

cannot think so. The fire can have no feeling of any sort, and nothing but feeling can resemble what I experience when I come near a fire. And the same holds good of the colours of the flowers and the sounds of the winds and waters: there is something there which produces a sensation in me, but it cannot be anything at all resembling my sensation. What I hear from scientific persons confirms me in this belief; for they tell me that sound is only a vibration in the air, caused by the movement of the sounding body, and heat and light are vibrations in an invisible aether, caused by movements in the particles of the body which I call hot or bright. If I shake a stick backwards and forwards, I do not see in that movement any resemblance to a sound, and yet no doubt if the movement were only rapid enough I should hear a sound. I conclude then that there is nothing in any object which I can perceive at all resembling my sensations of heat, colour, sound, or any other quality.

Such are the thoughts which may be supposed to occur to the mind of anyone who meditates on these subjects, since they are the thoughts of every philosopher who has ever given his attention to psychology. To some they have appeared of such importance that they have tried to draw attention to them by expressing them in a startling and paradoxical form. They have, for instance, affirmed that the fire is not hot, the sun is not bright, and ice is not cold; meaning, of course, that the fire does not feel itself hot, the sun has no sensation of brightness, or ice of cold; or they have disputed our right to say that we know what anything is like, since there is nothing in any object at all resembling our sensations, but only a power, which we do not understand, of producing these sensations in us. No one, of course, ever meant to question the truth or propriety of such expressions as "The fire is hot;" "I know what a rose is like": their intention was only, by talking in this startling way, to make people think, and to induce them to ask themselves what is the meaning of such language. I did not myself think it well to

begin in this way, as the inexperienced reader might be deterred and disheartened by statements which he would naturally think incomprehensible, if not absurd; but to anyone who has accompanied me thus far, they ought, I think, to appear quite simple and intelligible.

What we have now accomplished is this: we have made two full steps forward, and planted one foot on disputed territory. The mental exertion involved has been, I suppose, about equal to that required for guessing two riddles, while the result has been a permanent addition to our powers of thought. That result I would like to leave as it is for the present. In some subjects it is a mistake to go too fast. Knowledge which lies in the mind for a little while is digested and assimilated, and thus becomes useful as a means of making further progress; while that which is pushed aside and withdrawn from the attention by the too rapid accumulation of new materials becomes a mere burden on the memory.

I think, too, that to some, at least, the conclusion that we cannot suppose our sensations to resemble in any way the objects around us, may seem so strange as to dispose them to suspect that some unknown fallacy may lurk in the process of reasoning by which we arrived at it. I would not wish such persons to stifle their doubts; I would rather get them to go over the matter for themselves, and make sure of their ground. I dare say I can even help them to find out where the difficulty lies. Consider the question in this way. If you prick your finger with a pin, it hurts you. Evidently your sensation of pain arises from the pin; but you do not for a moment suppose that the pain is like the pin. If you handle the pin gently you get a sensation of smoothness, but you do not suppose that sensation to resemble the pin more than the other. When you listen to a piano you do not imagine that your sensation of sound resembles the piano, or its strings or hammers, nor do you imagine that your sensation of sweetness resembles a lump of sugar. Up to this point you feel no difficulty; but what you

find it hard to grant is, that when you see an object clearly, the sensation which you then have does not resemble the thing you see. Yet if you reflect a little, you will perceive that you can get no sensation from the object except that of light, for you cannot discern it in the dark, and that the object can no more have your sensation of light or anything resembling it than it can have your sensation of sweetness or of heat.

This reasoning will probably appear to you unanswerable and yet unconvincing; and as it is unpleasant to feel that you have an objection and yet not to be able to express it, I shall try to assist you. What you would say is this: "I can believe that my sensation of colour no more resembles the coloured object I see than my sensation of pain resembles the pin that pricks me; but besides the colour of the object there is its shape, and surely I know what that is like?" If you can feel that I have helped you to express your difficulty I am glad of it, for it shows that I have found an apt pupil, and one who is likely to take real interest in psychology: you will at least then have no difficulty in understanding the answer.

I cannot here discuss the shape of the object or what you know of it; to enter into that question fully would be to take you through some of the most difficult controversies in psychology. Its discussion in a simpler way I must leave for a future paper; but I will ask you to remark that, whatever you see you can see only by means of the sensations produced in your eyes by light. Now it is to those sensations that our attention is at present exclusively directed, and you cannot imagine that anything in the object resembles them. You were mixing up the sensation itself with the information which the sensation gives you. How this happens I cannot explain until you have taken another step forward. I can only hope that your experience of the road which we have begun to travel together has been such as to make you willing to go a little farther in the same direction.

(To be continued.)

PLAIN WORDS TO SCHOOLGIRLS.

By THE VEN. ARCHDEACON WILSON, M.A., Rector of ROCHDALE.

