he will forget any of us. No, no, my dear children, God knows all that we do, He knows all that happens to us. In the same passage in the Gospel which tells of the care he takes of the little birds, it says he takes still greather care of his children. You shall learn that verse and then, I hope, when you see the little birds flying so merrily, you will remember that God who takes so good care of the little birds will never forget you.

Now examine this feather. It is partly white and partly brown, there is another which is green, What then is the color of feathers? —They have different colors.

Take the feather; touch it. What do you find?—It is soft.

Are all parts of the feather soft?—No the middle part is not soft.

What is that, then?—It is hard.

That part of the feather is called the stem.

All repeat: The stem of the feather is hard.

What other difference is there between the stem and the down of the feather you have there?—The stem is bright or shining: the rest of the feather is not.

How do you call those things that shine?—Brilliant.

The things that do not shine?—Dull.

So the stem of the feather is brilliant; the down is not.

What other difference do you find?—Can you bend the stem easily? —Does any one of you know how they call the things which do not bent easily?—When a thing does not bend easily they say it is stiff.

Name me some things which are stiff.—Wood, Slate.

What do you say of the stem of the feather?—It is stiff.

What use do they make of Feathers?—They make beds and pillows of feathers.

Why do feathers make good beds?—Because they are soft.

Why are they good clothing for birds?—Because the are light.

Have you ever seen a feather attached to a piece of wood?—Yes.

For what purpose?—To make an arrow.

Of what use was the feather?—To make it fly in the air.

You may now repeat all you have said about feathers.

Feathers are the clothing of birds. God has given them light clothes so that they may fly in the air. God takes care of the little birds, and takes still more care of us. Feathers are of different colors. The stem of the feather is hard and shining; the down is soft and dull, and we can easily bend it. We cannot see through a feather. They make good beds, because they are soft. They trim arrows with them.—*Michigan Journal of Education.*

Catechism on Methods of Teaching.

TRANSLATED FROM DIESTERWEG'S "ALMANAC," (*Jahrbuch,*) FOR 1855 AND 1856,

BY DR. HERMANN WIMMER.

(*Continued from our last.*)

V. Natural History, by Ed. Hintze.

1. *What method should be used in teaching natural history?*

The method of instruction is the mental development of the pupil by means of the material development of the object. The method is, therefore, essentially a *process* made by the teacher. Since there can be but one such development, there can be but *one* method.

2. *Which is that true method?*

The one true method is named from the principle contained in it; it is the developing method.

3. *Wherein consists this developing method?*

In development there are three steps; observation, (*anschauung,*) conception, (*vortstellung,*) and generalization, (*begriff.*) Such is the progress of the method. Every where teaching begins with *facts,* and therefore in this case with the observation of natural objects. Of these, individual action and growth must be shown, and the general law of nature thence inferred. In this way and only in this, the pupil is taught according to nature, since he proceeds from immediate observing and knowing to perceiving and understanding.

4. *What mode of teaching is to be used?*

That one which develops by questioning, (*die fragent-entwickelnde.*)

5. *Is this mode practicable in all three courses, (set down by Hinize elsewhere with regard to the capability of the scholars)?*

In the first course, questioning is predominant; on the second, "*der vortrag,*" i. e., proper teaching and explaining must be joined with it; on the third again, questioning predominates. In all good instruction questioning is predominant, and with it conversation with the whole class.

6. *What have we to think of lecturing?*

Lecturing is no form of instruction at all; it is a rocking chair for teacher and pupils; the former has easy work, whilst the latter stare and dream.

7. *What ought to be required of the pupils?*

Their first and chief object must be to learn to *see* right; then follows right reproduction; and the necessary result is right understanding.

8. *What is the value of learning by heart?*

In all instruction nothing must occur which is not understood, and merely learnt by words. One fact well understood by observation, and well guided development, is worth a thousand times more than a thousand words and sentences learnt by heart without understanding. A well guided pupil has nothing to learn by heart particularly; what is understood, is remembered for life.

9. *Shall the pupil use a text-book?*

For natural history it is useless. The good teacher does not depend on it, the bad one has a good means to cover his inability, and the scholar has nothing bnt a dry skeleton.

The teacher must have mineralogical, botanical, and zoological collections, and, if possible, a microscope.

10. *What must the pupil do at home?*

Write out and draw what has been treated in school—in proportion to his time—in a brief, concise and neat manner. Besides, the well directed pupil will voluntarily and eagerly occupy himself with nature, look with interest and intelligence at plants, stones, etc., and collect them.

11. *How does an able teacher distinguish himself in this study?*

The able teacher takes pains with his school every where, and particularly in this branch; ll energy, punctuality and vivacity, must be applied here, if instruction is not to be a dead and dry mechanism.

12. *What distinguishes a painstaking (strebsamen) teacher?*

The able teacher is found out at school, the painstaking one at home. There are certain branches which are soon done with. But this is not the case with natural history; he who is devoted to it, must follow its own path of progress. The teacher must never cease to study, to make excursions, experiments, collections, etc., to search, to listen, to observe and investigate.

13. *What caracterizes the inspiring (geistanregende) teacher?*

He is distinguished by a happy development of sound talents, love of study, and devotion to his vocation. By force of application every one may acquire the necessary knowlege, for nature is every where. If the able teacher shows himself at school, the painstaking teacher principally at home,—there flows from the inspiring teacher every where something that indeed can not be completely gained by study and application; but an earnest will accomplishes a great deal. Besides, it is true, that as under the hands of Midas every thing was changed into gold, so in the hands of an inspiring teacher every thing becomes enlivened. As the creative mind every where works attractively, so particularly in natural history, zeal, application, love and devotion, spring up spontaneously in the pupils.

VI. Natural Philosophy, by A. Diesterweg.

1. *Should natural philosophy be studied in the common school?*

Certainly. Shall the children in the common school learn nothing of weather and wind, of thermometer and barometer, of the phenomena of light and air, of rain and snow, dew and hoar-frost, fog and clouds, lightning and thunder? shall they see the aëronaut, travel by steam, and read telegraphic news, without knowing the how and the why? Shall they remain ignorant of the constituents of food, and of the process of their stomachs and their lungs? Or is it sufficient to read of all this in the Reader? He who answers these questions in the affirmative, is either himself an ignoramus or a misanthrope, and he who affims the last, knows nothing of the way in which real knowledge is acquired.

2. *What do we begin with? and when does the proper instruction in natural philosophy commence.*

As every where, with showing single phenomena, with intuitive contemplation, with oral representation of what has been observed, and reflection thereupon.

We begin with it in the intuitional instruction of the lowest class. The instruction in geography and natural history develops further the faculty of intuition, and in the highest class the proper instruction in this branch commences.

3. *On what portions of natural philosophy are we to lay stress?*

On all such as belong to the knowledge of phenomena, within the pupil's sphere; the knowledge of the most common things is the chief point.