and was recumbent, I merely waited, hoping that the pulse would return; and I saw his respirations gradually become fainter and at longer intervals, till at the end of a minute or so they also ceased, and he seemed dead. I now kept up the movements of the chest artificially for about a minute, when he breathed again spontaneously, and his pulse returned. In a few minutes he entirely recovered. It was the pulse which gave me the first warning of danger. Although I withdrew the chloroform whilst he was still breathing, he had a narrow escape, and I cannot avoid the conclusion that had he inhaled chloroform air instead of pure air, during the minute which followed the stopping of his pulse, he must have died.

ON THE CONTAGION OF SCARLATINA AND SMALL-POX.

By T. T. PYLE, M.D.,

Physician to the Sunderland Infirmary, etc.

AT the present moment, when the public mind is agitated by doubts as to the necessity for vaccination on the one side, and by the fear of catching small-pox on the other, it may not be amiss to bring forward a few simple facts illustrative of the manner in which contagious diseases are spread abroad, and indicative of the means by which they may be prevented by timely care and attention. I maintain that it is by the neglect of a few very simple rules that our population is decimated by these infectious diseases; and we shall never check their progress until medical attendants and the heads of families are careful in carrying out a system of isolation on the appearance of fever in their villages or in their houses, and also in carefully tracing the virus-bearer so as to catch and imprison him until he is thoroughly disinfected and has ceased to be a pest to society. For these reasons, I call attention to this important subject, and venture to relate the following cases which have come under my observation in my own family and practice.

I shall begin by a case of scarlet fever that took place in my own house in the latter part of 1870. My eldest child, Ethel, aged 8 years, went to play with her little cousins for two days consecutively, and, on the evening of the second day, she awoke from her sleep with violent vomiting, and complained of pain in her throat. Two days after this, the eruption of scarlatina appeared. She had a rather severe attack; but, I am thankful to say, passed through the disease without any very formidable symptoms. It appeared that the housemaid at her cousins' house, about a week or so before, had suffered from sore-throat and excessive vomiting and prostration: she had been confined to bed for a couple of days, but was afterwards able to go about the house and perform her duties, though extremely weak. I made every inquiry where the child could have caught the infection. I had myself not attended any case of scarlatina for several months before that period. The laundress had not washed any clothes except for our family and the family of a patient of my own, whose children were quite healthy; and the only conclusion that could be arrived at was, that this housemaid had had a slight attack of scarlatina, and gave it to my little girl, who, perhaps, was rather in a condition to receive it, having just been convalescent from an attack of bronchitis.

The second case I can trace very clearly. Miss M., a governess from a school in Sheffield, came to Sunderland for the Christmas holidays, and consulted me for a chest-affection. On her next visit to me, about ten days afterwards, she was very depressed, and gave the following reason. Before leaving the school at Sheffield, a favourite pupil took scarlet fever; she nursed the child throughout its illness till its death. A few days after her return home, she wore the same dress that she had while she attended on her pupil. One of her little brothers took scarlet fever, and died within a few days. Three or four of the other children in the house also took the disease, but she herself never had the least symptom of it.

The third case occurred at a colliery village some few miles from this town, and one over which I have the medical supervision. The resident medical gentleman informed me that there had not been a case of scarlatina in the place for more than a year before. The village contains somewhere between three and four thousand inhabitants. When I was first called to see the child, the rash of scarlet fever was well developed, and the parents could give me no idea how the disease could have been caught. The drainage was excellent, the children were well fed, and the air good, being on the sea-coast. This child ran through the course of the disease in a mild form, and recovered. By very careful inquiry, I discovered that a relative of the parents had sat up all night in Sunderland a few days before this period, nursing a neighbour's child that had been ill and delirious, but, as they stated, merely with a very bad sore throat. Before leaving this case, I ought to state that I took every

precaution to prevent the spreading of the disease in the village. In spite of my efforts, some of the friends visited the house, and the fever appeared in two other houses in the place, in one of which three cases of scarlatina occurred, and in the other house one case. By impressing on these people the great importance of preventing any communication whatever with their friends, I was gratified to find that my instructions were fully carried out; and no other cases broke out except in the house where the first case was discovered. A brother of the child first affected was not at home when the fever appeared, and I ordered that he should be kept away for some time. After seven weeks, and when the child affected had become convalescent, the other child was brought home. I could not clearly ascertain if it had worn any of the clothing of the affected child; but, a few days after its return, it had a mild but distinctive attack of scarlet fever. I am happy to state that since that time, now several weeks ago, no fresh case of scarlatina has occurred in the village.

The following case will illustrate the direct contagion of small-pox, which is now occupying so much attention. It occurred at the same colliery village, and was brought from Hartlepool (a town distant about twenty miles) by a man in the desquamative stage, or, as they expressed it, "red raw", after the disease. He was invited to the house for change of air, and stayed about a week. Two days after he left, one of the children who had *never* been vaccinated, and whom the man had fondled a great deal and frequently had to play with him, took the confluent form of small-pox. The other children in the house had also not been vaccinated, but the Resident Surgeon and Public Vaccinator for the district at once had them vaccinated. They did not take the disease; and, by a proper surveillance of the house, and preventing any communication with it, no other cases have yet appeared.

CLINICAL ILLUSTRATIONS OF CUTANEOUS DISEASE.

By ERASMUS WILSON, F.R.S.,

Professor of Dermatology in the Royal College of Surgeons.

Melasma Frontis, with General Melasma in Patches, originating in Cachexia.—March 27th, 1871. A robust woman, aged 40, is troubled with a greyish-black stain which covers all that portion of the forehead which is exposed to the light. Her neck is also swarthy, and the integument of the whole body is darkened with pigmentary blotches of irregular figure and extent. This melasmic affection has been two years in progress, and is now somewhat less than it was some months back. Her health has been much shaken by numerous causes of exhaustion. Some years ago, she had a severe attack of rheumatic gout; this was followed by several miscarriages; and, immediately before the darkening of the skin was first observed, she suffered very considerably from abdominal spasm, accompanied with flatulence.

Perverted pigmentation of the skin in the form of melasma may always be traced to causes affecting innervation, assimilation, and sanguification. Such causes existed in the present instance; and the pigment-substance would seem to owe its origin to the destruction of the red corpuscles of the blood, for anæmia, in a greater or less degree, is always present with melasma; and in the present instance the sclerotic was anæmically pale.

Erythema Solare, affecting the Face and Hands on Exposure to the Rays of the Sun.—April 4th, 1871. Pellagra, the *mal del sole*, a disease of the South of Europe, has made us acquainted with an erythema due to a neuropathic condition of the skin; the disease subsequently invading the whole of the nervous system and brain, and ending in madness. Such a type of disease as this is necessarily recalled to the mind when anything of a similar nature, however remote, is brought under our notice; and it is as a far distant resemblance of the earliest stage of this affection that I now record the following case.

A healthy-looking young woman, aged 38, complains of the scorching effect of the sun upon her face and hands; and, to illustrate her complaint, she shows me the back of her hand, upon which she has allowed the light of an early April sun to impinge while awaiting her turn of consultation, about an hour. Sure enough, the hand presents a well marked erythema of a dull red or purplish-red colour—a slight degree, she observes, of the appearance produced during the warmer months of the year. The inference is evident. Her skin must be unusually and morbidly sensitive to be injured to such an extent by the actinic rays of the sun. She dates back this hypersensitiveness of the skin to a period of seven years; and since that time she has also noticed that her skin is unusually dry and lacking of perspiration.

Prurigo Mitis, from imperfect Assimilation.—March 11th, 1871. A