

in illustration a very simple question; one interesting to myself personally, because it was the first botanical problem I ever solved, but which, if the solution be properly generalized, is interesting in itself as giving the key to many peculiarities in the forms and markings of leaves.

When I was but a lad at school, a fellow-pupil, the son of a farmer, told me that on the back of every green blade of oats there was legibly stamped a capital B. I laughed at him for his simplicity in thinking he could make me believe such an "old wife's fable;" but he indignantly replied that not only had his father told him of the strange marking, but he had looked and seen it for himself. The only way, it seemed to me, to treat such an argument as this, was to change the subject of conversation, and this I did, a slight smile of incredulity letting my playmate know that he had not wholly imposed upon me. That very afternoon I happened to pass a field of oats, and, remembering the assertion of the mysterious markings, I determined to put the question of their reality to the proof of observation at once, and for altogether. I must confess, however, it was only after a mental struggle that I brought myself to cross the fence into the field; for the assertion seemed to me utterly absurd, and I had not then learned that, rightly taken, there is no such thing as "being made a fool of." But what were my amazement and confusion to find, on the very first leaf I examined, a capital B as clearly marked as if it had been impressed with a die! Quickly gathering and examining other leaves, I found on all of them a marking, in some a mere blur, on others clear and distinct as I had found it on the first leaf. Straightway occurred the questions: What

really is this mark? What causes it? I stood among the growing oats, so the answer was neither far to seek nor difficult to find; but I have never forgotten it, for no teacher told it to me—I found it out for myself. I rediscovered the solution of the mystery of this leaf-signature, and, although it must have been discovered and rediscovered thousands of times before, yet I enjoyed all the deep delight of discovery—a delight which never cloys, a pleasure which never palls. What is more, I soon found that my eyes had, as it were, been opened; I found that I could see many other strange things about leaves which, till then, had escaped my notice, and I found that I possessed the key to their solution.

But, if I urge on you the teaching of natural science, I also recognize the difficulties you will encounter if you accept my advice. You will have to teach from the actual objects, a method utterly and radically different from the text-book instruction to which you are accustomed. You will for a time have to submit to the adverse criticisms of those parents who judge of a child's progress, not by its mental growth, but merely by its increase of skill in the art of recognizing the marks that represent certain sounds, and of repeating those sounds, an art too often confused with reading. You will, some of you, have to struggle with classes not too large to inform by telling but far too large to educate by training. But overcome the first difficulty, overcome yourselves, and you will find the others will lessen day by day, and will soon disappear altogether, the little remaining of them being lost sight of in the increase of brightness which the new study will bring to the life of the school-room.—*The Popular Science Monthly.*