

naces heat the air—it would require about twenty-three times the amount in the external atmosphere.”

In concluding my remarks on ventilation, I give the common and simple test for excess of carbonic acid. Fill an eighth oz. vial with pure water (rain or distilled); empty out the water in the room, the air of which you desire to test. Emptying the bottle of water allows it to fill with the air of the room. Pour into the bottle half an oz. clear lime water and shake thoroughly. If there is no perceptible milkiess or turbidity the air does not contain more than eight parts carbonic acid in 10,000. If a half oz. of lime water shows turbidity in a six oz. bottle, there is at least eleven parts in 10,000; if the same in a two oz. bottle shows turbidity, it indicates upwards of forty parts in 10,000.

WARMING.

The usual method of warming rural schools is by a cast-iron box-stove placed near the front door. In a few cases it is screened to protect the pupils whose seats are near the stove from direct radiation of the heat; but usually no such protection is provided; nevertheless, pupils—salaman-ders they might be called—are found willing to sit all day in close proximity to the hot stove. Some teachers, pupils, and parents do not seem to have the least idea of the great danger of sitting for hours in a temperature of 100 degrees, and then running out into the cold, with little or no extra wrapping. If pupils have to sit near the stove trustees should see that it is screened by some means. The *Scientific American* has highly recommended an open ventilating stove called the “Fire on the Hearth;” and I have read strong recommendations by Prof. Johonnot, author of “School Architecture,” and some Normal School Principles, of that or a similar ventilating stove for use in schools.

It is evident that a heater combining the advantages of a box-stove and an open fire-place, is a *desideratum* for the school-room. This is a point which I hope will be discussed at this meeting.

Not many rural schools are supplied with a thermometer. Where it is supplied it must usually be regarded as more ornamental than useful. I knew of one case, but only one, where the “stove monitor” took his stoking orders, not from the teacher, but from the silent monitions of a thermometer. His instructions were to keep the mercury between 63 and 70 degrees. Every school-room should have one or two thermometers, not for show but for daily use. Teachers should be particular that no child should sit long in a part of the room that is either much too hot or too cold.

A few old-fashioned teachers still retain a practice that was once quite common—that of writing, classifying and numbering the “Rules of the School,” and posting them up in the room. The practice is becoming obsolete, because the modern teacher is finding out that there is more law and rules written in the heart and conscience of a child than he can post on the back of the biggest door. But I once saw a catalogue of “Rules, Offences, and Punishments,” that had in it a rule, not written in the conscience of the average school-boy, and which I fear, does not often cross the mind of many a better teacher than the maker of the rule. It was this: *No scholar may sit in school with wet feet.* How do you enforce this rule? “When I think occasion requires it, I say, after assembling: ‘All in the room with wet feet stand up.’ Those who stand have either to put their stockings under the stove or go home to change them.” If such a rule as this were generally observed, children would become less careless about getting their feet