

passed into oblivion. It was a time of very little interest in such matters, for many lines of development of natural science during the preceding quarter century had conspired to divert attention to other problems. The immediate occasion of my interest was, I well remember, the chance reading of Maly's important but almost forgotten papers upon the diffusion and dialysis of phosphates, recounting phenomena which, in the light of the modern theory of ionization, appeared simple enough, though to their discoverer they had been in some respects inexplicable. A series of researches have grown out of this interest, and since that time, whenever freedom has permitted, I have been occupied with various aspects of the problem of the neutrality or faint alkalinity of the organism. For it soon appeared that the key to the peculiar conditions of equilibrium between acids and bases in blood and protoplasm is to be found in such characteristics of phosphate solutions as Maly had observed, and in like behavior of similar solutions containing carbonic acid. When at length it became possible quantitatively to describe the chemical equilibria in such systems, it was at once clear that, of all known substances, phosphoric acid and carbonic acid possess the greatest power of automatic regu-