

NATURE STUDY—No. XXXIV.

A CEMENT SIDEWALK.

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In glancing over the topics that have been dealt with in this series of Nature Study articles in *THE OTTAWA NATURALIST* I find that more than half of them have been of a general pedagogical treatment, while twelve have been practical studies in plants, insects, birds, rocks and school gardens.

It is to be noted that this series portrays in a general way the history of the adoption of Nature Study in our school courses. At first, concern was about the need, the treatment, the courses, the practical value or the pedagogical value of it; latterly the tendency is towards practical, helpful directions for the teachers who have to work at the subject in our common schools. Nature Study stands to-day, with our progressive teachers, accepted as the leavening that will bring large vitality to worn out methods and subjects; what they are asking is for guidance to the recognition and the proper using of the materials.

With the purpose of emphasizing the proposition that the study is not limited in its field to biological or geological things, an outline of a lesson we had with our summer class is here submitted and worked out. A sidewalk had been in process of building for several days. No one had paid much attention to the work, the workmen or the process. This was, in part, owing to a multitude of other interests—chiefly biological—and, in part, to an unconcern that familiarity had bred.

When, however, attention was drawn to the subject, many propositions were opened up for investigating; the investigation was made by daily observation and inquiry. An engineer's work had been done in staking out the walk and making it level—the stakes were driven firmly in the ground and the top level marked with notches or nails. The top soil had been removed until a firm, gravelly bottom was reached; for most of the length of the trench a depth of a foot had been sufficient but where the ground was springy a greater depth was excavated. Into this trench, coarse gravel and broken brick was dumped and packed down. A plank