

the difficulty of nomenclature is anyhow too great to lightly reject so expressive a word, which, as bacteriologists and morphologists admit, does certainly most vividly express the primordial condition of which this is the physiological analogue. In its last analysis, after all, it is the molecular disturbance or change produced in the germ that deprives it of its toxic power. This we know will effect even chemical action. Upon these fermentative processes depend. Isomerism is another example of the effect of molecular arrangement or disarrangement. Where can you find two substances more distinctly different than sugar and gum arabic? And yet they are exactly the same in composition and in the proportion of elementary combination, the difference in arrangement of the molecules being sufficient to account for the difference in chemical and physical properties. With these examples before us—and I could, if time permitted, bring out many others equally as striking—it is very easy to see how the slightest disturbance of molecular arrangement in any germ will deprive it of its specific character, and by investing it with certain cellular elements, emasculate the most deadly of toxic bacilli and send them harmless through the blood currents of the organism. Having, therefore, found that it is within the leucocyte that all protozoic material is developed, that upon the proliferation of the leucocyte all assimilation depends, it is but a step further to establish the action of the leucocyte in resisting the effect of toxic germs, as well as divesting them directly of toxic power. It would perhaps be more accurate to define this action by the statement that they are capable in themselves of overcoming the pathological influences which are being continually introduced into that organism. To those whose daily experience brings them face to face with the awful side of human life, I think I can appeal with emphasis, when I state that there is scarcely a breath we breathe, or a drop we drink, or a morsel we eat, that is not charged with the germs of deadly disease, and if there were not in our organism a distinct provision made for the resistance of such germs, to use a Pauline expression, we should "die daily." When the tocsin of disease is sounded through the organism, it is the rushing of the leucocytes that constitutes the first physiological response—to directly resist a toxic agent, or supply the structure attacked with material for nutrition or repair in case of lesion. And yet there are still those among the ranks of intelligent practitioners who consider the increase of leucocytes as an element or phase of disease itself, instead of nature's effort to support her crumbling battlements. At this stage of my argument, I shall, upon the strength of what may be microscopically demonstrated to be the function of the nuclein-charged leucocyte,