erythema, or non-specialised dermatitis. As the contagiousness of true erysipelas has been placed beyond question by the experiments of Koch, Tillmanns ("Erysipelas," *Deutsche Chirurgie*, p. 9), and especially Fehleisen (*Deutsche Med. Wochenschrift*, 1882, p. 553), as well as by many clinical facts, an accurate diagnosis is obviously of importance. It has been shown that the virus of erysipelas may be collected, cultivated by appropriate methods, and transmitted to animals and to man by inoculation, the resulting disease being often of great severity. The question then arises, can the virus, when inoculated, give rise to a mild affection similar to that under consideration? The experiments of Tillmanns (*loc. cit.*, pp. 14, 18) seem to show that it can. Out of twenty-five inoculations on dogs and rabbits, five were followed by marked erysipelas with high fever; in two there was erysipelatous redness and swelling, but only a slight rise of temperature, while in several others (the number is not stated) the inoculation was followed by spreading redness and swelling, which resembled erysipelas in every particular, but ran their course without fever. Now Tillmanns considers that as these cases were apyretic they were not genuine erysipelas, but I must admit that I fail to see the force of his reasoning. The selection of high fever as the pathognomonic sign of the true disease seems to me altogether arbitrary, and, even if it be accepted, impossible to apply with accuracy. It is surely true that the cases with the highest fever and those with the lowest, or even with none, are connected by transitional forms which establish an insensible gradation between the two extremes, and I am quite unable to see where the line should be drawn, on one side of which we are to place all the genuine cases, and, on the other, all the spurious ones.

If, then, we admit that true erysipelas may occasionally run a mild course, practically without fever, and if we also recognise the fact that some forms of erythema, and even urticaria (*e.g.*, the "acute circumscribed cutaneous oedema" of Quincke), may have a close resemblance to erysipelas, we have to inquire by what means we may distinguish between these affections. I think there is one character of importance which is present in erysipelas and not in the others, and that is rapid spreading at the margins. Mr. Jonathan Hutchinson, in an able paper on Certain Diseases allied to Erysipelas (*Medical Times and Gazette*, January 1883), insists strongly on this point. After pointing out that erysipelas may be often wanting in vesication, in abrupt margin, and even in hyperemia, he defines as erysipelatous any inflammation which *travels* and is attended by oedema. But, even if we pay attention to this valuable sign, I think we shall still meet with instances in which diagnosis must remain uncertain. Tillmanns, referring to such cases (*loc. cit.*, p. 196), says that it must remain a question how far they are true erysipelas; and, further, that a correct diagnosis has no practical importance; but I do not think it would be wise to accept this view without reserve. Erysipelas is unquestionably contagious; and, although this may not be equally true of all cases, the severe ones being probably far more dangerous in this respect than mild examples, we cannot do wrong in taking all necessary measures to avoid communication of the disease to others. The severe cases shade off into the mild and doubtful ones by such gentle transitions, that it is certainly not always an easy matter to decide as to the rank which should be occupied by any particular case under notice. The difficulty is, perhaps, best solved by Mr. Hutchinson, who concludes that there is a family of erysipelatous affections, rather than a single disease erysipelas—some closely, others remotely, connected with the typical complaint. He holds that, in all, a virus is probably produced, which enables the disease to spread by contagion; and, whenever transmission to another person occurs, the disease, he believes, is intensified.

If these views are correct (and we shall at least be on the safe side if we adopt them), it is plain that there may be a danger of infection from any case, however mild; and caution will be always desirable. This possible danger of infection should, I think, be specially guarded against by those who are engaged in the practice of midwifery, and in the performance of vaccination and other trivial operations. The close relation of erysipelas to a grave form of puerperal fever is well established, and the slightest wound may become the starting-point of erysipelatous inflammation; indeed, it is nearly certain that some breach of surface, however trifling, is a necessary antecedent of all erysipelas. Under these circumstances, I have no doubt whatever that he will be the best practitioner who takes the minutest precautions against the possible conveyance of infection, however remote and improbable such a contingency may appear.

THE Duke of Devonshire has been elected President of the Chester-feld and North Derbyshire Hospital for the ensuing year.

Among the candidates for the *externat* of the Paris hospitals, Mdlle. Mathieu, a negress, has competed with success.

