even after the spark is quenched, even when all is dust and ashes, that yearning must still be felt. We would never not be loved."

1. 90. Pious drops="tears of dutiful affection."

1. 105. Hard by="Fast by their native shore."

1. 115. The lay, properly, a song here=verses.

ls. 117-following. These lines are generally taken to refer to Gray himself. He often speaks of his melancho'y in his letters.

## A Difference in Meaning.

To the Editor of the Educational Review:

DEAR SIR.-Miss Robinson does such good service in her department that one hesitates to criticize; but the enclosed may be worth noting, and she herself will be interested to have her attention called to it. In the interesting notes on Christmas poetry in your December number she publishes Ben Jonson's familiar poem with some explanations. On a line in the second stanza, "He, whom the whole world could not take," she adds the comment that it means, "whom the whole world could not captivate or charm." This meaning of "take" is, of course, quite possible, but its application in this passage seems rather obscure. On the other hand, the meaning, old, contain, makes a fine antithesis: He whom the whole world could not contain, who was the maker of both heaven and earth, "was now laid in a manger." The passage is usually explained in this way; it is quoted, indeed, in the Century Dictionary as an illustration of this meaning (see take v. meaning 27). 'Take' in this sense is, as has been pointed out, apparently a Latinism, after the analogy of a well-established use of capio.

[Miss Robinson will always be glad to have any criticism of her work or to receive suggestions from any correspondent.—Editor.]

It is worthy of remark that but for the brightness of the sky the stars could be seen in daylight. Even as matters stand, some of the brighter of them have been seen after sunrise by explorers in high mountains, where the air is very clear and the sky dark blue. If we could go above the atmosphere the sky would appear perfectly black, and stars would be visible right close up to the sun. Astronomers observe bright stars in daytime by using long focus telescopes, the dark tubes of which cut off the side light; and persons in the bottoms of deep wells have noticed stars passing overhead, the side light being reduced by the great depths of the wells.—T. J. J. See, in the January Atlantic.

## Mineralogy and Geology in Schools - No. IV.

L. A. DEWOLFE.

We have studied the more abundant minerals and rocks, and have learned something of the geologic agencies concerned in their formation. Let us devote a little time to the various forms under which any given mineral may occur. Take, say, quartzone of the first specimens studied. The kind we found in our granite was doubtless glassy or milky quartz. When we compare it with other samples which should be in our collection, we find it hard to believe that minerals of so varied appearance can really be the same in composition. Let us divide our quartz specimens into two groups. (1) Milky quartz, rose quartz, amethyst, rock-crystal, etc., and (2) agate, jasper, chalcedony, and flint. The pupils will soon notice that those of one group are smooth, while those of the other are more or less rough. This will probably be their first lesson on crystallization. Have them notice the shape of the crystals in "rock crystal" and amethyst. Notice, too, the parallel striations on each crystal face. Are they longitudinal or transverse? Compare them with those on a cubical crystal of iron pyrites. By comparison with calcite, selenite or orthoclase, the pupil will readily learn to distinguish a crystal face from a cleavage surface. The teacher will see the necessity of having samples of all the common minerals at hand for illustration. Here the question of cleavage has come up, so here is the place to teach it if you have not already done so. One can scarcely teach cleavage apart from fracture. Our quartz specimens are good for the latter. Notice the concoidal fracture in all the cryptocrystalline groupjasper, flint, etc.

The pupil will wonder why all these minerals—whether red, vellow, white, colorless, green, purple, etc.,—are put down as one and the same mineral. Let him powder fragments of each. He finds that when powdered their color disappears. It could not, then, have been an essential part. The color of the powder is always called the *streak*. The streak, which is a very important thing to note, is often very different from the color. Try the hardness of the quartz specimens. They all scratch glass easily. They even scratch a steel knife. It is the quartz grains in a grindstone that wear away the axe or chisel.

Now, what have all these varieties of quartz in common? They are all of about the same hardness,