dark colour, and transversely but not deeply fissured. Only three toes were found on each foot; they were rudimentary, and the nails, as on the hands, were distinguished by great deformity.

The face showed at a glance the nature of the complaint in the retraction of the skin, causing eversion of the lower eyelids and the upper lip. In the ear, likewise, not only was the lobe connected to the adjoining part of the skin of the neck, but the back of the concha was partially attached to the skin over the temporal bone; and hence this part was far less free or moveable than in the natural state.

In a *third* kind, an intermediate stage is represented between what might be termed pityriasis and ordinary ichthyosis. It is a far more frequent species than those just described, and its scales are thinner and more abundantly diffused than in the latter affection. In common with the rest, this complaint is congenital, and as such it differs from hereditary psoriasis in not being declared, or at any rate most rarely so, at the time of puberty, or yet at a later age. The most usual period for its primary manifestation is from the third to the sixth month, and seldom is it delayed beyond the first year. It commences generally on the scalp and face—sometimes on the back, extending from thence over the whole surface, and varies from one to two or more years before its entire effect is accomplished. In some of the worst instances of its occurrence, it is associated from birth with a deficiency of the eyebrows and eyelashes; and in cases less pronounced these may be but partially present. Although at its origin the face is usually involved, the disease in its progress sometimes appears partially to forsake this part, and to become finally more confined on the loins and legs. The patient's garments or bed-clothes, as in psoriasis inveterata, will be constantly covered with numerous scales, which are regenerated almost as soon as shed. The skin everywhere feels preternaturally rough and dry, not excepting the hands and feet; and one distinguishing element of the complaint to be often noted consists in that absence of perspiration which, in cases of severity, would seem to be complete, the skin retaining its dry character even in the hottest day. As might be anticipated, the condition of the patient thus situated depends in no slight measure upon the seasons, the disease being found to yield to the influence of mild weather; while, on the other hand, it is readily affected or increased by cold. In winter, or in a piercing wind, the patient is pretty sure to suffer, particularly on any surface uncovered, as the face or fingers; or should he afterwards approach the fire or become otherwise heated, the same parts tingle and smart. A similar result will sometimes follow exposure to the sun's rays in summer; and, without flaying the skin, produce great irritation in such a locality as the face. In others, the feet around the heel are apt to become fissured and painful after walking, or much inconvenience is occasioned from the friction of the scales in front of the ankle or at the groin.

A yet lower type of ichthyosis—the lowest of all—I would beg to subjoin. The subjects of it are distinguished by a similar want of perspiratory action of the skin as in the last named, or by its limitation to some particular region. This may be, and most generally is, the palmar or plantar surface, or the axillæ, or the face and neck; and I have known a small space on the loins, or the front of the chest, the only part capable of secreting. Sometimes the spot thus selected constantly perspires, or it is only the great heat of summer which induces it to do so. Again, the presence of scales, although of so prominent a feature in all other forms of ichthyosis, is not remarked here; and scarcely can the hand, much less the eye, detect any appreciable difference in the integument from that of the normal state. Such patients are often remarkable for a redness or freshness, as it might be said, of the cheeks; and particularly is this noticeable after the least excitement or exertion. That these cases do in reality pertain to the class under our present consideration is sufficiently attested by the hereditary nature of the complaint, and by the evolution of its higher grades in other members of the same family; and not seldom its occurrence in direct descent. One complication, I must likewise add, almost always overlooked, deserves mention in this place—I mean its occasional association with prurigo. The latter is in many instances severe, and productive of the utmost annoyance to the patient, whom it may affect at any age—from early life to youth, and beyond it. Towards night especially exacerbations are wont to occur, as on approaching the fire, or the same takes place from exposure to cold. That this kind of prurigo is dependent upon the state of the skin itself, and not due to any parasitical influence, is, I think, proved to demonstration by the absence of any such exciting cause, and by the remedies successfully employed for its removal.

