ing normal after the pneumonia, but did not show any increase over that seen during the pneumonia. The same rapidity was noted in delayed resolution and was rather more constant, as in only 5 cases was the rate below twenty-four and in 14 it was over thirty. In one instance the increased rate persisted after the lung had cleared entirely.

Leucocytes.—An increase was practically constant in empyema, as in only one patient did they fail to reach 15,000 per cmm. This was in a patient dying on the ninth day of the pneumonia with a very severe infection. The largest number showed a count between 20,000 and 30,000; the highest count was 63,000. In delayed resolution the variations were more marked. In 7 cases the leucocytes were not over 9,000 and in 3 others not over 12,000. The largest number had counts between 12,000 and 25.000; the highest count was 50,000. It was not possible to associate the number of leucocytes with the course of resolution, the persistence of signs, or the degree of fever. Some patients showed great variations from day to day. Thus in one case, they were about 25,000 during the pneumonia and fell to 12,000 by the twentieth day; the lung cleared from the twentieth to the thirtieth day but on the twenty-seventh day the leucocytes were 27,000.

The results of this series show that leucocytosis is more constant in empyema than in delayed resolution, so that with the diagnosis between the two, the absence of leucocytosis would speak against empyema.

Sputum.—Except in the instances in which an empyema ruptured into a bronchus, the sputum showed no special features. In delayed resolution it varied greatly but as a rule was muco-purulent and tenacious. The tenacious character may persist for some time. Prune juice sputum, very foul sputum, bloody sputum, abundant frothy sputum, were all observed. One point of interest in delayed resolution is the occurrence in the sputum of casts of the bronchi, as was seen in 3 cases. In one patient a large fibrinous cast of the bronchi was brought up in the fourth week, a very unusual happening.

Physical signs.—It is to the study of these that special interest belongs, but as will be found the results are not such as to encourage the belief that typical findings are to be expected in either condition. In discussing the signs in empyema, it has to be remembered that those in empyema complicating lobar pneumonia may be very different from those in a primary empyema. The extent of consolidation, amount of lung involved, and the rapidity of resolution may all influence the signs. In delayed resolution the presence of exudation in the pleural cavity may have a marked modifying effect on the signs.

Inspection.—This does not seem of special importance as the appear-