, on the other hand, where there was the greatest amount of coryza, it did not always happen that the rash looked most like that of measles. Whilst it existed on the face there was often some sneezing, with suffusion of the conjunctivæ; but these symptoms never preceded the rash, nor were they accompanied by pain in the eyes, nose, or frontal sinuses, or followed by catarrh. When the throat was at all affected, there was generally some uneasiness in swallowing; but there was never any ulceration, nor did I observe the tongue to assume the "strawberry" aspect of scarlatina. In a few instances, there were nausea and a little vomiting before the eruption showed itself. These, however, were the only signs of gastric disorder. The heat of the body was never

much increased, and certainly never to the extent that it is in scarlet fever, or even in measles. The convalescence was always rapid; and although circumstances did not admit of my making a chemical examination of the urine, I could perceive no signs of renal disorder. In none of the cases did I consider it necessary to have recourse to medicinal treatment, and I am not aware that the natural course of the disease was interfered with in a single instance.

In the following table, all the cases that came under my notice in the school are entered in the order of their occurrence, and their principal features, both positive and negative, are so arranged as to be easily available for reference.

No. of Case.	Initials.	Sex.	Age.	Date of Attack.	Measles.			Symptoms.			Duration of	
					Has had.	Has not had.	Doubtful.	Febricula.	Coryza.	Cynanche.	Premonitory stage.	Eruption.
			Yrs.	1866.						Hours.	Days.	
1	A. G.	F.	12	Mar. 1	1	-	-	1	1	-	-	3
2	A. B.	F.	13	" 20	1	-	-	-	-	-	-	3
3	J. C.	M.	6	April 6	-	1	-	-	-	-	-	3
4	L. S.	F.	9	" 6	-	1	-	1	-	-	-	3
5	J. C.	F.	10	" 6	1	-	-	-	-	-	-	3
6	C. C.	F.	11	" 6	1	-	-	-	-	-	-	3
7	K. S.	F.	8	" 8	-	1	-	-	-	-	-	2
8	H. S.	M.	15	" 17	1	-	-	1	1	-	12	2 to 3
9	C. L.	M.	12	" 18	1	-	-	1	1	1	12	3
10	G. G.	M.	13	" 18	1	-	-	1	1	1	23	2 to 3
11	T. A.	M.	15	" 18	-	-	1	1	-	-	24 to 36	6
12	K. H.	F.	11	" 19	-	-	1	-	-	-	-	3
13	H. H.	M.	12	" 19	1	-	-	-	-	-	-	3
14	J. C.	M.	9	" 19	1	-	-	-	-	-	-	3
15	W. H.	M.	6	" 20	-	-	1	-	-	-	-	2
16	J. S.	M.	6	" 20	-	1	-	-	-	-	-	2
17	T. J.	M.	14	" 20	1	-	-	-	-	1	-	3 to 4
18	C. S.	M.	13	" 20	1	-	-	-	1	1	-	3
19	J. S.	M.	6	" 21	-	1	-	-	-	-	2	3
20	J. L.	M.	9	" 21	-	-	1	-	-	-	-	2
21	A. C.	F.	15	" 21	-	1	-	-	-	-	-	3
22	G. M.	F.	8	" 21	-	1	-	-	-	-	-	3
23	A. C.	M.	6	" 22	-	-	1	-	-	-	-	3
24	R. H.	M.	15	" 22	1	-	-	-	-	-	-	3
25	P. C.	M.	11	" 24	1	-	-	-	-	-	-	3
26	J. J.	M.	16	May 4	-	1	-	-	-	-	1	2 to 3
27	B. A.	F.	4	April 19	-	1	-	-	-	-	-	3
28	P. A.	M.	6	" 19	-	1	-	-	-	-	-	3
29	H. A.	F.	13	May 5	-	1	-	1	-	-	-	4
30	A. A.	F.	18	" 5	-	1	-	-	-	-	-	4

