

the lungs, which I have set forth in this paper ; and no theory would better explain the exceptions that occur. The tidal air becomes the vehicle of the virus ; and as the forces exercised upon the ebb and flow of this air vary in different parts of the chest, so will these forces vary in different parts of the lungs.

The two great forces of respiration are the mobility of the thoracic cavity and the elasticity of the lungs. The thorax, as we know, is so constructed as to become a potent factor in respiration ; the length, obliquity and mobility of the ribs increasing from the first to the seventh ; the more or less fixity of the first and second ribs, both by their anatomical formation and the action of the scaleni muscles ; the articulation of the ribs to the vertebræ and indirect attachment to the sternum by means of elastic bands, the costal cartilages ; together with the contraction of the diaphragm drawing with it the rapidly distending bases, tend to show in inspiration the increasing movement of the thoracic wall from above downwards, and consequently the proportionately greater force with which the inspired air enters the bases as compared to the apices. In expiration we have the elastic recoil of the lungs, strongest in those parts which have been the most expanded ; the recoil of the elastic cartilages and sternum returning to their original position, with the driving upwards of the thoracic floor by the retraction of the abdominal walls, previously distended ; these in turn tend to show the greater force with which the air is expelled from the bases as compared to the apices. If we go a step further we can apply the same rule to a subdivision of the apex or of the base, whereby we are able to conclude that some part or parts of the apex, or of the base, are more or less influenced by the respiratory forces according to position ; so that we are able to assume that the lessened movement of the apex is not uniform through the whole apex.

I think it probable that the bacillus, which is of slow growth, finds its way into that portion of the apex which is the least disturbed by the air currents ; there, if the soil be favorable, in one or more bronchioles develops the primary lesion. I believe this focus to be within one inch to one inch and a half from the