The total arrest of all sensible perspiration in ichthyosis, and its partial secretion only in some such modified forms of this complaint, offer an interesting subject for investigation with respect to the state of the urine. The result of certain experiments which I undertook some few years since on this question, and to which I would beg to refer the reader (*Diseases of the Skin*), pointed to the following conclusions. A consi-

derable increase in bulk was observed in the urine, which was only faintly acid, and of low specific gravity; the rate per cent. of urea was small, although its absolute amount remained nearly the same—a fact which militates against the usually received theory of the elimination by the skin of urea; lastly, the phosphoric and sulphuric acids were hardly if at all affected.

Most writers have dwelt on the greater frequency of ichthyosis in the male as compared with the female. My own observations, derived from no inconsiderable number of cases, rather incline the other way, and certainly do not support the opinion that ichthyosis is a special complaint of either sex. Instances have come under my notice of ichthyosis invading the male children only in one family, and in another the female; of its affecting both sexes, the offspring of the same parents; and again of its appearing in a single member alone. The hereditary nature of ichthyosis in some examples is unquestionable; and I have recorded one, in which there was evident proof of the direct transmission of this affection through six successive generations. Instead of proceeding in an immediate line, it will sometimes show itself in a collateral branch of the family; and cases are not rare in which, as far as can be ascertained, no claims of lineage are allowed.

Ichthyosis may exist in the fetus, and in a most aggravated stage. In these cases, the skin appears tightly stretched throughout, and over the trunk and limbs it is ruptured in transverse or parallel lines. The eyes are fixed in consequence of the rigid state of the limbs; so likewise are the lips, which are converted into hardened bands, and expose the gums; and no vestige of an external ear is seen. The entire body presents an assemblage of lozenge-shaped spaces or intervals, caused by a separation of the fibres of the cutis, sufficiently numerous and distinct to warrant the appellation of a "harlequin" fetus, which is allotted to it. The only museum, as far as I am aware, in the possession of this singular class is that of Guy's Hospital, which contains four excellent specimens of this singular deformity of the skin. Although it is to be regretted that no history is attached to them, I was fortunate in learning from Mr. Scarr of Bishop's Stortford, who presented one of the above preparations to the Hospital, that not only was the mother's labour in this instance perfectly natural, but the fetus lived for some seconds after its birth: it was the only one of several children that exhibited any indication of ichthyosis, and no hereditary trace could be obtained. I may add, that by the parent the complaint was attributed to a sudden and severe fright she experienced when attending a country fair at the time of quickening.

[To be concluded.]

CASES OF A BULLOUS ERUPTION APPARENTLY CONTAGIOUS.

By JAMES F. GOODHART, L.R.C.P.Lond.

SOME authorities on cutaneous diseases incline to the view that the discharge from all vesicular eruptions is more or less capable of communicating contagion. Few, however, if any, go so far as to declare that inoculation—from an eczema, for example—will produce a like affection; and I am not aware that there is any positive evidence on the point one way or the other. As bearing somewhat on this question, the cases described below, which have lately come under my notice, are not without interest.

CASE I.—Mrs. H. was confined with her third child on March 10th, 1870. The mother is a very healthy woman. The child was strong and healthy when born, and so continued for ten days. On March 21st, a large blister was noticed on the inner side of the great toe of the left foot. It was tense and shining, and contained opalescent serum.—March 22nd. Many fresh bullæ have appeared. They are scattered over the buttocks and back; there are some also in the axillæ and on the fingers; they vary much in size, some being very large and flaccid, others smaller, about half an inch in diameter, and distended. There is a slight red areola round the base of each. In many places, but more especially about the buttocks, the skin is covered with a thick papular rash. At the apices of such papules, small vesicles can be seen. The child is apparently in its normal health. It takes the breast well, and sleeps well.—March 24th. Fresh blebs are appearing daily. The mother describes them as rising up very rapidly, and as drying up almost as soon as they rupture. A thin crust covers the oldest crop. No sore is left behind when the bulla breaks. The skin is red and shining for a few hours after.

CASE II.—Eliza H., aged 2. A bleb in all respects like those on the infant came on the knee to-day (March 28th). It is of the size of a three-penny-piece.—March 30th. Several fresh blebs have appeared on the buttocks and on the right thigh. The face also has numerous small

blisters upon it, about the mouth and nose. These bear no resemblance to the ordinary herpes. They are apparently no more than upliftings of the cuticle by fluid underneath. These quickly dried up, giving a scaly appearance to the skin. No true scab was formed.

