

ture keeps up her fires in the body, the flues of which are perhaps liable to become over-heated by undue accumulation of fuel, as well as the more visible ones which we run through our dwellings.

But you may say these examples, though striking proofs of the need of chemistry to enable us to understand the functions of the healthy body, are not practical, inasmuch as they do not refer to the diseased body. They are highly important as physiological truths, but they are not pathological. This is true, but if you understand not the physiological, how can you understand the pathological? Could you venture to undertake a nice operation of surgery without knowing the parts amongst which you are to cut? So how could you venture to meddle with diseased organs, the elements of whose functions you are unacquainted with?

But I need not rest my argument on this ground. I can show you that changes which are strictly pathological can only be recognized by chemical manipulations, and being recognized, can only be remedied by chemical appliances. You have all heard of the Humoral pathology, or of what, in the not very grammatical though very expressive phraseology of the day, are called blood-diseases. This humoral pathology, by the bye, furnishes a not uninteresting episode in the history of medicine. Received as manifest truth for many ages, it fell at last into disrepute, became the butt of ridicule to the moderns, and was referred to chiefly as showing the absurdities of the ancient schools of medicine.

This once supposed "exploded dogma" has, however, again begun to raise its head, and counts among its abettors many of the best and wisest of our practitioners; and this change is comparatively recent, for it was several years after I had completed my medical studies before this old doctrine began to reappear. My mind is apt to dwell upon this change as one evidence, among many others, of the imperfection of our boasted reason, and of the propriety of using modesty and caution in asserting even the most generally received of its conclusions.

It is true that in the olden time the humoral pathology was but a speculation, though certainly a happy one; it was not based upon experiment, the proper ground of philosophical deduction, and therefore fell. The humoral pathology of the present day may be expected to become an ascertained fact, inasmuch as it is based not on hypothesis, but on multiplied experiment and observation.

But to return. Blood diseases are so named because they consist in an alteration in the materials of which the blood is made up. That fluid consists, as you know, of certain constituents in certain proportions variable within certain limits, without affecting health; but beyond these becoming less fitted for the performance of its normal duties; and, be-