

new product, but owing to the fact that the dosage was too great, and that the effects could not be determined with sufficient accuracy, this also led to disappointing results. In 1902 a fresh impetus was given to the use of vaccines in the treatment of disease by Wright. He showed that the blood of patients suffering from acne, sycosis and furunculosis is characterized by a defective phagocytic power for the *staphylococcus pyogenes*. He also shewed that the cure of these bacterial infections can in almost every case be achieved by the inoculation of appropriate quantities of sterilized *staphylococcus* cultures, and further that the cure is associated with the acquirement of an increased phagocytic power for the *staphylococcus pyogenes*. It was also shown that human serum exerts no bactericidal action on the *staphylococcus pyogenes*. It was, however, still a matter of uncertainty whether the blood fluids performed any active part in phagocytosis. Following on this, Wright and Douglas showed that phagocytes had no power of ingesting *staphylococci* except when serum or plasma was present; and, further, that the power exerted by the blood fluid was not a stimulation of the phagocytes, but a modification in some way of the micro-organisms, which made them a fit prey for the phagocytes. To the substance which brings about this modification they gave the name, "Opsonin." In 1904, the same investigators showed that the opsonic action of the blood is exerted not exclusively upon the *staphylococcus pyogenes*, but also upon the bacterium *pestis*, the *micrococcus melitensis*, the *diplococcus pneumoniae* of Fraenkel, the *Bac. Coli*, the *Bac. dysenteriae* of Shiga, the *Bac. anthracis*, the *Bacillus typhosus*, and the *Vibrio Cholerae Asiaticae*. And, further, they showed that the increased phagocytic power which accompanies successful immunisation against the *staphylococcus pyogenes* is dependent upon an elaboration of opsonins in the system of the inoculated patient. In a second paper, published in the same year, the increase of the opsonic power is again clearly shown to follow the injection of an appropriate vaccine in cases of infection with the tubercle bacillus or *staphylococcus pyogenes*. It was also shown that an increase in opsonic index was associated with clinical improvement, and conversely a fall in the opsonic index was associated with an exacerbation of the infection. From this time, therefore, the opsonic index has been used as a guide to the in-