

completely cured, and the purchaser left to rejoice over his bargain. It appears therefore that even wealth has not been able to secure exemption from the evils of bad ventilation and drainage. Science must come to the aid of money. The effectual manner in which it is possible to do the work when both are combined is attested by Mr. Rawlinson, when he says that gaols are about the best modern examples of artificial warming and ventilation. They are, he says, the only residences he knows of which a man can inhabit, where sewerage, drainage, water supply, warming, and ventilation are at the highest point of perfection. They are incomparably better in these means of health and comfort than many palaces, noblemen's mansions, London clubs, London West-end houses, or than town and country cottages. But there can be no difficulty in agreeing with him that there are no valid reasons why every dwelling place, from a palace to a cottage, should not be as comfortable and as wholesome as a prison. Similar knowledge and intelligence in design and execution, with similar intelligence and care in management, would produce similar results in honest men's houses. There is, however, one practical difficulty in the way of such ventilation as Mr. Rawlinson recommends. It is opposed to economy of fuel, and very expensive, especially in view of the constant increase in the price of coal and wood. The "cheerful fire" in the old English fireplace, so celebrated in song and story, and an admirable ventilator, would be much commoner than it is but for the fact that such a fireplace will require three times as much fuel as a modern grate or stove. In our severe climate the objection to open windows and open fireplaces on the score of economy is still stronger than in England. As an offset to this, however, smaller openings in cold weather suffice to admit all the air required, and with care and attention a great deal may be done in the severest weather to keep the air of the house healthful without sacrificing warmth. But to do this discreetly, some practical knowledge of the subject is necessary, and this brings us back to the hope we expressed at the outset, that so necessary and important a part of education may receive the attention to which it is entitled. With a thorough understanding of general principles, every one will soon learn to regulate such matters for himself, and architects will be forced to construct dwellings in such a manner as to conduce to the health and comfort of the inmates.—*Mont. Gazette.*

4. PLANT TREES.

The Gold Hill, Nevada, *Daily News*, says: "In various parts of the country efforts are making to stimulate the cultivation of forest trees, and to check the reckless and wasteful destruction of woods for which Americans have been distinguished. California has engaged a professional arboriculturist, at a salary of \$15,000 a year, to superintend the selection and planting of trees in that State; and if the man is a master of his business, the money paid to him will be well invested. The legislatures of several States are moving in this matter, which commends itself to the favourable consideration of every practical mind.

IV. Papers on Practical Education.

1. TEACHING FROM REAL OBJECTS.

Much has been written within the past few years on the best methods of teaching the younger class of scholars, and nothing has contributed more to improve those methods than the introduction into the school-room of material objects, to be carefully examined and subsequently described. This exercise has been carried to a greater extent in the juvenile schools called *Kindergärten* than in any others, though it has been by no means confined to them, nor was the idea first suggested by the Germans. The writer well remembers exercises of this kind in a school of which he was a member over thirty-five years ago, and which redounded greatly to his own benefit, as they no doubt did to that of all who participated in them. The objects selected were nearly always natural, and he vividly recalls a very close examination which he then made of an expanded chestnut-burr which was to be the theme of his little essay on one occasion. Ever after, if not before, he too could, with the poet,

— "in the rugged burr a beauty see."

This exercise is better than any other calculated to cultivate habits of close attention, at a period when such habits are most easily acquired, and to do away forever with all possibility of those loose and superficial ones, which characterize most people throughout life, leading to continual inaccuracy and consequent misapprehension of the facts of nature and of life.

