

rather becomes unfit for nutrition, and disease follows:—paleness, feebleness, loss of flesh and strength, in short, an anæmious state. This condition the late Dr. Prout seemed disposed to attribute to the deficiency of saline ingredient, which he believed were requisite to the normal healthy constitution of the blood; and, in consequence of which being deficient, those actions and processes, probably electric, or electro-magnetic, for the requisite applications of the nutritious parts, did not take place. All this must of necessity be matter of conjecture, and, though it is not desirable to admit unknown causes of morbid conditions without sufficient proof, yet various facts seem to show, that of this there is as much probability as of many other morbid states.

One observation more only on this subject we make. There is too great a disposition in all instances to consider disease as a positive state:—as something having an active existence. To do so is quite natural; for it would be difficult to speak or to reason about it without doing so. At the same time it ought never to be forgotten, that disease is, correctly speaking, a negative condition. The positive condition is health; the absence of this condition, the negative of it, is disease. So with regard to morbid states of the blood, and especially that called *tuberculosis*, they are merely the absence of the healthy state of this fluid, whether this consist in the presence of morbid matters that ought to be rejected, or in the absence of healthy elements, the presence of which is requisite. The blood ceases, from various causes, to possess those principles and properties which fit it to act as a nutritious fluid. It accordingly does not nourish, and the organs and body at large are wasted, from not being supplied with materials to repair waste. It is true that the blood, besides losing certain principles and properties, possesses others which are not natural—which are in short morbid. But it is to be remembered again, that these morbid principles are not really new principles, but degraded forms of original principles. Even the analytical researches quoted by Mr. Ansell show how slight is the change, how small and insignificant, apparently, is the deviation, in the most intense instances of tuberculosis. No element or principle is absolutely wanting. One is a little in excess, another is a little in deficiency; and these are all the tangible points on which the pathological inquirer can fix. Perversion, even in the proper sense of the term, it is impossible to detect. The blood is in some manner without those principles and qualities which enable it to be employed as a nutritious fluid; and this seems to be all that can be said, after much microscopical examination, and not a few chemical experiments.

[Mr. Ansell considers the following inferences are established from his investigations into the state of the blood in tuberculosis.]

“The debility of the tuberculosis indicates a direct loss of power, and the whole of the phenomena of the predisposition and the symptoms of the disease shew—

“1. That from the earliest invasion, the sum of the vital force is either below the standard of health, or it is relatively low as respects the structure and organization of the individual.

“2. That this diminution in the sum of the vital force depends especially upon diminished vitality of the blood, and of the cellular, gelatinous, and muscular tissues produced and nourished from an imperfect blastema derived from the diseased blood.

“3. That as tuberculosis advances, the sum of the vital force for the whole system continues to diminish, this loss of vital force being exhibited not only in the defective manifestation of voluntary and involuntary muscular power, but in cellular and muscular tissues to the change of matter in the animal body; hence, in tuberculous subjects, the rapid diminution of the red corpuscles of the blood, the deterioration of the vital qualities of the *liquor sanguinis*, and of the blastema, the diminished plastic power of the cells, the low calorific power, and the emaciation.

“4. That frequently, but by no means universally, the nutritive powers of the blood, as respects the nervous tissues, remain undiminished, this tissue not requiring for its nutrition compound principles identical with it to