death unless one knew the clinical history. The heart is generally dilated moderately as to its right side, but this dilatation is seldom enough to attract a great deal of attention in itself. The lungs may exhibit basal areas of broncho-pneumonia or superficial areas of collapse over the backs of the lower lobes, as described above, or there may be a little dry pleurisy, but in the majority of cases there is no pleurisy, no broncho-pneumonia, no collapse, and at first sight the lungs look perfectly normal. On incising and squeezing a piece of lung, however, the thick yellow pus, sometimes altered to a dirty grey colour as the result of the post-mortem changes, can be seen bubbling out of nearly all the bronchioles. All the other organs look natural.

Microscopical examination of a section of affected lung shows blockage of the bronchioles with debris, pus cells, and desquamated epithelial cells; the submucous coat may be laid bare, as though the bronchiole lining had been ulcerated away; the walls of the bronchiole are infiltrated with small round cells, and this small round-celled infiltration extends a small distance beyond the bronchiole itself into the adjacent lung tissue, forming an irregular ring of small round-celled infiltration more or less uniformly all round the bronchiole, without affecting the alveoli in the form of definite broncho-pneumonia. Of course, if sections are cut from areas where there is basal broncho-pneumonia that has developed in a late stage, the microscopical appearances of definite broncho-pneumonia will be found, but a case may die without any such broncho-pneumonia being present at all, and then the feature in the section which attracts attention is the filling of the bronchi with cells, and the ring of small round-celled infiltration all round the bronchiole in a way that is illustrated by a drawing from a section.

Cyanosis and Respiratory Distress.

One of the most striking features of these cases is the great respiratory distress and the peculiar heliotrope cyanosis of the face in the fatal cases. Even when lying in bed quietly the respiration may be as rapid as that of a lobar pneumonia case; whilst any very slight exertion—such as turning over on to the side—may cause the respiration-rate to rise to 50 per minute, or even more. Seeing that there may be little, if any, consolidation of the lung tissue, it would appear that some other factor than diminished serviceable lung tissue is at work to cause this dyspnœa, and one conjectures that this other factor is the effect of toxic substances upon the respiratory centre. It was partly on this account that special bacteriological researches were carried out in a small series of consecutive cases, and the striking result of these investigations is to show that the malady is due to a double infection with the influenza bacillus coupled with the pneumococcus. A summary of the actual findings is given; the general conclusion which they afford is that, whether the cultures were made from the sputum itself or from material obtained by lung puncture, or from the blood or organs post mortem, these two organisms were constantly found, and the conjecture is that the disease starts as an influenzal infection, terminating in the fatal cases as a pneumococcal septicæmia.

The temperature charts show great variability in the duration of pyrexia, but in all cases the temperature tends to fall by lysis, and though it is not, as a rule, at any stage very high, in the severer cases it inclines to persist for a very long time.

The total number of cases that have come under observation amounts to scores, but owing to the fact that the earlier examples of the malady were often classified as broncho-pneumonia, or pneumonia, and not as purulent bronchitis, it is difficult to give exact figures as to the incidence or the mortality rate. Speaking from impressions and not from actual figures, one would estimate the mortality at something like 50 per cent. There is no particular age incidence, and whilst the majority of patients were of inferior physique and many had been sufferers in the past from chronic chest troubles, the disease also occurred in men who had enjoyed robust health in their previous occupations and had never suffered from any lung disease, a circumstance sometimes strikingly borne out in post-mortem examination.

HELMETS FOR NURSES.

Any idea that the shelling and bombing of our hospitals behind the lines on the Western front was due to accident has now been abandoned by the authorities. The enemy defended the sinking of hospital ships by allegations that we were making use of these vessels to carry officers and high dignitaries across the Channel. But it is impossible to understand the process of reasoning by which Germany justifies this latest example of "frightfulness." We are glad to hear that at many of the clearing stations and field hospitals steel trench helmets are now being served out to the nurses. If the bombing and shelling of hospitals continues it may be necessary for the nurses to abandon their tents or billets and live in dug-outs constructed for them close to the hospitals.