

though seldom the earliest, is fine crepitation heard only during inspiration. Occasionally this sign lasts the full course of the disease. As soon as the second stage begins there is dulness on percussion, with bronchial breathing and bronchophony, and also increased vocal fremitus. In the fourth stage, that of resolution, returning crepitant r  le is heard. The author is inclined to think that the locality of the affection, whether in the upper or lower lobe, does not influence the production of cough or affect its character. In old people cough may be absent. The expectoration is peculiarly tenacious and variously colored. The characteristic prune-juice color is sometimes absent, and is replaced by a red, black or green color; or the expectoration may be colorless. The characteristic sputum of pneumonia has three qualities—color, consistence, and coalescence. It may appear on the first day, or not until the third or fourth. It is not always present, and may occur occasionally when no pneumonia exists, as in nasal or pharyngeal catarrh with hemorrhage, or in acute laryngitis. Diarrh  a is often present, and so are nausea and vomiting. The urine is often scanty. Albuminuria is common, and is usually most marked at the height of the disease. There was kidney trouble in 41 per cent. of his cases; in 5 per cent. of these chronic kidney trouble of long standing existed; in only 8 per cent. was it shown by clinical and post-mortem evidence that there was no urinary implication. The greatest danger occurs in an exacerbation of an old kidney affection. Little has been added to our knowledge of the clinical aspects of pneumonia since the studies of Laennec. In the stage of engorgement we may expect to find dulness, but we do not. Grisolle found in this stage loss of elasticity in the chest walls, especially when percussed in the supra- and infra-spinous foss  e. The crepitant r  le was regarded by Laennec as the first pathognomonic sign. It is produced by fluid matter passing into the vesicles of the lung. In some seasons it is rarely heard; in old people it may be replaced by a coarse crepitant r  le. Fine crepitation may be heard in other types of pneumonia, in pulmonary phthisis and syphilis, and even in bronchitis. Prolonged expiration precedes tubular or bronchial breathing. Broncho-