Whilst this epidemic lasted, the average number of children in the school was sixty, of whom nearly one-half were attacked. As a rule, the boys are kept as separate from the girls as possible;

still, a certain amount of intercommunication in the school is unavoidable, and it is possible that one child may thus have caught the disease from another, accidentally, as it were; but a careful consideration of the circumstances which I shall now narrate, will be more likely to lead to the conclusion that it did not spread exactly in that way. The first case, as I have already mentioned, occurred on the 1st of March, in a girl. She was at once placed in a separate room, and was thus isolated for a week, after which she returned to the school. On the 20th of March, the second case appeared, in a girl who occupied, in the common dormitory, the bed lying next but one to that which the first girl returned to. In this case isolation as before was not attempted; the girl was merely confined to her bed for three or four days. However, no other cases followed until the 6th of April, when four children were attacked simultaneously; and of these, three were girls who occupied the beds lying nearest to that of the girl seized on the 20th of March. The fourth child was a little boy, æt. 6, a brother of one of these girls, who lived and slept on the girls' side, but who, from local circumstances, was permitted to pass from one side to the other whenever he pleased, and who thus associated with the other boys whilst the rash was upon him. Exactly eleven days after the commencement of his attack a case occurred on the boys' side. On the day following, viz., on the 18th of April, three more boys were affected; on the 19th, three more; on the 20th, four; on the 21st, two; on the 22d, two; and on the 24th, one. After this there was an interval of ten days, and then another case, No. 26, occurred amongst the boys. On making inquiries, it was found that this boy slept in one of the smaller rooms of the establishment, along with H. S., No. 8, and R. H., No. 24, who were attacked, the former on the 17th, the latter on the 22d of April. During this time, on the girls' side, one case occurred on the 8th of April; one on the 19th; and two on the 21st.

I have been quite unable to discover in what way the first case originated. I could not trace it to any peculiarity in the diet, drink, clothing, or indeed any other circumstance. There was no measles nor scarlet fever in the neighbourhood, so far as I could learn, nor was any similar disease prevalent amongst the natives of the adjacent bazaar. But this does not exclude the possibility of the disease having been imported from one of the surrounding villages in some manner, perhaps simple enough, only not detected. Except on the hypothesis of its being contagious, it would be equally impossible to account for the extension of the disorder; but if we accept this view, the explanation becomes easy, and the cases can be divided into separate groups, thus,—*a*, Case No. 1, source unknown; *b*, Case No. 2, infected by No. 1; *c*, Nos. 3, 4, 5, 6, and 7, infected by No. 2; *d*, from No. 3, all the boys from No. 8 to No. 25 inclusive caught the disease; *e*, from one of the group *c* originated the remaining cases amongst the girls; *f*, finally, No. 26 caught the disease either from No. 8 or No. 24.

The cases which occurred in the private family already alluded to, will also tend, I think, to show that the disease was contagious. On the 7th of April, five of the school girls spent the afternoon with this family; and, amongst the five, were the two girls who had already had the disease, and a sister of the little boy, No. 3, upon whom, as I have already related, the eruption had appeared on the previous day. Now, on the twelfth day after this, viz., on the 19th of April, two children in this family were attacked; and then, after an interval of sixteen days, other two of its members suffered.

There is so much difficulty always attendant upon investigations into the properties and effects of morbid poisons, that we can scarcely wonder if considerable obscurity still surrounds the subject of contagion. Much light has been thrown upon it, however, of late years, by those who have experimented upon the inoculation of syphilis and other eruptive diseases; and the opinion may now be safely held, that there are periods in the course of the inoculable and contagious diseases when their morbid poisons are more active and more abundant than at others; and that there are, likewise, certain periods when their rate of elimination is greater than ordinary; and hence one might not unreasonably infer the probability of these diseases being influenced, as to severity, by the states of the poisons producing them. It has been frequently noticed, for example, in reference to vaccination, that the virus produced on the seventh day is more active than that produced on the eighth; that on the eighth than that on the ninth; and so on; and, in practice, one may raise the standard, so to speak, of the vaccine vesicle, by taking advantage of this circumstance. Moreover, it is a matter of common observation, that in nearly all epidemics the worst cases generally occur immediately after the outbreak, and that the disease gradually grows less severe.

It may also be regarded as almost certain that some morbid poisons, those of syphilis and rabies, for instance, exist only in the fluid state; whilst others, like those of measles, scarlet fever, etc., are always aëriform: certain others again, such as that of smallpox, being capable of assuming either condition; and, with respect to their elimination from the body, there would seem to be a certain relation between the facility with which this process is effected, and the contagiousness of the disease. The marsh poison, for instance, clings to the system with extreme pertinacity; and if ever eliminated, is probably first decomposed and rendered inert. The diseases which it produces are, therefore, not contagious; but that they would be so if their poison were eliminable, as such, cannot for a moment be doubted. The contagiousness of diseases may, then, be said to be in direct ratio with the virulence of their specific poisons and the extent to which these are eliminated, as such, from the body; and if this be admitted, it must be of great importance to determine at what periods such poisons attain their maxima of intensity and abundance. I have already expressed my belief that,

in the case of cow-pox, the virus is most active rather before the eighth day. I also incline to the opinion that, in smallpox, the virulence of the poison is greatest just before the maturation of the pustules; and in measles, scarlet fever, and the like, during the period which precedes the decadence of the eruption. The quantity, however, is probably greatest whilst the processes of scabbing and desquamation are going on.

