the surface thoroughly cleansed either by the use of ether or benzin, to facilitate its penetration.

Megalosporon endothrix.—Milder methods will here suffice. It is in this variety that most drugs establish their reputation for the cure of ringworm, for the disease readily yields to treatment; in fact, it seems in some cases to be self-limited. Situated superficially, as it is, the parasite is readily reached; thus various watery solutions, such as corrosive sublimate, 1 to 1000, resorcin (gr. xxx to 3i), carbolic acid, etc., are often found to be sufficient. More satisfactory results are usually obtained, however, from sulphur, ichthyol (ammonio-sulphate) or mercury, used in ointment form. In this variety the hair returns on bald areas, and the rigid prophylactic measures so necessary in the microsporon are here not a *sine qua non* to successful eradication.

Ectothrix ringworms.—On account of their pyogenic property these are the most formidable in appearance of all, and their treatment is sometimes a matter of considerable moment. Fortunately, the suppuration which the animal-derived fungus incites is inimical to its life, the disease in consequence runs an acute course.

Kerion.—This calls for epilation, which on account of the destructive process in the follicles, is as a rule, not painful. Cleanliness must be enjoined, and in young children soothing applications are called for, such as carbolic acid, grs. xx to 3i, a saturated solution of boric acid or hyposulphate of soda. Pus cavities may be flushed by inserting a fine nozzled syringe into the fistulous openings. An incision is seldom necessary, for free exit of pus is usually afforded by the suppurating follicles. Should this not occur, and fluctuation be present, the tumors should be freely opened. A pledget of cotton saturated with the lotion selected should then be applied and changed frequently. When suppuration is less active the tincture of iodine is to be preferred.

Sycosis parasitica.—It is usually necessary at first to remove the crusts by soaking with oil and afterward washing in hot water and potash soap. Epilation and shaving on separate days is the next important step. As the suppuration is usually deeper than in kerion and much induration exists around the follicles, the more penetrating applications should be used. Good results may be expected from an ointment composed of sulphur and oleate of mercury, 20 per cent., of each half a dram to an ounce of the lanolin vehicle previously referred to. The oleate of copper and ichthyol are likewise valuable drugs; the latter may be used in the strength of 15 to 30 grains to the ounce. If much pain exists, free scarification followed by boric acid compression will generally give relief. Poultices should not be used, as moist heat favors the growth of the fungus.

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RICKETS.

IMPROPER FOOD AS THE CHIEF ETIOLOGIC FACTOR IN ITS PRODUCTION.

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Nearly all the children that are brought for treatment to the dispensary of the Woman's Medical College of Baltimore come from the "Black District" bordering on Druid Hill Avenue and the intersecting streets and alleys. We have children showing all proportions of negro blood, from the woolly-headed pure negro type to the palest yellow of the mulatto, and in the mothers, or friends, who accompany them, we find the widest possible range of intelligence. As most of the women have to work to help to support themselves, and often to take care of children of whom the father is unknown, it follows that the care of the children is frequently entrusted to older members of the family, as a maternal grandmother or aunt, who probably has already children of her own. We have found also that baby-farming is quite an industry in the neighborhood, and always attended by a very high percentage of infant mortality.

After considerable experience with these children, during which time nearly all cases have been investigated as far as the intelligence of the responsible party permitted us to go, we have come to the conclusion that the negroes and mulattoes of Baltimore have but the most rudimentary ideas of the importance of care in feeding infants and young children, and that the universal prevalence of rachitis among them is due almost entirely to this ignorance. Even the children who are fortunate enough to be suckled by, their mothers escape the impending disaster only so long as they remain unable to appreciate what it is to be able to eat. As soon as general food can be given them the mother sees in this a means of escaping an irksome duty, and allows the child to stuff itself with all sorts of indigestible food without restraint. Is it any wonder that infant mortality is high among such people? They seem to have no conception whatever of the fact that the diet of children should differ from that of adults, and think the reason that more carefully fed children are refused general food is rather economic than dietetic. They appear to take pride in the ability of their babies to sit up to the table and eat everything put before them, and will boast that nothing ever disagrees with the child. No matter how ill it may be with bowel trouble, food is never thought of as the cause of the ailment. They consider that it is effeminate to allow a child to continue to live on milk exclusively, and it is often brought out in the history that the mother rather discourages the use of milk as tending to retard the growth of the child. Again and again, in reply to questions asked of women showing more than the average intelligence, I have been told that although they knew that white children are usually carefully restricted to milk for the first six or nine months of life, that sort of diet would not suit a "colored" baby, who must have stronger food to enable it to grow big and prepare for a life of labor.

