

and extensive hypertrophy of the heart. Neither, in my opinion, does the fullness of the epigastrium; as the enlargement and downward displacement of the heart consequent upon its own increased weight, and the additional weight of a tumor near its base, and perhaps partially consequent upon the state of the right lung, will as properly account for it as would the presence of fluid in the pericardium.

I regard the hypertrophy as chiefly affecting the left ventricle: firstly, because the dullness extended so much downwards and to the left; and secondly, because a condition favorable to the production of that state of the left ventricle existed either at the aortic orifice, or the arch, or at both. Dilatation was inferred to exist with the hypertrophy on account of the loudness of the cardiac sounds, their wide transmission over the chest, the large surface over which pulsation was perceptible, the fair volume of the arterial pulse, and the moderate force of the heart's impulse. The right ventricle, I concluded, participated in the condition of the left, both because of the marked epigastric pulsation, and the existence of some degree of obstruction to the pulmonary circulation resulting from the hypertrophied, if not the emphysematous, state of the right lung and the compression of the left, to which your attention will be again directed.

The next clause in the diagnosis requiring comment is "tumor most likely aneurismal, involving transverse portion of aortic arch to left of *arteria innomina*." You will remember that the left side of the chest on the level of the nipple measured an inch and three quarters less than the right, that there was flattening of the left infra-scapular region, and that the expansion movement was diminished on the same side—that yet there was no dullness on percussion over the lungs except that in the cardiac region, and that while the character of the respiratory sounds was very much alike on both sides, their intensity was much less on the left—that there was no past history of pleuritic effusion to explain this condition of the chest—that there was a somewhat muffled voice, a laryngeal paroxysmal cough without expectoration, and a sensation of obstruction referred by the patient to the upper part of the trachea—that the pulsation in the left carotid, sub-clavian and radial arteries was very much weaker and less visible than in the right—that the right external jugular and thoracic veins were more distended than the left and that the vocal resonance was greatest over the root of the left lung and the left infra-scapular region, than over the corresponding points of the other side. This combination of conditions seems plainly to establish the existence of a tumor of some kind, so situated about the arch of the aorta as to compress the left bronchus as it passes under that arch, and to involve the left recurrent nerve, which hooks round that arch, and to