found no positive signs of peritonitis, but gave it as my opinion that the woman had something in the pelvic cavity of a septic nature, and that unless this septic material was found and removed she would not live. I put the patient on a table, and examined her uterus, when, to my surprise, I found it measured eight or nine inches. I said if this uterus is not large enough to hold sepsis I do not know what is. I did not operate, but washed out the uterus and left one of my assistants with instructions to continue the washing every hour. I removed considerable material from the cavity of the organ. Shortly afterwards the patient had a violent chill with a rise of temperature to 105° F., but that did not discourage me in the least. For six hours the uterus was washed out with a 1-100 carbolic acid solution and at the end of that time the temperature had fallen to the normal and the woman got well.

I believe now, and I say it with perfect sincerity, that nine cases out of ten cases of puerperal fever that I am called upon to treat in from twelve to twenty-four hours after the onset of the attack I will cure by simply regulating the bowels and washing out the uterus systematically and thoroughly, as I have pointed out to you. Within this period of time the septic material is confined to the uterus, vagina or cervix in a place easy to attack it and has not yet entered the connective tissue, veins or lymphatics. If I am called to wash out the uterus in a case of puerperal fever, and within six hours or so the temperature does not fall to normal, I then make up my mind that the poison has entered the connective tissue, veins or lymphatics, and in that event I open the abdomen and generally find an abscess present. I have done this in a case of well marked phlebitis or milk leg with success, which some of the most eminent men in town pronounced absolutely hopeless. I believe now that there are a great many cases of milk leg where suppuration takes place that ought to be operated upon, and yet I do not open the belly every time as some suppose.—W. Gill Wylie, M.D., in *Inter. Jour. of Surg.*

THE METSCHNIKOVIAN THEORY OF VITAL RESISTANCE.

There is a large and marvellously interesting class of phenomena associated with the history and sequelæ of certain of the acute zymotic diseases characterized as immunity, which has long been recognized as the posssible source of a potent ally to preventative medicine providing that its subtle nature and mechanism should ever become understood sufficiently to render it susceptible of imitation and employment for the arrest and anticipation of infectious disease. The advent of vaccination as a prophylactic in smallpox was the first actual realization of what lay concealed in this direction, and its discovery gave a new importance and significance to what had hitherto been mere conjecture and speculation. Notwithstanding this fact, however, and that this great adjuvant has been usefully employed for a number of years, its underlying and mysterious principles have remained quite isolated and signally barren of generalized results applicable to other disorders of analogous characters. These failures to discover and apply the *mode* of vaccination have not, however, deterred the ambitious, nor caused the speculative mind to entirely relinquish the hope of its ultimate success; but, on the contrary, the spirit of inquiry and experiment has been more of less active all along, and is just now more vigorous than ever before. That the subtle and obscure conditions associated with and constituting the cause of immunity or vital resistance will finally be detected and opened up as a generalized auxiliary to medical art, is the ambition of many and the hope of all.

In an article with the dimensions of the present one, it is quite impossible to enumerate and discuss the several and various kinds of immunity known to exist both as natural and acquired conditions of certain organisms in relation to certain diseases, and we shall have to limit the observations to that of the acquired form alone, which experiences show to be the result of two classes of agencies or influences; namely, immunity from a natural and immunity from an artificial attack of disease. It may be stated that it is now very generally believed that the agencies of immunity, the *vis medicatrix naturæ*, and the factors of vital resistance are one and the same, and that the special functional activities of the body-cells are the chief or sole agents in the arrest, cure, and prevention of germ disease. It is from this conception and rôle of the cells that this paper is undertaken, and its purpose will be to search out and ascertain the nature and influence of these agents and agencies, and, in so far as is possible, to assign to each its separate value and importance in the origin, manifestation, and sequelæ of infectious disease. In all sciences where the processes are imperfectly observed the theory of the process (which is a systematic survey of all the facts of the case marshalled in the order of their casual dependence) is supplemented by an hypothesis which bridges over with a guess the gap left by observation. Immunity, like a number of kindred occult subjects, has had a vast number of hypotheses and speculations to explain it, though none of these have as yet evidenced the *sine qua non* of reconciling observation with calculation to that degree which would warrant their acceptance as the true and legitimate theory of immunity. Unfortunately for medicine, in a large proportion of the explanations advanced in connection with its