

of fibrin in the blood was always increased, often doubled and sometimes trebled, and, indeed, occasionally quadrupled, while in typhoid fever it was reduced to one-half, one-third, and even sometimes to one-fourth of the nominal rate. And yet so true and universal was the rule, that even in this now evidently non-inflammatory affection, if a true inflammation supervened, the proportion of fibrin was at once increased. In view of these facts the opinions of medical men had to undergo serious modifications. By them, without shame it might now be said, "*Tempora mutantur et mutamur in illis*"; or, as it has been well rendered—

"Men change with fortune, manners change with climes,
Tenets with books, and principles with times."

The time had indeed come for a change in principles. The scalpel was now no longer the exclusive, nor even the most useful, instrument of pathological research. The balance, the test-tube, the filter, the microscope were employed not merely to observe the results in fatal cases, but to watch the progress of the disease in the cases which were not to have this disastrous termination. The two great fluids of the body (the blood and urine) were most earnestly studied. Just at this time (1841) organic chemistry made sudden and unexpected advances; the fruit of long years of patient and laborious analyses was gathered, and Liebig, and Gruelin, and Rose, and Lehmann, and Dumas, and Pelouze, and Boussingall, launched forth their startling hypotheses. It now seemed, for a season, as though pathology were about to become a branch of organic chemistry, and the human frame to be regarded as a curiously complex laboratory, in which molecular forces were contending for the mastery; that health was the result of a well-balanced contest, and that an undue preponderance of any of the combatants led necessarily to disease. The analogy of fermentation was employed to illustrate and explain many morbid processes, and the word zymotic was boldly introduced by Liebig into the realm of pathology.

Of course there was in this case, as there ever will be, a reaction against this unexpected invasion of our territory by these "outside barbarians." The loins of the vitalists were girded and they went to battle against this most material pathology and yet more material therapeutics. The chemists were driven forth the more readily that there was no discipline in their ranks, no acknowledged leader, and most discordant opinions and theories. But though the enemy had been expelled, the traces of the invasion are evident on every hand. Take, for example, rheumatism. Read the works of the best writers thirty or forty years ago, and see how differently we view this affection at the present day. What are the present controversies on the treatment of rheumatism? Do they turn