ON THE YELLOW PIGMENTS FOUND IN THE VISCERA IN CASES OF ARSENICAL POISONING.

By THOMAS STEVENSON, M.D.,
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IN an interesting communication on the above subject (*BRITISH MEDICAL JOURNAL*, 1884, vol. i, page 506), Dr. Campbell Brown and Mr. Davies record their examination of a bright yellow pigment, met with in three bodies exhumed after death from arsenical poisoning; and conclude that the pigment resembled one of the products of decomposition of bile-pigment. They, moreover, state that "no proof has ever been adduced, so far as we are aware, that the yellow substance" observed in such cases "is really sulphide of arsenic."

This novel and valuable observation accords with what is known of the occasional yellow discharges from the bowels, during the course of cases of arsenical poisoning, referred to in Dr. A. S. Taylor's *Principles and Practice of Medical Jurisprudence* (third edition, edited by myself, vol. i, page 257), where it is stated that "the matters discharged from the stomach and bowels have had in some instances a yellowish colour, as it was supposed, from a partial conversion of the poison into sulphide, but more probably from an admixture of bile."

The authors of the paper in question go too far, however, when they assert that no proof has been adduced that the yellow substance, met with in exhumed bodies, is sulphide of arsenic. Christison (*Poisons*), in speaking of the solid particles of arsenic found in the stomach, speaks of the brilliant yellowness of the surface of these particles, and adduces four cases of this character which came under his own notice; and adds that, in all these, he found the oxide as well as the sulphuret of arsenic. In one of these cases, besides the oxide and sulphide, he found sulphuretted hydrogen gas in the stomach. In the case of Margaret Warden, yellow arsenical solid particles floated in the stomach fluid. In the case of Regina v. Jennings (Berkshire Lent Assizes, 1845), Dr. Taylor describes how, in a case of exhumation, he obtained abundant evidence of the arsenical nature of the yellow substance, by means of general reactions, which are given in detail. (*Guy's Hospital Reports*, 1845, page 187.) In another case, Regina v. Garner and Garner, tried at Lincoln in 1863, Dr. Taylor found, in a case of exhumation, arsenic "partly in a soluble and partly in an insoluble form—that is, as orpiment, or yellow arsenic," the quantity of which he put as six or eight grains. (*Pharmaceutical Journal*, 1862-3, page 377.) I well remember seeing these yellow powdery masses of yellow arsenic in one of Dr. Taylor's cases.

To these, I may add an observation of my own on the body of Elizabeth Kittle, exhumed in 1872, six months after burial (Regina v. Kittle, Chelmsford Summer and Autumn Assizes, 1872), where there was extensive yellow staining of the stomach, orange-coloured staining of the duodenum, and also a considerable amount of solid yellow matter in the stomach, gritty to the touch. The yellow portion of this was insoluble in water, and could be seen coating the surface of pigments of white arsenic. The yellow matter was conclusively proved by chemical tests to be sulphide of arsenic.

I think there can be no doubt that gritty yellow sulphide of arsenic is not very rarely formed from arsenious oxide in the viscera after death; but this must not be confounded with the yellow substance described by Dr. Brown and Mr. Davies.

EPIDEMIC OF FOLLICULAR TONSILLITIS DUE TO DEFECTIVE SANITARY ARRANGEMENTS.¹

By G. ARTHUR CARDEW, M.R.C.S. Eng.
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THE following are a few notes on an epidemic of sore-throats which occurred at the Cheltenham Training College (male department) during May and June 1882.

The first man attacked complained of a sore-throat, and stated that the previous day he had a shivering fit and a splitting headache, and, on awaking the following morning, found he had a sore-throat. He had never before suffered from any such affection. The following notes I took of his condition, progress, and treatment, and they are typical of most of the other cases which followed.

He complained of a severe throbbing headache, sore-throat, great thirst, and inability to sleep. The temperature on the second day was 103° Fahr., with a pulse of 130 per minute. The whole of the pharynx, tonsils, soft palate, and uvula were intensely congested. On the tonsils were three white looking ulcers, as large as threepenny-pieces, of an irregular shape, covered with a white membranous material, which

¹ Read before the Gloucestershire Branch.