CASE III.—Henry H., aged 4, has a large bleb occupying nearly the whole of the left ala nasi (April 7th). The infant is now well, and the eruption on the girl is nearly well.—April 9th. A large bleb, nearly of the size of a sixpence, has risen on the left cheek of the boy.—12th. No further eruption has appeared in any of the children.

A powder of rhubarb and soda was ordered in each case, and the blebs as they ruptured were smeared with olive oil, and afterwards dusted with oxide of zinc. Both father and mother were healthy, and the children were also strong. No history of syphilis could be obtained, and no evidence of any congenital affection in the family was observable.

In these cases the presumption of contagion is a fair one; and indeed such an explanation of the facts is the only reasonable one that suggests itself. It must be stated, however, that the mother of these patients regarded all skin-eruptions as alike in their "catching" properties; and great care was therefore taken to keep each child separate as much as possible, and linen, etc., used, for one was in no case allowed to come in contact with the others; but where children are concerned, even such precautions are no guarantee against contagion occurring. With regard to the disease in question, an epidemic form of pemphigus is described by some authors, but in Hebra (*Syd. Soc. Trans.*) such a variety is not recognised. At the time that these children were under observation, two other cases of well-marked pemphigus came before me in the same town; but five cases occurring nearly simultaneously as these did would scarcely justify the term *epidemic*, or the putting aside of the more probable explanation offered above.

Aberdeen, May 1870.

CLINICAL NOTES.

(Reported from the Practice of Dr. WILKS, at Guy's Hospital.)

NO. III.—CROUP.

THE following case is from notes by Mr. Steele.

Henry F., aged 6, was admitted on February 28th, 1870. He had had several illnesses affecting the respiratory organs. For about a fortnight, he had been very unwell with sore throat and cough. During the last two days he had been very much worse; his cough was so bad that he had struggled for breath. As he was becoming worse every hour, his mother brought him to the hospital at 5 o'clock, p.m. He was a fair-haired, well made, and intelligent child. His head was thrown back, his breathing difficult and hurried, accompanied by a prolonged, noisy, and crowing sound. The skin was hot and dry; pulse 156. The chest was so little inflated, and the larynx evidently so much obstructed, that the propriety of immediate tracheotomy was discussed. He was ordered a warm bath and an emetic. Whilst in the bath he had a fit of coughing, and a violent struggling for breath. He was taken out, rolled in a flannel gown, and placed in a crib in front of the fire, with a screen around. During the night he had several attacks of bad breathing, but in the morning was evidently breathing with less difficulty; his skin was perspiring, and he allowed his throat to be examined. It appeared somewhat swollen and injected, but no membrane was visible. The respiration was still noisy and ringing. Pulse 148. Temperature 100.5. There was also some dulness at the base of both lungs, with deficient breathing. He was ordered to continue the medicine which he had taken from the time of admission, viz., five minims each of antimonial wine and ipecacuanha wine, every three hours.

On March 2nd the child was better. The noisy breathing had ceased. Hoarseness was only perceptible on coughing. The skin was moist; temperature 100; pulse 120.

March 3rd.—He was better. He spoke with a whisper, but the voice was shrill. The cough was less, but still brassy. The temperature and pulse were less. The medicine was omitted. After this, the symptoms gradually abated, and he left on March 14th.

CLINICAL REMARKS.—Dr. Wilks said that, in the first place, it was important to know what was understood by the term croup. He had found that the answer to this in theory and practice were very different. If the question be asked of a medical man or a student, what is croup? he will tell you it is a cyanache trachealis, or a disease in which the windpipe is the subject of inflammation, accompanied by the formation of a false membrane; and if you inquire again whether, in the rounds of his practice, he waits for a definite knowledge of the existence of a membrane before he applies the term croup to the case before him, he will answer no, but that he adopts the term whenever he meets with a case of spasmodic closure of the larynx, accompanied by a loud crow-