Hundreds of these children die every summer in

Baltimore of gastro-intestinal complaint, yet many survive miraculously, and are referred to as being strong and well, although fed upon everything. They can not see that it is because of their strength that such children are able to live, when so many die and are forgotten. This comes out often in the questions asked in the dispensary. One would think that the loss of two or three children in exactly the same way, from manifestly faulty diet, would teach women even of a low grade of intelligence, but it does not; the child brought to us will have been fed in the same manner, and will show the same intestinal symptoms that preceded the death of the others. Inasmuch as this method of general feeding begins in many instances as early as the fourth or fifth month, at a time when the child is totally unable to digest the character of food that it is allowed to take, it begins to sicken at the time that the first teeth are expected, and any consequent illness is ascribed to teething and treated by means of all sorts of household and advertised remedies, the food being continued.

If the baby grows worse and dies, it is accepted with stoic indifference as one of the usual results of the "teething" process—the great bug-bear of that class, the "scapegoat" on which many grievous sins of diagnosis are annually sent into the desert. I recall a child who was brought to me in October last, who was fourteen months old and weighed but nine pounds. The family history, as far as could be made out, was good; the grandmother, who brought it, was reasonably intelligent, but the usual faulty diet had been allowed. The child was rachitic, extremely feeble, undeveloped, without teeth or any appearance of teeth. Yet that child had been born healthy and had grown and thriven as a healthy child as long as the mother nursed it, and not until it was given all sorts of food did the trouble develop. At about five months it began to eat potatoes and cabbage and any other vegetable or meat that happened to be on the table, and very soon, much to the surprise of the family, it showed signs of distress. "Teething" was accused of the trouble, and it had been "teething" ever since, but without the appearance of a tooth. When the woman was asked if she never gave it milk, she said that milk always disagreed with the child and that it was refused. This was not true, for the child was taken into the hospital and put upon a milk diet, which it took readily, and improvement began forthwith. Even those cases that live through the combined evil influence of bad food and summer heat in most unhygienic surroundings do not escape entirely. Very few of the negro or mulatto children of Baltimore escape rachitis. This might be expected in those who are crowded into confined quarters in the narrow alleys of the poorest districts, but we find it almost as prevalent among those who are able to live in better quarters. It begins very early in life, especially in those cases who give a history of too-advanced feeding, with consequent gastric and intestinal troubles.

With increasing acquaintance with this disease I am more and more inclined to lay the chief blame for rickets rather upon the faulty assimilation of improper food than upon an unsanitary condition of the household. This conclusion has been reached entirely from a clinical standpoint and after collating the evidence offered by a large dispensary clinic of excellent material. The improvement that does undoubtedly come later, even in extremely severe cases with most remarkable distortions, is coincident with the ability

of the child to run about and so keep itself in the open air, but is not, in our opinion, due directly to this fact; but in some measure indirectly, as it enables the child to digest and assimilate its food, which it has at last grown up to, and which is the same as it had received from its fifth or sixth month. The limbs do straighten out, and the bony enlargements do, in large measure, disappear, except in extreme cases, under the stimulus of healthy play in the open air, but I am convinced that this is because under the same stimulus the stomach and intestines functionate more correctly, and proper aliment is supplied to the growing bones. We have frequently had, succeeding each other, babies of the poorest class, who lived in the worst condition imaginable, as far as concerned hygiene, and who being suckled by the mother without additional food, showed no sign of rickets, and in contrast, others much better situated in their home surroundings, who were distinctly rachitic and whose history showed improper alimentation. I am aware that the result of these investigations coincides with the general teaching on the subject, and offer this only as additional testimony bearing upon the etiology of a very obscure disease.

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SOME NEW POINTS ON INFANT FEEDING.

Presented to the Section on Diseases of Children, at the Forty-ninth Annual Meeting of the American Medical Association, held at Denver, Colo., June 7-10, 1898.

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The present article is not intended as exhaustive of this subject, which is a very vital one and calls for future investigation, since thousands of lives of infants are ignorantly slaughtered from there having been so little interest taken by the medical profession in the matter, it having been left to manufacturers of nipples as to what is best. While there has been great advance in bacteriologic research, and milk has been Pasteurized and many lives saved, yet there has been no true advance in the improvement of artificial nipples from a humanitarian standpoint. Although more than a thousand different shapes and so-called improvements have been made up to the present; yet, with all that has been brought forth, I found when necessity compelled me to attempt to save the life of one of my grandchildren, no nipple fully met the needs of this case.

By an unfortunate mistake in diagnosis one of the mother's breasts had been totally removed before her marriage, and I then predicted to the surgeon and my daughter that should she ever have a child she would never have milk in the remaining breast; that while I had never read of a precedent, yet I felt sure milk would never come into the remaining breast, since the function was a dual one; and, as no function had ever as yet come to the virgin's breast, now with one gone, I asserted that no milk would ever come to sustain the child in the remaining one. With all the effort made by the accoucheur to force milk into the remaining breast from persistence in trying the child at the nipple, there was no evidence of any secretion, and the effort was only abandoned when the child was gaining none and gave every evidence of starvation. In my absence in Europe to attend the International Medical Congress at Moscow, Mellin's Food and various preparations were tried, but there was no per-