

the lungs were observed to occupy their normal position. On opening the pericardium, 1 to 1½ oz. of serous fluid were observed, which I regard as a lethal phenomenon. The right ventricle was absolutely anterior; this we found was occasioned by the great weight of the left ventricle, which was contracted into a hard ball. Near the apex of the left ventricle, was a patch of false membrane the size of a half-penny firmly adherent, with several firm threads with broad bases dependent from it, which had been evidently attached to the pericardium, and separated inattentively when lifting out the heart. The heart and great vessels were now removed. The appearance of the size of the heart, as thus contracted, was apparently that of an ordinary heart. A gentleman present, who has weighed a good many hearts, declared it would not weigh more than eight ounces. On passing the finger through the aorta into the cavity of the left ventricle, it was found that it was contracted to the size of a very small walnut, and that the walls were very thick. The heart was washed, and its weight proved to be 16¼ ounces avoirdupoise. It was now put into salt and water to macerate till the following Wednesday, 2nd April, when it was examined during the clinical lecture. The valves and cavities of the right side were found in a normal condition. The patch of false membrane had not become detachable by the maceration. The aortic valves were sound. On the anterior lamina of the mitral valve was found a thickening near the edge, which however did not interfere in the least with its action. The cavity of the left ventricle had now expanded to its vital extension, and was found to be of normal size—the hypertrophy was lateral. The columnæ carneæ were

much enlarged; the average thickness of the parietes was an inch; that of the septum more; but at the apex the thickness was normal.

The following extracts will shew the physical signs laid down by some of the best authorities, as those of simple hypertrophy and hypertrophy with dilatation, none of which were present in this case with the exception of the powerful impulse:—"The impulse is ordinarily sufficiently strong to heave the head of the observer in a very sensible manner, and sometimes it is so strong as to produce a shock disagreeable to the ear. The greater the hypertrophy the more time that heaving takes for its performance, and when the disease is carried to a high degree, we evidently perceive that it takes place by a gradual progression; it seems as if the heart swelled and applied itself to the walls of the chest at first by a single point, and in the next place suddenly sank back."—*Laennec*. "The first sound, i.e. that attending the ventricular systole, is duller and more prolonged than natural, in proportion as the hypertrophy is more considerable; and when this exists in an extreme degree, the sound becomes nearly extinct, but never, according to my observations wholly so, as stated by *Laennec*." "The power of the impulse is increased in the direct ratio of the hypertrophy; and the movement is a progressive heaving, because the hypertrophous ventricle, from being thick and unwieldy, contracts slowly and with a gradual progression. For the same reason the first sound is diminished, is dull and stifled; because as the closure of the auricular valves is sluggish, it is attended with a less jerk of extension, both of the valves and cordæ tendineæ, and of the ventricular walls." "Thus in simple hypertrophy it (the pulse) is stronger,