

it rains give them rubber boots and water-proofs, and let them have a good time wading in the puddles, of which our New York streets always afford an abundance of variety during a storm.

In recommending such a course of hardening I am well aware that there will always be found a certain number of children who can not stand it, and a vastly greater number of parents who are opposed to trying it. But where there are twenty children of whom it has been thought that they were of too delicate a

nature to bear such treatment, there will perhaps be found but one of whom this is really true. In fact, it is often the so-called delicate ones—those who have been shielded from every draught that blows—who need it most and thrive under it best.

These remarks upon prophylactic treatment in children will then be seen to resolve themselves simply into regulations for keeping the child in the best health possible, paying particular care to the digestion.

MICROBES—BACTERIA—DISEASE GERMS.

IT is very popular to talk of microbes, said Dr. J. G. Johnston, at the Kings County, N. Y., Medical Society meeting, recently. We hear the term in almost every one's mouth, and yet of the many thousands who use the word so glibly, how few know its meaning or derivation. You will seek for it in vain in any dictionary or its definition in any medical book. For a long time there was a dispute as to whether these disease germs were animal or vegetable, and the word microbe was adopted as a common term which every one could use. It comes from mikros, small, and bios, life. These "little lives," as microbes mean, was a term that every one could use, whether he believed these "little lives" were animal or vegetable. Webster's definition of an animal as having sensation and motion had to be abandoned, because it was shown that there were vegetables that had both sensation and motion. Finally, Pasteur compounded a fluid entirely of minerals, furnishing only carbon, hydrogen, oxygen and nitrogen, in form easily obtainable, and it was found that these microbes could subsist on this. A new distinction was made between animal and vegetable life—that is, that an animal must have some other animal or vegetable life to subsist on; while a vegetable can live on the mineral world. As it was found that these disease germs would subsist on either animal, vegetable, or min-

eral world, wherever they could easily obtain carbon, hydrogen, oxygen, and nitrogen, all bacteriologists now class them as vegetable organisms. Chemistry cannot detect these disease germs. In water standing the severest tests of chemical purity, typhoid bacilli have been found, enough to infect a whole village. No chemist with the finest reagents in his laboratory can show any difference in the pestilential air in the rice swamps around Tybee Light or the pure air from the top of Chimboraza Mountain. Chemistry can show no difference between an air laden with the yellow fever poison and the air we breathe. The microscope alone cannot tell disease germs, because in every mouth, on every tongue, and on every portion of the skin, are multitudes of germs. But which of these germs are hurtful and which harmless the microscope cannot determine. Culture alone can do this.

From an instructive lecture delivered by staff-surgeon Schjerning before the Military Medical Associations at Coblenz, Prussia, on the subject of "Microorganisms in their influence on hygienic questions," the following will be of interest:

(A.) Endogenous Bacteria:—These are necessarily parasites; they only thrive in the human (or animal) body, and their propagation, consequently, takes place, almost exclusively, through immediate contact with sick persons, etc., and re-