I am not aware that any one has hitherto succeeded in determining how long the eliminative period may last, or how long the various morbid poisons may retain their subtle power; but the circumstances connected with the introduction of smallpox into Australia, of scarlet fever into Madras, and with the transmission of yellow fever, point to the conclusion that although some morbid poisons are longer lived than others, they are all more persistent than we frequently imagine. It is possible, also, that their eliminative periods are of longer duration than we have been in the habit of believing. There is no reason, however, for supposing any disease to be contagious during its period of incubation, as the following case may show. A child was vaccinated on the 11th of February. On the 18th, from the only pustule that had formed another child was vaccinated. On the 22d, the first child was seized with convulsions and fever; and on the night of the 24th, the eruption of smallpox began to appear on its face. After this, the second child was carefully examined and watched; but, notwithstanding that the vaccination was successful, no sign of smallpox could be detected either then or subsequently. Hence it may be concluded, that on the eighth day of incubation the poison was not being ejected by the skin.

It is, moreover, hardly probable that a disease is contagious during the febrile stage, which precedes the eruptive; but the proof of this proposition, being less direct, would necessitate a longer digression than I am now at liberty to make.

Returning now to the disease specially under consideration, I shall next endeavour to determine its period of incubation, taking the hypothesis of its contagiousness for granted. It will be remembered that the school-girl in whom the eruption was first seen was kept apart from her fellows for a week, and that the second case occurred twelve days after her return to the common dormitory. Hence it would appear that the disease was communicable on the eighth day after the outbreak of the rash, and that the period of incubation could not have exceeded twelve days, but it is evident that if the disease be contagious still later than on the eighth day, so may the incubative period be less. From the group of cases which occurred on the 6th and 8th of April, nothing positive can be deduced, except that the period of incubation may have extended to sixteen and eighteen days; but this is hardly probable, because, although there was no positive isolation in the second case, the girl was kept in bed for three days, and only mixed freely with her

fellows on the fourth. However, there would be no difficulty in admitting that the incubative period may have been twelve days in this group. There can be little doubt, I imagine, but that the little boy, Case No. 3, carried the disease to the other boys; and as only eleven days elapsed from the appearance of the eruption upon him, until the first case on the boys' side occurred, we must regard the period of incubation as being, in this instance, eleven days at the most, and even then the disease must have been communicated on the first day of the eruption. From the fact, however, that only one case happened so soon, it is possible that it may have been somewhat exceptional. As regards the cases which immediately followed, it is impossible to ascertain their period of incubation because their date of infection cannot be determined. Still, if we suppose twelve days to be the normal period, it would appear that three were infected on the first day of the eruption, three on the second, four on the third, four on the fourth, two on the fifth, and one on the seventh; and thus the third and fourth days of the eruption would seem to be the period when the chance of infection is greatest. In the case of No. 26, it will be admitted as most probable that the lad caught the disease from one of the boys who slept in the small room with him, either No. 8 or No. 24. If he were infected by the former, the incubation might have lasted as much as sixteen days; if by the latter, it could not exceed ten. But if we look to what happened in the private family above mentioned, and suppose the infection to have been conveyed by one of the school-children on the 7th of April, the incubative period would be fixed at twelve days for the first two cases, Nos. 27 and 28; but as regards Nos. 29 and 30, nothing would appear certain except that it could not have exceeded sixteen days. However, as we have seen reason to believe that the chance of infection is greatest on the fourth day of the eruption, if we suppose them to have caught the disease on that day, there would be exactly twelve days left for incubation.