THERE is a very real danger in our high schools that the intellectual side of education may be overestimated and overpressed, not by mistresses, but by yourselves; and that the natural, human, domestic, and family elements in it may be undervalued. What are you yourselves at home, in society, with parents, brothers, sisters, children, friends, school-fellows, servants? Is the better education, that you are undoubtedly getting, widening your sympathies, opening your heart and mind to all the educational influences which do not consist in books or in work? Is it giving you greater delicacy of touch? Is it opening new channels for influences, streaming in on you or streaming out from you? Your daily life may become a higher education, and is so to the truly noble-minded and well-educated girl or woman. Do not regard as interruptions, and as teasing, the calls of household, the duties to parents, visitors, children, and the rest; it is part of the education of life to fulfil all these duties well, delightfully, brilliantly, joyously, enthusiastically; these things are not interruptions to life, they are life itself. There was a pitiful magazine article written the other day by some lady complaining that social duties, the having to see her friends, her cook, her gardener, her dressmaker, etc., prevented her from reading Herbert Spencer, and developing

her small fragment of soul. Social duties, rightly done, are one of the developments of soul. Let it be seen that you girls who can enjoy your literature, and your history, and your music, and your drawing with keen appreciation are not made thereby selfish or unsocial; but that you are more delightful creatures than those who have no such independent resources and joys. A girl who gets her certificate or prize and is cross or dull at home, and does not think it worth while to be kind and agreeable to a young brother or an old nurse, to every creature in her household down to the cat and the canary, is a traitor to the cause of higher education.

Again, it has been observed that the practical and artistic elements in school education have been, in general, more thoroughly developed of late years since they were put into a secondary place. This is as it should be. Such subjects as music, drawing, cooking, housekeeping, wood-carving, nursing, needlework, when they are studied at all, are studied more professionally and thoroughly and intelligently, and less in the spirit of the amateur and dabbler. So I would say to you, show that your education in intelligence has given you wide interests and powers to master all such subjects. Take them up all the more thoroughly.

Closely akin to this merit of thoroughness

is the large spirit of unselfishness that ought to come, and certainly in many instances does come, with wider interests, a more intelligent education, and a more active imagination. Women in our class have more leisure than men; they can actually do what is impossible by the conditions of life for us men to do, link class to class by knowledge and sympathy and help and kindness. They can be of immense service in this way. There is a story in the life of an American lady, Mrs. Lynam, that occurs to me. There was much conversation about a certain Mr. Robbins, who had lately died; he had been such a benefactor, such a good man, and so on. A visitor asked, "Did Mr. Robbins found a benevolent institution?" "No," was the reply; "he was a benevolent institution." Women of our class may be, they ought to be, "benevolent institutions." And such women exist among us; pity is there are so few of them. They can unobtrusively be centres of happiness, and knowledge, and generous attitudes of mind. Now there ought to be more of such women, and I look to our high schools with hope. They ought to make girls public-spirited and large-minded.

There is another element in girls' education which is only imperfectly as yet brought out, and which you yourselves can do something to develop. I mean the better appreciation of

an education which is not in books, and not in accomplishments, and not in duties, and not in social intercourse. How shall I describe it? Think of the old Greek education of men. There was a large element of literature and poetry and natural religion and imagination in it; and a large element of gymnastic also; but besides all this it was an education of eye and ear; it was a training that sprang from reverence for nature, as a whole, for an ideal of complete life, in body and mind and soul; and not only for complete individual life, but also for the city, the nation. It was a consummate perfection of life that was ever leading the Athenian upward, by a life-long education, to strive for a certain grace and finish in every one of his faculties. And we see to what splendid results in literature and art and civic and personal beauty it led them.

This element is still wanting in our higher education; it is the ideal of nobility of life and perfection. We lack it in our physical education. That is still far from perfect. If we all, parents, children, boys and girls, schoolmasters and schoolmistresses, had some of the Greek feeling of high admiration of physical perfection of form and grace and activity, we should not see so many boys and girls of very imperfect gracefulness, nor should we see fashions of dress so ruinous to all ideals of perfection and grace. We cannot make up for the want of this national artistic ideal of beauty of figure by artificial gymnastics, scientific posturings, and ladders and bars.

They are better than nothing, they are a protest, they certainly remedy some defects and prevent others. But do not you be content with them. By self-respect and self-discipline, by healthy life, early hours, open air, natural exercise, the joyous and free use of all your powers, playing games, by refusal to give way to unhealthy and disfiguring fashions, and, above all, by an aspiration after grace and perfection, do what you can to remedy this national defect in our ideals for girls.

This leads me to say that games contribute much to remedy another deficiency in our ideal. There is a defective power of real enjoyment of life, of healthy spirits, among us moderns. There is more enjoyment now than there was. I think my generation was better than the one that preceded us in this respect; we had more games, more fun, more *abandon* in enjoyment than our fathers and mothers, your grandfathers and grandmothers, had, if we may judge from letters published and unpublished. And they too often thought we were a frivolous generation, not so staid and decorous as we might be, and repressed and checked us; while we, on the contrary, urge on you to enjoy more fully the splendour of your youth and vitality. We desire to see you skip, and sing, and laugh, and bubble over with the delicious inexhaustible flow of vital energy; we know that it need not interfere with the refinement of perfect manners and decorum, and we know too that there is the force which will sober down and do good work, and there is the health-

giving exercise, the geniality, and the joy that will make you stronger and pleasanter, more patient, and more persuasive to good in years to come. There is a word in German which has no English equivalent; it expresses just the missing ideal I am speaking of. It is a terrible mouthful, as German words often are—*Lebensglückseligkeit*—it is the rapture and blessedness and happiness of living. Carry the idea away with you, and make it one of your personal ideals, and home ideals, and school ideals, and life ideals, this *Lebensglückseligkeit*.

