## SCHOOL COLLECTIONS.

L. A. DEWOLFE.

In all the larger American cities, a school museum sends its delivery wagon with collections to any school in the city desiring illustrative material. If, for example, a teacher desires to give a lesson on the woodpecker, she applies the previous day for stuffed woodpeckers and samples of their food. Thus, a museum under those conditions has a right to exist. It is not a place for musty curios but an educative collection of material in constant use.

Cannot every country and town school have its own collection? In the November number of the Review, the subject of School Collections was opened. May we not discuss it further?

For example, a lesson on our clothing suggests a rather extensive collection of raw material, finished products and by-products. At this season, wool would probably be the first suggested. If wool were not thread-like in its structure, thus permitting its being spun into yarn and woven into cloth, it would not have been useful for clothing. After a little discussion, therefore, the children will draw the conclusion that anything composed of or containing threads or fibers may be useful for clothing; and that some quality makes them useful for many other things.

Let us, then, classify our material woven, spun, or braided from fibers.

Wool, already mentioned, is an animal fiber. Do we know any other? Silk will suggest itself to some one. Here, then, we need collections showing various grades of wool and the various steps in its manufacture. Pictures will help to animate the geography of wool-producing countries, the transportation of the raw material, and the various factory processes; but the lesson has the breath of life breathed into it when the teacher can show real wool from sheep not only of our own country, but from those of same far-off European or Asiatic land.

Silk in its finished form is attractive, but how much more it means if we have cocoons of the silk "worm," mounted specimens of the fullgrown moth, mounted twigs bearing the mulberry leaves, and pictures of the countries where the silk worm is grown. It is possible to get these if we really try.

Better than nothing would be a study of the

silken cocoons of our own Cecropia Moth and Polyphemus Moth.

Following up the subject of Clothing, cotton and linen claim attention. These are made from plant fibers. Some boy who likes to ask "smart" questions will want to know if cloth can be made from mineral fibre. Answer him by showing him a piece of sheet asbestos such as his mother possibly uses in the kitchen.

But can we not get a very interesting collection showing flax and its products or cotton and its products? Try growing some flax next summer. Press and mount some of the plants when in flower. Let others mature their seed if they will. Get some old lady to show you and tell you how in her young days the flax was manufactured into cloth. From the flax you grow, get as many stages of the process as you can. Find out and collect material made from flax seed. In November, I hinted at a fairy story a teacher might construct relative to the iron used in making a steel pen meet its brother iron that was used to make the ink. Can you not use a similar story about two neighboring flax plants, or, even, two parts of the same plant, which, after many wanderings, met when the house-wife brightened her furniture by using an old linen rag to rub on a little linseed oil? In story form the common origin of the rag and the oil sets the child's mind to thinking how closely, after all, so many of our common objects are related; and how far we have carried them from their natural condition. Then it is that human industry becomes a living reality. Words in a text-book are lifeless, and often meaningless; but the real material collection is living evidence of intelligent effort.

Cotton and its products will give another somewhat extensive collection.

But while we are talking about vegetable fibres, there are others beside those used for making clothing. A collection of coarser fibers, therefore, such as Manila hemp, Mexican, Russian, Italian and other kinds of hemp should belong to our school collection. With these should be samples of rope, twine, burlap, matting, brushes and other things made from these fibers. Pictures of the plants producing the fibers can be obtained. Children will be interested to learn that stems of some plants, leaves of others, fruits of others and seeds of others all contribute to their comfort.

Instead of mechanically reciting from the