By way of illustration, a few cases may be mentioned briefly:----

A boy, 12 years of age, admitted with well-marked chorea and endocarditis; following this he developed pericarditis, hemiplegia lasting one week, and later pleurisy with effusion. Cultures made from the pleural fluid showed Gram-positive diplococci resembling, as far as they could be cultivated, those found in the fatal cases described above, but they failed to grow on the second transplant.

In 8 out of 13 adult cases of typical acute rheumatic fever, smears made from the fluid aspirated from the affected joints revealed pus cells and occasional Gram-positive encapsulated diplococci, but no growths could be obtained in cultures made.

In the five other cases, one of which developed endocarditis, pericarditis and pleurisy, the aspirated fluid contained many pus cells, but no bacteria could be found and cultures were sterile.

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SOME THEORIES ON THE NATURE OF SHOCK.

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Theories regarding the nature of shock have been many and various, especially during the past half century, but for the scope of this paper, only such theories are considered as have a foundation built upon experimentation.

For many years before the present era of experimental shock, the cause of shock was vaguely ascribed to the severe shaking up or commotion of the vital processes. For example, Erichsen, in 1864, considered shock, especially in accidents, to be due to the "sharp vibration that is transmitted through everything." It is, however, worthy of note that as early as 1864, W. W. Keen and S. Weir Mitchell put forth practically the same theory as that advanced by Crile, of Cleveland, at the present day, namely, that shock was due to vasomotor fatigue.

The era of experimentation might properly be said to have begun about 1870. It was in this year that Golz, of Strassburg, began his classical experiments on frogs. His findings, of interest to us in this paper, were briefly these: When a frog is suspended, with legs downwards, and