

when tried in many hundreds of houses, and is adapted to our climate and wants.

"§ 11.—There shall be no gully inside a house in cellar, or basement or otherwise, unless absolutely necessary. Where such gully cannot be avoided, it shall be properly trapped, and the outlet pipes shall not pass directly to any drain or sewer, but shall be disconnected therefrom by passing through the wall to the outside of the house, and there delivering with an end open to the air over a suitable trap. Subsoil or land drains shall also have a similar break or disconnection between them and the drain or sewer."

This is an excellent regulation, perfectly adapted to all climates and localities. It is rendered necessary by the uncertainty of keeping such gully traps supplied with water, when not often used.

The above is the last of the "Regulations" under the Uppingham By-laws. But some of these by-laws are worthy of notice. No. 2 is as follows: "Every person erecting a new building shall cause all rain water to be so drained or conveyed from the roof of any building as to prevent its dripping on the ground and causing dampness in the walls." This is sound, and applicable as well here as in England.

"By-LAW No. 3.—Every person who shall construct a water-closet in a new building shall construct such water closet or earth closet in such a position that one of its sides at the least shall be an external wall, and no part of such water closet or earth closet shall be situated beneath any habitable room."

It is doubtless very desirable to locate water-closets against an external wall, for the purpose of giving ample ventilation to the apartment. But in well-built houses we do not consider this as absolutely essential, especially if to be tenanted by a class of people of cleanly habits, who can be depended on to take good care of their premises. But whenever closets are provided in tenement houses, the immediate access to outer air becomes more essential and should always be provided. Such a situation adds much to the comfort of the housekeeper in any case, and should never be sacrificed where it is possible to attain it. We do not see the necessity, however, of prohibiting water-closets "under any habitable room" in houses that are well built and likely to be well taken care of. Air-drafts should always be provided to change and circulate the air around them. These safeguards are very important, but hardly enough to justify an interior location when the quality of work and style of fixtures are not first-class. Ordinary cheap water-closets, inadequately flushed with water, such as the majority of "pan" and "hopper" closets now in use, cannot fail to be nuisances anywhere inside the house walls, and the farther out we push them the better off we shall be. Yet we firmly believe that a really good fixture, whether one or other of several good varieties, if well cared for and provided with air draft around it, can be made a wholesome thing, even in the middle of a house when necessary. A want of care in the housekeeper will ruin the good name of the best fixture in the world, for we cannot expect servants and children will always be careful in their use; and no invention yet devised by man will compensate for allowing drops of urine to be spattered about on the floors or wainscoting, to pollute the air with its rapid decomposition.

The Uppingham engineer recommends soil pipes to be put outside the house walls. Our climate forbids putting water closets in towers or projections outside the walls of the house, and as we must keep them and the soil pipes also inside to avoid frost, it behoves us to be all the more careful in their workmanship and in their daily use and cleanliness, for this very reason. All parts should be made readily accessible to the housemaid's sponge and hot water, and a frequent use of these articles insisted on. Simplicity of construction is a merit never to be lost sight of in this regard.

HOW THE ANCIENTS ATE.—Two or three thousand years ago late suppers were not fashionable, as in the present degenerate age. The noble specimens of humanity of that day, whose deeds of valor and other wonderful achievements still inspire our respect, after a score of centuries, never formed the acquaintance of dyspepsia, that hydra-headed monster which renders miserable the lives of a large proportion of civilized human beings at the present day. This fact may be fairly attributed, in a great part at least, to the simple dietetic habits of those pioneers of science, art and civilization. Those noble Grecians who were the compeers and contemporaries of the great Hippocrates, the acknowledged father of medical literature, knew nothing of the elaborate courses, the infinite varieties, and the exquisite indigestibility of modern fashionable dinners. At that age of the world, man took but two meals a day, as do

some at the present, a fact which is clearly stated in the writings of Hippocrates and other medical authors; from which it will be readily seen that in adopting the two-meal system one is but returning to the good old ways of his forefathers, rather than adopting any new or untried theory.

STRAWBERRIES AND CONSTIPATION.—Professor F. H. Storer, of Harvard University, in a communication to the *Journal of Pharmacy*, calls attention to the fact, not generally known (and which certainly would scarcely be expected), that ripe strawberries are very apt to induce constipation. He remarks that in the United States particularly, "where an immense and well-nigh universal consumption of this fruit is coincident with the setting in of hot weather, the constipating action of the berry is complicated, and, as it were, increased by the excessive waste of water from the body, by perspiration, which occurs at this period; and there can be little doubt that, taking the two causes together, the strawberry season—though perhaps beneficial to some constitutions—is the occasion of much ill-health among the American people."

Educational.

SWEEPING REFORM IN TEACHING.

Enlightened Boston has taken the initiative to abolish the old and prevailing method of school-teaching, which was, and still is, to confine the principal work of the teacher to hearing recitations from text-books. In some schools this is abused to such an extent that the teachers are ignorant of the subjects, and think they have done their duty if the pupils can thoughtlessly and in a parrot-like manner recite their lessons, no matter whether the meaning of the same has been understood or not. But this is not all; to the great credit of Boston, be it said that the spelling-books and the grammars have been abolished in her schools; that the pupils will be taught by making them see and think, and that the teachers will be obliged to give talking lessons, so as to teach correct speaking; to teach the alphabet and spelling orally and by pictures, plants, animals, and reference to the children's everyday life and experience; to teach grammar, not by parsing and other technical work, but by lessons in composition, the use of capitals, letter-writing, arrangement of sentences, etc.

The lower classes will receive instruction in regard to the form, color, and other properties of objects; next in natural history of minerals, vegetables, and animals grouped by easily observed habits, and hygiene, especially of the human body. In the lower classes oral instruction will largely predominate, and also in the higher classes, only not to such an almost exclusive extent. Much of the time formerly given to geography will be devoted to natural philosophy and physiology, and very wisely, as man is more interested in his own body and his immediate surroundings, than in far-off countries. Biographical and historical sketches will be taught to the higher classes, but only to such an extent as may be useful for practical life or for forming their characters, as much time will be devoted to experiments in physics and technology.

In order to aid the introduction of the metrical system, the example will be followed which the Netherlands adopted fifty years ago, and by which they have successfully introduced it without the least trouble, namely, to teach the metrical system to the lower classes in the public schools, not by books, but from the measures themselves, and from the metrical apparatus. It is interesting to see how comparatively very young children attain clear notions about measures when they are allowed to verify that, for instance, 10 decimeters make 1 meter, or 10 deciliters of sand go exactly into 1 liter, and so on for other measures. The main advantage is that such practical trials impress the memory in such a way that the lessons are remembered while those from books learned by heart are most always forgotten when needed in practical life.

Our contemporary, the *Scientific American*, makes a few pertinent remarks on this subject, which we copy in closing. It says: "This method labors under one serious, we fear fatal, difficulty—the teachers will have to know something. Their knowledge will have to be real 'live' knowledge, not dead verbiage; and they will need to know a good deal about the natural, social, and industrial life that the children come in contact with outdoors and at home. Such knowledge is not to be gained from books; and it is hard to turn a book student into a practical observer. We sincerely hope, however, that the teachers of Boston will succeed in their difficult task, and demonstrate to the rest of the world the feasibility of this promising and long needed reform."