'Tis life, whereof our nerves are scant,
Oh life, not death, for which we pant;
More life, and fuller, than I want.

You can carry this idea with you into society, and use it to brighten its conventional sociabilities, and stimulate them into positive enjoyability by more of intelligence and animation.

This quality of *Lebensglückseligkeit*—it is a sort of intensity of life, of vivacity, of willingness to take trouble, to interest and be interested, that is a little lacking in our English ideal of young ladies; and we must be on our guard, lest any school ideals of study and bookishness should actually increase this deficiency. Anyone, mistress or girl, who makes good education to be associated with dullness, and boredom, and insipidity, is again a traitor to the cause of higher education.

From *Three Addresses to Girls at School*.—Percival & Co.

A LONELY LASSIE.

By SARAH TYTLER, Author of "A Young Oxford Maid," etc.

CHAPTER V.

FLORA went to the window, peeped out through the venetian blind, and was a little consoled. She looked out on no waving birch and fir trees, no mighty Ben, with light or shade, a smile or a frown, on his great rugged face, as an index of what would be the weather for the day, but on a large square of houses of different widths and slightly different heights, different degrees of brick-stains, and varieties of facings—like the facings of regimentals—to the doors and windows. Nothing very imposing in this. Indeed, she was puzzled to understand how such a fine interior as that of the house she was in could be found in connection with one of those parti-coloured, occasionally battered exteriors. And yet Flora was convinced afterwards that she had from the first seen an air of antiquity and distinction about the houses in the square; a kind of hint that their floors had been trodden long ago by aristocratic feet, and were still haunted by ghosts of renown. Yet how inferior Kensington Square, in its irregularity and patchwork, was to Moray Place and Charlotte Square, in their gray, grand, solitary unity, as Flora had walked round them in Edinburgh.

Flora found all the ladies of the house in the morning-room, to which a servant took her. Whatever the family hours might be at night, Mrs. Bennet was too energetic and sensible to allow them to be late in the morning. Besides, Kate and Mary had to be at their respective schools by ten o'clock.

"You slept well, I hope, Flora?"

Mrs. Bennet added to her cheerful "good-morning," as she stood pouring tea and coffee from the silver tea and coffee-pots—she was such a little woman that she always discharged this office standing—and she was so busy that she could only spare a quick, scrutinising glance to Flora, while she said, "Dorothy, the toast for your cousin. Kate, pass the eggs and the sardines—or she may rather have bacon."

Egg-stand and sardine-dish were of silver, like the toast-rack, only the cruet, which Flora would have expected to be of the same precious metal, was of white china.

In the centre of the table was a tall glass, which greeted Flora's pleased eyes—pleased, not because it was full of such gorgeous or delicate hothouse flowers as those which the Macdougals were proud of commanding in abundance; not even of such garden flowers as sometimes did duty in the epergne at the Castle, but of ox-eye daisies ("horse gowans," Flora called them,) such as one might pluck in handfuls anywhere in the fields or by the roadsides in the country. But in London—how did horse-gowans come there? Why were they apparently prized there as no cottage-bred child would prize them?

But Flora, though she had a house-wifely eye, was less inclined to remark on the arrangements of the table than to renew her acquaintance with her aunt. However, Mrs. Bennet was too much taken up with her occupation and her plans for the day to share much in the general conversation, but the three girls

were ready to make advances, and open to advances in return.

"I hope you have got over your fatigue, Flora," said Dorothy.

"I hope you were not disturbed by the noise," said Kate. "We think it perfectly quiet in the square; but when people come from the country I believe they always hear noises in London," she finished rather sententiously.

"Cousin Flora—(mamma says I may call you Flora because we are cousins, you know, if I remember to say 'cousin' before it, and then it will not sound forward from a little girl to a grown-up girl like Dorothy," said Mary, a small damsel who was generally full of one idea, at which she hammered with a mixture of transparency and matter-of-factness)—"Cousin Flora, will you have preserves? Mamma always lets me finish with them. Of course you are grown-up, and can do as you like. This is apricot, and the other is strawberry jam."

Dorothy was considerably taller than her mother, though not quite so tall as Flora, while she was nearly two years her senior. But Dorothy at nineteen did not look so womanly as Flora at seventeen. It was not from any absence of the well-bred ease and confidence of a girl who had already seen a good deal of society in her father and mother's circle, it was from the lack of those experiences which had already befallen Flora. Dorothy and her mother were dressed somewhat similarly, a little to the visitor's bewilderment, and she would have also said very plainly, if she had not been gifted with sufficient feminine instinct to compre-