In confirmation of the opinion previously expressed relative to the possibility of the contagious diseases being rendered more or less virulent, according to the periods when the morbid poisons which produced them may have been generated or eliminated, I may refer to what took place in this epidemic; but I must first state that the notes from which the preceding table of cases was compiled were made quite independently of any theories whatsoever, and that it has only recently occurred to me to ascertain their bearing upon this particular point. On examining the table, then, it will be seen that in the first case there were both fever and coryza; whereas, in the second, there were no symptoms of constitutional disorder. How the first case originated I am unable to state, but I have shown reason for believing that the second was caused by the poison eliminated at a late period of the disease. In the next series, the cases (Nos. 3 to 7 inclusive) were probably produced by the poison eliminated at the middle period; and they

were all of a mild description. But the group immediately succeeding were infected, there can be little doubt, at the earliest eliminative period, and it will be observed that they were not only more severe than any of the others, but characterized by a more marked premonitory stage. The last cases that occurred were again comparatively mild.

From the fact that so many children were attacked who were ascertained to have already had measles, it is clear that this affection could not have been measles. It is almost as certain that it was not scarlet fever; because, although they had none of them had it, this disease, I believe, has never been seen in the Bombay Presidency. There are sufficient points of distinction, however, between these three diseases, as the following contrast will make abundantly clear:—

Disease.	Period of Incubation.	Eruption appears.	Eruption fades.	Character of Eruption.	Coryza and Catarrh.	Sore Throat.
MEASLES.	10 to 14 days.	On 4th day of fever.	On 7th day of fever.	Papular, but more or less crescentic, affecting the whole body, and followed by desquamation of the cuticle.	Common.	Uncommon.
SCARLET FEVER.	4 to 8 days.	On 2d day of fever.	On 5th day of fever.	General efflorescence without distinct papules, affecting the body and the flexor surfaces of the limbs chiefly, followed by desquamation and exfoliation of the cuticle.	Uncommon.	Common.
RÖTHELN.	10 to 12 days.	On 1st day.	On 3d day.	Papular, but not crescentic, affecting the body, and the extremities in a less degree; occasionally succeeded by slight desquamation.	Coryza occasional; Catarrh uncommon.	Occasional.

I much regret that I have not the means in this distant region of consulting the original papers of Drs Babington and Richardson, so as to be able to distinguish more clearly the principal features of the diseases described by them. I am inclined, however, to think that the epidemic which I have endeavoured to portray differs from that noticed by Dr Babington only in degree; and that the variation in the symptoms may have been attributable to the difference of climate. But I am quite unable to reconcile Dr Richardson's views with the description given by Dr Babington, or with what has come under my own observation. Nor

can I agree with Dr Richardson with reference to the etiology of the disease. The only evidence that I have been able to obtain is of a purely negative kind, and I am forced to the conclusion that the disorder is produced by a specific morbid poison, whose origin is at present as obscure as that of the views of smallpox.

The name of a disease is always a matter of some importance. It should be short for the sake of convenience in writing, and euphonious for ease in pronunciation. It should, if possible, be capable of serving only as a sign, or mark, whereby to indicate a definite group of pathological conditions, and it should not be a "question-begging appellative." *Rötheln* is harsh and foreign to our ears. *Rubeola notha*, and *Rosalia idiopathica* are too long for general use, and are certainly expressive of conclusions which have yet to be proved. I therefore venture to propose *Rubella* as a substitute for *Rötheln*, or, at any rate, as a name for the disease which it has been my object in this paper to describe.

ARTICLE IV.—*The Modern Treatment of Pneumonia in Young Children, with some Observations on the Initial Auscultatory Sign of the Disease.* By G. STEVENSON SMITH, L.R.C.S.E., formerly Resident Medical Officer, Royal Edinburgh Hospital for Sick Children.

AT the present time, when the treatment of pneumonia is exciting so much discussion, it has occurred to me that a brief account of the plan pursued amongst young patients suffering from that disease in the Children's Hospital here might not be altogether uninteresting or unprofitable.

Before entering upon the subject of treatment, however, I may take this opportunity of making a few remarks in regard to the diagnosis of pneumonia in its earliest stage. Most of the cases when brought into hospital are of too long standing to enable us to make out correctly what the initial auscultatory symptom really is; but I have had the good fortune to meet with two cases in which I was able to determine, with the greatest certainty, that a harsh respiratory murmur preceded crepitation. This harshness or puerility of the respiration was long since pointed out by Dr Stokes as a phenomenon that preceded the crepitating rale, and the correctness of his observation has been confirmed by Dr Waters and others. But as a considerable amount of scepticism still exists on this point, and as M. Grisolle, who is no mean authority, states that in all his experience he has never met with a case in which the pneumonic crepitation was ushered in by abnormal harshness of the respiration, it may be as well to give the following notes of the cases which were made by myself at the time, and are now extracted from the hospital case-book:—