

"THE HARVEST OF A QUIET EYE."

The poets were the earliest observers and they have never abandoned the field. In proportion as they have studied Nature in her varying moods and phases; as they have watched men, the play of their emotions and the development of their motives into action, have they been the interpreters of Nature and of men and have sung songs which linger in the world long after their voices are still.

Tennyson wrote:

Flower in the crannied wall,
I pluck you out of the crannies:
Hold you here, root and all, in my hand,
Little flower—but if I could understand
What you are, root and all, and all in all,
I should know what God and man is.

Thus has the poet shown at once how close together life and its source are and how close is the kinship between the scientist and himself. Both seek for verities, and so far as they find them and hand them over to their fellows are they of use in the world.

Science has done much in breaking down superstition, and in unraveling mysteries, in saying with Scripture, "The truth shall make you free," but it has done more; it has taught men to use their eyes so well as to be slow about basing conclusions upon too few data.

Professor Huxley, in writing of his friend Tyndall, says: "That which he knew, he knew thoroughly, had turned over on all sides, and probed through and through. Whatever subject he took up he never rested till he had attained a clear conception of all the conditions and processes involved or had satisfied himself that it was not attainable. And in dealing with physical problems, I really think that he, in a manner, saw the atoms and molecules and felt their pushes and pulls." And thus do we learn that imagination is no less the servant of the scientist than of the poet.

It would be difficult to find better

illustration of the fruit of quiet-eye observation than that shown in the work of Mr. Hamilton Gibson. His remarkable lectures on "Cross-fertilization of Seeds," made doubly clear and interesting by beautiful charts of his own invention, prove that he is as worthy to be named among scientists as among artists.

Time is not too precious, he has thought, for him to spend enough in concealment near a clump of milkweeds to watch the bumble-bees and learn the secret of their relation to that plant. The fertilization of the trumpet creeper had never been satisfactorily explained until Mr. Gibson discovered that it is the work of humming birds. They thrust their long bills down into the nectaries at the base of the blossom, and come out with their backs covered with pollen, which they give to another flower when they seek the same sweets there.

We have all found flies entangled in carollas and seen birds and bees darting about among the flowers, often too intent to be frightened away by our approach; but not even botanists of fair repute in our century have been close enough lookers to find out that the blossom and the insect have been made for each other—that the perpetuation of species is secured by that drop of sweetness hidden where it cannot be reached by the insect or bird without coming in contact with the pollen.

The old Arabian proverb, "A fig tree looking on a fig tree becometh fruitful," has now an explanation. Pliny and other early writers mentioned the fact that two kinds of fig trees must grow near together if they produce fruit, but they do not account for it.

Close observers in recent times have discovered that the proverb is based not merely upon the existence of staminate and pistillate flowers, but also upon the intervention of an insect which fertilizes them.

Every seed of the fig represents a blossom. The first crop of figs ap-