Many years after the little exercises alluded to above, the writer was teaching in a country school in Pennsylvania, which was situated in the midst of a pleasant grove—just the kind of situation, by-the-by, for a school house. Sometimes the interest of the

younger scholars in their column of the multiplication table or the spelling lesson would flag. On such occasions he found no other means of stimulating them so successful as the promise of half an hour in the woods, where they could collect wild flowers and acorn cups, and, in the fall, the beautifully tinted autumn leaves. This promise almost universally insured perfect lessons from the whole class, who were generally ready for recitation before the hour for it arrived. On their return they were allowed to lay down a scalloped maple leaf or a sinuous oak-leaf on their slates, carefully to draw the outline, and then delineate the larger veins and the stem. This exercise was to them a source of never-failing pleasure; and while, instead of interfering with the other lessons, it secured a better performance of them, it also cultivated admirably the organs of form and colour, thus training the imagination and developing æsthetic tastes as no other exercise could. I suggest it to teachers, in the hope that some of them may taste its efficacy. — *Z. in Pennsylvania School Journal.*

2. TEACHERS' RULES.

1. Read these rules every morning.
2. Ventilate the school-room.
3. Inquire after absent scholars.
4. Remember the home lessons.
5. Insist on a quiet and orderly entrance and exit of the scholars, and on a proper deportment in and out of school.
6. Teach a proper manner of sitting, standing, and walking, especially while reciting.
7. Keep your scholars out of mischief, by keeping them employed.
8. Be orderly, and insist on order.
9. Never open or close your school without doing or saying something that will make a pleasing impression—be it by singing with the children, reading to them, showing them some beautiful or curious object, or making some pleasant and instructive remark.
10. Always remember the words of the poet: "Great is the slayer of lions, greater the conqueror of nations, greatest he who governs self."
11. Make the Golden Rule familiar to all; and
12. Let the only rule for the school-room be, DO RIGHT!—"PEN," in the *Chicago Schoolmaster.*

3. INCREASE OF TECHNICAL EDUCATION IN GERMANY.

The tendency towards technical instruction is rapidly growing in Germany. Very successful are their schools for printers, in which the pupil is taught not only the theory and practice of printing, but knowledge of other languages and the types of all languages which he may be apt to meet in the exercise of his trade. Beside these schools, there has lately been established at Leipsic one for booksellers. Three years' study is enjoined by the course, which takes in both the literary and commercial phases of the business. The studies prescribed are terrifically numerous and comprehensive. There are the ancient and modern languages, natural sciences, mathematics, the sciences of commerce, geography, drawing, writing, bibliography, booksellers' technical information and business management, history, statistics, æsthetics, debate, elocution and the types and written characters of all languages. With acquirements like these the book-selling trade will be not merely a trade, but a most worthy and dignified profession. Nothing could be more hopeful and liberalizing in all directions than such accurate technical education.

4. MANNERS.

The difference between the true manner and the false, is just that between the real features and flesh of the face and a mask. So all effective cultivation of manners must begin with man. Make him generous, intelligent, refined, affable, sympathetic, and his actions will naturally tend to politeness as the smoke curls upward. True, this is not all; but this is the alphabet of which all else is application. Having these, it needs but a constant effort to express them in the simplest, noblest, most natural manner, to acquire the best manners.

[Continued from page 28.]

23rd, 24th, 25th. Fog, 30th. Snow, 1st—3rd, 7th, 8th, 10th, 11th, 13th, 15th, 18th—23rd, 26th—28th, 30th. Difference of mean temperature from average of 11 years for December = -8° 32m., an unusually large variation.

HAMILTON.—Burlington Bay frozen and navigation suspended 12th, sleighing began 20th. Wind storms, 13th, 14th, 21st, 28th. Snow, 1st—4th, 6th, 8th—14th, 15th, 18th—23rd, 25th—30th. Rain, 2nd, 7th.

SIMCOE.—Wind storm, 21st. Snow, 18th, 20th, 21st, 27th, 30th. Rain, 3rd. The last week or ten days of December said to be the coldest known in this region for several years.

WINDSOR.—Lunar halo, 6th, 10th, 14th, 17th. Meteor in E., towards H., 11th; meteor in E., towards S. E., 20th. Wind storms, 13th, 14th, 19th, 21st, 23rd, 25th. Snow, 1st, 19th, 21st, 23rd, 26th, 30th. Navigation on the lakes closed on the 4th, the river ports open about a week later. The temperature has not been so low on the Detroit River for many years as during this month.