

of double mortality are the same for different districts in the Duchy of Baden. Now this must mean that a larger proportion of the bovine race dies from phthisis than of the human race, because of the difference in the length of life between the races. We have no statistics of this kind in the United States, but Professor R. A. McLean, the authority before referred to, tells me that where cows are affected by tuberculosis in great numbers, the death-rate from phthisis is correspondingly large in the human race in the same districts; this is his observation from his large experience among diseased cattle.

"Now let us see what the conditions of the two races are, how they differ, and how this difference modifies the disease under consideration. Without going into detail in comparing the two races, you will find, after due comparison, the most marked difference to be that of the normal temperature. . . . We find in published tables the following figures: Cows and oxen during confinement, 100.8° F.; during work and liberty, 101.8° ; calves and stirks during confinement, 100.9° ; during work and liberty, 101.8° ; sheep during confinement, 102.5° ; at liberty, 104.5° ; lambs at liberty, 104.9° ; pigs in confinement, 101.6° ; at liberty, 103.2° ; dogs in confinement, 99.3° ; at liberty, 101.9° ; and horses in confinement, 99.2° ; at work and liberty, 100.3° ; rabbits, 103° ; guinea-pigs, 102° ; the common fowl, 106.7° . Now, if you compare this table with all the recent inoculation experiments on bovine tuberculosis, you will find that the success of such experiments is in direct ratio with the temperatures—that is, commencing with the lower temperature, that of the dog, we find the resistance lessening as we go up the scale till we come to the common fowl, with the highest temperature, where there is no resistance whatever. Feeding with tubercular matter is always positive with this bird.

"We can now see why the human race is not more extensively affected with tuberculosis, which, in my candid opinion, is all derived from the bovine race. A germ cultivated in the cow is a tropical growth, because her average temperature is