

gree, auscultation. Inspection and palpation seldom afford trustworthy signs of *incipient* tuberculosis. When there is unequal expansion of the apical or infraclavicular areas with increase of fremitus in the area of deficient expansion, it is no longer proper to speak of incipient tuberculosis. The disease is already well advanced in what is commonly called the first stage, and the individual tubercles have coalesced to form more or less consolidation of that portion of the lung. An almost identical statement applies to percussion. To produce even a slight quantitative or qualitative alteration of the percussion note, there must be consolidation, i. e., coalescence of many minute tuberculous foci. There can be no doubt, however, that in experienced hands percussion affords, if not the earliest, at least fairly early evidence of tuberculous infiltration. Much depends on the patient; in thin subjects, young or old, differences are more easily detected than in those who are fat or have well-developed muscles. Particular attention should be paid in percussion to certain regions of the thorax, which overlie those parts of the pulmonary structure most frequently and earliest affected with tubercle. These are the clavicular and subclavicular spaces, (not the extreme apex of the lung), the upper anterior border of the upper lobe, the lingula of the left upper lobe overlying the heart, the supraspinous space behind, the upper interscapular areas (overlying the apex of the lower lobes), and lastly the upper border of the lower lobe behind (corresponding on the surface with the vertebral border of the scapula when the hand is placed on the opposite shoulder with the arm at right-angles to the body). I need hardly mention that corresponding areas should be percussed symmetrically and successively.

It is from auscultation that we obtain the earliest signs of pulmonary tuberculosis in physical examination. Three varieties of alteration of the normal breath sounds have been considered to point with more or less certainty to early tuberculous infiltration; roughness of inspiration with prolonged expiration, enfeeblement of the vesicular murmur, and interrupted, jerky, or as it is sometimes called, cog-wheel respiration. The first two signs are the most reliable. The roughening of inspiration is accompanied by a lowering of the tone, so that inspiration has the same quality as expiration. On the other hand, the expiratory breath-sound, in addition to being prolonged, may be raised in tone up to or above the inspiratory breath-sound. The explanation usually allowed for these changes is that the infiltration of tuberculous material occurs earliest at the point where the terminal bronchiole breaks up into the infundibular and acinous structure of the lung, producing a diminution in the lumen of this portion of the bronchial tree which interferes with normal in- and ex-piration. This explanation seems hardly reasonable when one considers that there is no movement of air beyond the