ing respiration, and a threatening suffocation. The symptoms which oblige him to give the name croup are those which are dependent solely on a closure of the glottis, and have no necessary connection with any tracheal affection, or with the presence of false membrane. The term is therefore made to include several complaints. Theoretically these are as follows: the case unattended by inflammatory symptoms occurring suddenly, oft repeated, evidently of nervous origin, and styled laryngismus stridulus; then the case which is more gradual, regarded as catarrhal in its origin, and styled simply laryngitis; thirdly, the case which is called true croup, where a false membrane is spread over the larynx and trachea (for, remember there is no such thing as inflammation of the trachea without the larynx); and, fourthly, a very similar affection associated with a diphtheritic throat, or occurring in some house where diphtheria is known to exist, and which has thus acquired the name of diphtheritic laryngitis, or diphtheritic croup. The case of laryngismus stridulus is clearly distinguishable, and the profession is agreed to separate the catarrhal form from the membranous; but when we come to the latter form, there is by no means an agreement as to whether we are dealing with one disease or two. Is indeed the case where a membrane is found of the same nature as that to which we have of late years applied the term diphtheritic? Dr. Wilks believed that the majority of the profession was impressed with the belief that there is a local affection known as true croup, characterised by the formation of a false membrane, and with which most medical men have been familiar all their lives, and that there is another affection which has only of late years been familiarised amongst us, which is constitutional in its nature, and is called diphtheritic; that, indeed, during the prevalence of diphtheria in a neighbourhood, a case of membranous inflammation of the larynx and trachea may occur, which, although not distinguishable from ordinary croup, is very different in character, and is amenable to different treatment. An opposite opinion is held, however, by some, and they regard the disease long known as membranous croup as nothing more than the same affection now so commonly recognised as a diphtheritic affection. This opinion is not yet generally held; for most medical men consider it to be of the very highest importance to be able to decide between the "old-fashioned" croup and the new affection known as diphtheritic; and since in the latter the throat is often affected, they usually take the presence of a membrane in this part as the test of its diphtheritic nature. The greatest pains, indeed, are taken to discover the existence of a membrane in the palate; and even after death a careful search is made in the throat in order to see if the exudation have passed beyond the glottis, so as to determine whether or not the correct line of treatment has been adopted; the prevalent opinion being that the diphtheritic case should be treated by support and stimulants, whilst the true croup requires leeches, emetics, and the so-called antiphlogistic measures. It is clear, therefore, that the question is a very important one; for Dr. Wilks stated he had more than once seen a medical man unrelentingly blame himself for the adoption of the latter treatment, because he had afterwards discovered, by the presence of some membrane in the mouth, that the case was diphtheritic. Although in many cases it is impossible to decide as to the exact nature of the case, yet the belief in two forms is founded on the opinion that in the "old-fashioned" local croup there is not observed that remarkable nervous depression which so often accompanies the diphtheritic variety, nor are there the nephritic and other complications which so often prevail in the latter. It is a subject upon which the profession has not yet agreed; but although the majority hold to the opinion expressed, it must be mentioned that some of those who have made the subject their especial study, as the late Dr. Hillier, are of opinion that the membranous croup is always diphtheritic. Whatever opinion may be right, there can be no doubt of the importance of distinguishing between the simple or catarrhal, and the membranous form of laryngitis, although this is with difficulty accomplished. For, as before said, certain symptoms implying merely spasmodic closure of the glottis are sufficient to give the name croup to all cases which are treated by particular remedies, or by operation. Now, in by far the majority of cases where recovery has occurred, either from medicine or tracheotomy, the disease has been not one of true croup, but of laryngitis. In the present case, laryngitis was the true term, if by croup is intended the case where a membrane is formed. Probably in nearly all cases where a rapid recovery has occurred after an operation of tracheotomy, a simple inflammation has alone been present. In such simple or catarrhal cases, Dr. Wilks strongly advised the old-fashioned and approved treatment, and in fact in all cases where the following symptoms existed, viz.: a high state of fever, great distress of breathing, loud crowing respiration, with paroxysms of spasm in the glottis, the head thrown back, the child fighting or gasping for breath. In such, the antimony emetic, followed by smaller doses of antimony and ipecacuanha wine, hot sponges to the throat, the room warmed with vapour, etc.