

knowledge, and take great care to sustain the lesson with abundant resources, for if it is once lost, it is a very difficult thing to regain it on the same lesson.

8. Pictorial power. Word-painting by the aid of the imagination and ample details; the power of describing scenes and incidents, so as to appear real to the child's imagination, will assist you in gaining his attention. If you will dwell on all the little details of a fact clearly, you will be graphic in picturing it out in words; and without these details, the teacher may sometimes be very graphic with children, even in the simple act of reading with suitable emotion, emphasis and action. Said a little girl, "Oh father, Mr. F., the minister, read the 21st chapter of Revelation in church to-day, and it was just as if he had taken a pencil and paper and pictured it right out before us." It is St. John's elegant description of the Holy City.

9. Avoid a stereotyped or routine mode of teaching. If ever so good, strive to improve it; vary it and freshen it up in some way, and thus keep each child expecting something.

10. Awakening curiosity. Archbishop Whately says: "Curiosity is the parent of attention; and a teacher has no more right to expect success from those who have no curiosity to learn, than a husbandman has who sows a field without plowing it." Duly regard their love of approbation by cherishing their self-respect; and if you would retain attention, patiently cultivate their inquisitiveness, for it will prove one of the grateful rewards for your kindness. Says an old writer: "The general occupation of infancy is to inquire. Education directs their inquiries." Therefore bear patiently with your little ones, and answer all their endless questionings. Do not rashly check the rising spirit of free inquiry with an impatient word or frown. Says the poet:—

"Answer all a child's questions, and ask others as simple
As its own, yet wisely framed
To waken and prove the young child's faculties,
As though its mind was some sweet instrument,
And you with breath and touch were finding out
What stops and keys would yield the sweetest music."
—Selected.

TO MAKE CHILDREN THINK.

AT the Teachers' Institute, recently held in Providence, the following question was proposed by one of the teachers present: "My pupils do not think. What shall I do to make them think?" This complaint and inquiry appears in its most expressive form, just as it comes from the lips of the teacher, who

"With strained and tired nerves,
With weary and aching head,"

Has been trying almost vainly to instill a few valuable thoughts into the mind of some pupil whose attention is preoccupied. The inquiry is a difficult one to answer. What would prove successful in producing satisfactory results in one case, might be of little avail in another. Pupils, as well as teachers, have different dispositions, and are affected in different ways. Various theories might be presented, the practice of which would at least seem sufficient to obviate any difficulties which might arise in regard to thoughtless pupils. But actual experience which have proved successful, we believe will be more heartily received than untried schemes. We heard this same question asked years ago by an experienced teacher; and when the suggestion was made that she should win the attention of her class, by telling them stories in connection with the lesson, or calling upon individuals in the class to do so, her answer was, "What shall I do with the boy who does not care about the rhinoceros?" In this instance the study under discussion was geography. Now, in many instances, this question is asked with no intention of being benefited by a reply. The teacher may have tried the plan once, and becoming irritated by the failure to engage the attention of some indifferent pupil, determines to confine herself to the book, and force the scholars to commit the words by penalties for failures; and so the school-days pass. Such a decision imperils the teacher even more than the pupil; for under present customs and arrangements (in the country by change of teachers, and in the city by promotions,) the scholars change teachers so frequent as to secure a variety of talent, while the teacher who has resolved to confine herself to the text-book, has fixed for herself a routine which will be almost insufferable. Some teachers we know, by the judicious dropping of facts accumulated by their own reading, have been able to elevate the taste for reading among their scholars, and to set them upon a track of pursuing such books as would be intensely interesting even to the teacher; and with all their varied tastes, the items called out from the class can scarcely fail, in process of time, to interest the most indifferent. Buy some interesting book, if you have not a school library, and sacrifice it to the wear and tear of the school-room. You will be amply repaid by acquiring the information yourself, by hearing it reiterated in the school-room, instead of having it nicely bound between two covers and standing untouched in your library or on your parlor table. Most

children are fond of novelty. Nothing is better adapted to keep their attention than constant change. The dry details of any branch of study soon become irksome to them. They are wont to let things pass through their minds, rather than to think of them. They become satisfied with seeing or hearing what is said, without going farther. Let each recitation be conducted with much oral instruction, animating them with choice facts and pleasing incidents, interspersed where circumstance requires or opportunity affords. Accustom the scholars to study systematically. Often read to them, or require them to read, and induce them to express the thoughts of the author in language of their own construction, kindly correcting mistakes in thought, and encouraging the pupils to further efforts by due praise and commendation, and you will have awakened a new impulse to thought, that will grow and strengthen as you feed and nourish it.—R. I. Schoolmaster.

WATER.

BY DR. J. A. SEWALL.

Water is a fluid that exists in great abundance, both on and in the earth, and in the things upon the earth. It is four-fifths of the weight of the vegetable kingdom, and three-fourths that of the animal. It is essential to the continuance of all organic life. It is composed of two gases, oxygen and hydrogen, eight parts of the former to one of the latter (by weight.) It dissolves gases in various proportions; ammonia, seven hundred times its own bulk; carbonic acid its own bulk or volume; therefore there is in nearly all water, more or less of these gaseous matters. They give to water its sparkling appearance, and agreeable flavor. When water is boiled, then these gases are driven out, and the liquid becomes insipid.

Rainwater, which has passed through the porous soil and strata of the earth, dissolves such portions of its soluble materials as it meets with. The amount of mineral matter thus dissolved, varies greatly, from 1-20th of a grain to 20,000 grains in a gallon.

Common spring and well water contains from ten to sixty grains to the gallon.

The well water of our State is nearly all surface water—that is, water that has passed through the more porous soil, and has been arrested by the more compact layers below. When a well is sunk the water finds its way into the hole in the ground, thus furnishing us our drink.

As the water filters through the soil, it dissolves more or less of the mineral matter with which it comes in contact, as well as organic matter. The latter is particularly bad or unhealthy.

John (you know John, Mr. Editor,) took a bottle of well water into the laboratory, and interrogated it as to what it contained. On adding nitrate of silver it yielded a copious precipitate of chloride of sodium, common salt; oxalate of ammonia revealed quantities of lime; chloride of barium showed marked traces of sulphates; lime found carbonic acid; sulphurated hydrogen gave indications of iron; carbonate of soda revealed large quantities of magnesia; white terchloride of gold brought out a mass of organic matter, of all sorts, a regular soup.

John said he believed that the water was *dirty*, though it appeared perfectly clear and transparent, it was full of dirt. So I think that if folks will *drink well water* they must *drink the dirt too*.—Bloomington, Illinois, Schoolmaster.

THE VILLAGE SCHOOL-MASTER.

Beside yon straggling fence that skirts the way,
With blossomed furze unprofitably gay,
There, in his noisy mansion, skill'd to rule,
The village master taught his little school.
A man severe he was, and stern to view;
I knew him well, and every truant knew;
Well had the boding tremblers learn'd to trace
The day's disasters in his morning face;
Full well they laugh'd with counterfeited glee,
At all his jokes, for many a joke had he;
Full well the busy whisper, circling round,
Convey'd the dismal tidings when he frown'd.
Yet he was kind, or, if severe in aught,
The love he bore to learning was in fault.
The village all declared how much he knew,
'Twas certain he could write, and cipher, too;
Lands he could measure, storms and tides presage,
And even the story ran that he could guage;
In arguing, too, the parson own'd his skill,
For even though vanquish'd, he could argue still;
While words of learned length and thundering sound
Amaz'd the gazing rustics rang'd around;
And still they gaz'd, and still the wonder grew,
That one small head could carry all he knew.

GOLDSMITH.