spleen, and in each instance a streptococcus growing in short chains was isolated. The individual organisms commonly arranged themselves in pairs.

Heart.—Sections were made from the various parts of the heart muscle. It was found that irregularly distributed through the musculature and more particularly through the walls of the left ventricle there were aggregations of inflammatory exudate consisting of polynuclear leucocytes, lymphocytes, and plasma cells. These inflammatory infiltrations were most evident in the regions of the small nutrient vessels of the heart muscle. In the vicinity of these reactions the heart muscle showed evidence of degeneration, and at times considerable areas of heart muscle consisted of indefinite wavy fibrils which had lost their staining qualities. In places these areas of degeneration showed some replacement by connective tissues. Fragmentation of the nuclei of the muscle cells was commonly observed in the areas where degeneration was progressing. In the vicinity of the areas of degeneration the muscle nuclei yet remaining appeared much larger than elsewhere.

Aorta.—Sections of the ascending branch of the aorta taken a short distance from the aneurysm showed a healthy character to the intima as well as in the media (Plate XXIV. Fig. 2). There was, however, observed in the tissues of the media an occasional inflammatory infiltration around the vasa vasorum of the outer third of the vessel. This exudate consisted mainly of lymphocytes. In the vicinity of this infiltration some disturbance of the muscular and elastic tissue elements of the media was observed. The adventitia of the ascending limb of the aorta showed quite an extensive inflammatory infiltration around the vasa vasorum of all sizes. In some places this infiltration was composed for the most part of leucocytes, in other places lymphocytes and plasma cells were predominant. Although the infiltrations were quite extensive, no destruction of tissue was observed in the adventitia. There was no evidence of anything simulating abscess formation. In some of the small vessels of the adventitia proliferative changes could be seen in the intima. Occasionally a few fibrin threads were present in the vicinity of the inflammatory reactions.

Sections obtained in closer proximity to the aneurysm of the aorta showed characters similar to the above, but of greater intensity. The infiltration about the vasa vasorum in the adventitia was more marked, and the inflammatory reaction extended more deeply into the aortic wall along the paths of the nutrient vessels. A greater number of leucocytes were present in the exudate in the media, and about these reactions the vessel suffered severely. The muscular elements were destroyed and their place was taken by a granular débris. The elastic tissue elements were swollen and distorted, so that they no longer retained their parallel arrangement. The inflammatory exudate led to the production of wide spaces between the altered elastic fibres. The greater amount of change was in the outer third of the aorta, but inflammatory products were also present in the inner part of the walls. Close to the aneurysm the entire wall of the aorta was seen to be infiltrated with polynuclear leucocytes. The leucocytes followed the spaces between the elastic laminæ and gradually displaced the muscle elements. In places the elastic fibres were also destroyed so that only fragments of them remained. At the mouth of the aneurysm it was seen that the intima and the greater part of the media had been destroyed and these coats came to a sudden end. The outer portion of the media was everted and dragged along with the adventitia, which formed the saccular pocket of the aneurysm. The wall of the aneurysm was formed by the adventitia with a narrow margin of the media, and was reinforced on the outside by the adherent portion of the pericardium. The sac of the aneurysm contained an adherent fibrinous clot in which numerous leucocytes were found. The greater number of leucocytes were found upon the surface of the adherent blood masses within the aneurysm.

Here and there along the wall there was some attempt at organisation of