It was then that Rudolf Virchow, another pupil of Müller, conceived the happy idea of transferring the cellular theory from the healthy to the diseased organism; he sought in the more minute metamorphoses of the diseased cells and the tissues they composed the true source of those larger changes which, in the form of disease, threaten the living organism with peril and death. Especially during the seven years of his professorship at Würzburg (1849–56) Virchow pursued his great task with such brilliant results that his *Cellular Pathology* (published in 1858) turned, at one stroke, the whole of pathology and the dependent science of practical medicine into new and eminently fruitful paths. This reform of medicine is significant for our present purpose in that it led us to a monistic and purely scientific conception of disease. In sickness, no less than in health, man is subject to the same eternal "iron laws" of physics and chemistry as all the rest of the organic world.

Among the numerous classes of animals which modern zoology distinguishes the mammals occupy a pre-eminent position, not only on morphological grounds, but also for physiological reasons. As man belongs to the class of mammals (see p. 27) by every portion of his frame, we must expect him to share his characteristic functions with the rest of the mammals. Such we find to be the case. The circulation of the blood and respiration are accomplished in man under precisely the same laws and in the same manner as in all the other mammals—*and in these alone*; they are determined by the peculiar structure of their heart and lungs. In mammals only is all the arterial blood conducted from the left ventricle of the heart to the body by one, the *left*, branch of the aorta, while in birds it