two colonies of *B. coli* on one of the slope agar tubes, no other organism was found.

Pericardium.—There were evidences of a slight plastic pericarditis, a few flakes of fibrin being adherent to the heart muscle. This condition was not diagnosed during life, and it was entirely owing to the restrictions placed on the necropsy by the parents that none of the fluid could be properly collected and examined. It is, however, quite permissible to reason that in all probability the condition was pneumatic in origin.

Heart.—The right cavity was in a state of slight dilatation, and otherwise the whole organ was perfectly healthy. The valves were absolutely sound, and there was no evidence whatever of any existent endocarditis; and it is, further, a significant fact that no infarcts of any kind were met with in any of the internal organs examined.

Elbow-joint.—No sign of inflammation, swelling, or other abnormality was visible. However, I aspirated the joint with a sterile needle, and withdrew a few drops of practically clear fluid containing a small number of floating flocculi. Coverslips made direct from the fluid presented a few capsulated Gram-staining hastate cocci, but cultures both in blood broth and on blood agar remained sterile. I have, however, no doubt in my mind that the organisms were no other than genuine pneumococci.

Middle Ear.—During the child's stay in the hospital no discharge or ear trouble ever manifested itself. At the necropsy, however, I introduced in the middle ear on each side a sterile pipette, but entirely failed to withdraw even one drop of fluid.

This is interesting, for on inquiry the mother stated that before the child's admission a discharge from its ears had been noticed for some time. This of course may or may not be true, but for the period during which the child was under treatment in the hospital no ear trouble was ever observed, though on several occasions it was searched for unsuccessfully.

In conclusion it may be interesting to trace out in tabular form the time and nature of the various sequential infections:

Bacteriological Report.			
Original pneumonia	...	March 7-12	...
Left elbow-joint	...	March 17-18	...
Emphysema	...	March 24	...
Blood examined	...	April 20	...
Cerebro-spinal fluid examined	...	April 24	...
Death	...	April 28	...
Necropsy	...	April 30	...
Lung squeezing	...	...	Diplococcus pneumoniae
Elbow-joint	...	...	...

I desire to express here my thanks to Dr. Ewart for permitting me to publish this case, and the obligation I owe to Dr. Vere Pearson, the Medical Registrar, who kindly placed his clinical notes at my disposal.

REFERENCE.

¹ St. Bartholomew's Hospital Reports, vol. xxxii, 1896.

CONCURRENT SCARLET FEVER AND MEASLES IN CHILDREN.

By ERNEST A. DENT, M.B., C.M.,
Cheltenham.

On February 8th I was sent for to see a child, E. B., aged 10 years. She was suffering from scarlet fever, and I sent her to the hospital for infectious diseases. She was away six weeks. The house, clothing, etc., were thoroughly disinfected by the sanitary authority. Six other children—A. B., a boy at work, aged 16; T. B., a girl, aged 13; C. B., a boy, aged 8; N. B., a girl, aged 7; M. B., a girl, aged 5; and G. B., a girl, aged 1½—remained away from school for fourteen days, according to the routine order of the sanitary authority, and then, being apparently perfectly well, returned to school until the Easter holidays.

M. B. (the youngest but one) became ill on April 1st. I was sent for on April 3rd, and I found her suffering from sore-throat, swollen glands, sickness, general *malaise*, and a slight rash, which commenced on the chest, and was, I thought, that of scarlet fever; the fact of the previous case in the house strengthened this view. I notified the case as a suspicious one, and asked Dr. Garrett, the medical officer of health, to see the child, and he kindly did so on the following day (4th). The rash had disappeared, and he considered the signs then evident hardly sufficient to justify removal of the patient to the hospital, and we agreed that it would be well to keep her at home under observation. On April 6th, when I visited the house, the child was covered with a very distinct and profuse eruption which was unmistakably that of measles; there were also other symptoms of that affection.

I was asked to see her brother C. B., aged 8. This boy had an indefinite rash which was not typical of either scarlet fever

or measles; there was no evidence of sore throat nor of swollen glands, and except for headache at times, he appeared to be pretty well. In five days desquamation had set in, and large scales of epidermis were peeling chiefly from his neck and chest; the appearance was quite unlike the fine branny desquamation which follows the disappearance of the rash in measles, and which is usually most in evidence on the body and lower extremities. The boy felt well and wanted to go out. I was of opinion that this was a case of scarlet fever, and communicated with Dr. Garrett, who again visited the house. We considered it right to send both children to the hospital.

Two of the other children T. B. and N. B., were apparently sickening for something. The house was again disinfected. Four days later T. B., N. B., and the baby were in bed with measles. They all recovered without any further development. A. B., the eldest, was the only member of the family mentioned who was not affected by illness.

Two days after admission to hospital a blotchy, measles-like eruption came out in the face of the boy; there was marked coryza, and desquamation continued for several weeks. He remained in hospital until June 3rd.

The girl had a good deal of desquamation of the neck and face, which continued for a long time; also, there was a persistent rhinorrhoea. On account of these indications she was detained in hospital an unusually long period, and did not leave until July 5th.

The cases mentioned illustrate some of the difficulties met with in making a precise diagnosis in non-typical cases of the eruptive fevers. The boy was without definite signs until desquamation occurred, which itself was more like that of scarlet fever than anything else. In certain indefinite cases, unless they are watched from the outset, and every sign, including even a slight and transient rash, noted it is likely that the presence of scarlet fever may be overlooked. I was fortunate enough to see M. B. while the rash (although indistinct) was present, and this, together with the other symptoms, led me to the belief that the case was one of scarlet fever. The rash, as not infrequently happens in this complaint, quickly disappeared.

These two cases are interesting, also, as affording examples in which the poisons of both scarlet fever and measles were present at the same time, and in which these poisons in combination modified the symptoms of both diseases.

I understand that during an epidemic of measles in Cheltenham, which has now subsided, other cases were admitted to the hospital for infectious diseases as typical of scarlet fever, and in less than a week after admission a distinct rash of measles developed in them, followed by a modification of symptoms similar to that in the cases now cited.

If one disease is coexistent with another (for instance, scarlet fever with measles, or scarlet fever with influenza), it is probable that the general character of the symptoms is so altered that the case is non-typical of either disease, and a definite diagnosis of it may not be possible. So misleading, indeed, may the condition be (especially if not under close observation from the commencement of the illness), as to suggest to the observer that some new disease is present.

A good deal has been written about the "fourth disease," which, as described, appears to have for its symptoms those which bear resemblance to both German measles and mild scarlet fever, and yet to be somewhat unlike either. It is conceivable that such symptoms might be caused by the poisons of both these affections acting together.

DENGUE FEVER IN PENANG.

By F. M. T. SKAE, M.D.,
Penang.

IN THE BRITISH MEDICAL JOURNAL of July 12th, 1902, Dr. F. O. Stedman¹ gives an account of an epidemic of dengue fever in Hong Kong during the last three months of 1901, and Dr. Nightingale² reports its arrival in Bangkok in the beginning of December of the same year. The disease reached Penang from Singapore in the end of November or beginning of December, 1901 (my first case was on December 5th), was