

failed; and in political economy there were only ten who presented themselves for examination. In drawing and the history of art "the number of candidates was too small to warrant general observations," and there were only four candidates in music.

The training of women in the duties of domestic economy is now attracting great attention in England, and an institution is soon to be established under the patronage of the Earl of Shaftesbury, and other distinguished philanthropists, for the purpose of teaching the art of housekeeping. Lessons in cookery and baking bread are to be given, and lectures are to be delivered on food, cooking, house-keeping, the laws of health, and other subjects of importance.

5. COMPULSORY EDUCATION.

Wendall Phillips is a firm believer in compulsory education. He says:—

"I do not believe the State will ever do its duty until it fits the man to get his bread. I think the State is bound to give to the child of every man in the community, poor and rich, the opportunity of a book education, and of learning a trade, and in the last years of his apprenticeship he should get his living out of it. We have hitherto elevated the brain until we starved the very feet. The school system of to-day does not contemplate the fact of a man having a stomach, and needing to be able to get something to put into it. The education of to-day is a monster; it is almost as bad as that of the lower classes in England, who know only how to use a spade or watch a spindle."

IV. Miscellaneous.

1. ODD CHANGES OF MEANING.

A correspondent of *Notes and Queries* writes as follows of the changes of meaning that often take place in the lapse of time in words and phrases:—

"The first verse of Dean Whittingham's version of the 114th Psalm may be quoted as a curious instance of a phrase originally grave in its meaning becoming strangely incongruous:—

"When Israel by God's address
From Pharaoh's land was bent,
And Jacob's house the stranger's left
And in the same train went."

—*Manchester Paper.*

"I had just read the above when, glancing at an American paper on my table, I found the following 'from a correspondent':

"Some introductory lines in Southey's 'Thalaba' require correction. They read as follows:

"Who at this untimely hour
Wandering o'er the desert sands?
No station is in view."

"Now this is no longer true. The Great Desert is crossed by a railway, and there are several stations. The editor advises that in any future edition of Southey the present altered state of things should be shown by a note."

Many other instances might be adduced in which a comic effect is produced in a passage of grave and even lofty diction by the use of some phrase which has become slang. Thus in the opening of one of Dean Milman's theological works it is written, "The great drama of the Hebrew dispensation had been played out."

2. SMALL SAVINGS.

Five cents each morning—a mere trifle. Thirty-five cents a week—not much; yet it would buy coffee and sugar for a whole family, \$18 26 a year—and this amount invested in a savings-bank at the end of each year, and the interest thereon at six per cent, computed annually, would in twelve years amount to more than \$670—enough to buy a good farm in the West. Five cents before breakfast, dinner, and supper, you'd hardly miss it, yet it is fifteen cents a day—\$1 05 per week. Enough to buy a small library of books. Invest this as before, and in twenty years you have over \$3,000. Quite enough to buy a good house and lot. Ten cents each morning hardly worth a second thought; yet with it you can buy a paper of pins or a spool of thread. Seventy cents per week—it would buy several yards of muslin. \$36 50 in one year—deposit this amount as before, and you would have \$1,340 in twenty years; quite a snug little fortune. Ten cents before each breakfast, dinner and supper—thirty cents a day. It would buy a book for the children. \$2 10 a week, enough to pay a year's subscription to a good newspaper. \$109 59 per year—with it you could buy a good melodeon, on which your wife or daughter could produce sweet music, to pleasantly while the evening hours away. And this amount invested as before, would in forty years produce the desirable amount of \$15,000.

Boys, learn a lesson. If you would be a happy youth, lead a sober life, and be a wealthy and influential man—instead of squandering your extra change, invest it in a library or a savings bank. If you would be a miserable youth, lead a drunken life, abuse your children, grieve your wife, be a wretched and despicable being while you live, and finally go down to a dishonoured grave—take your extra change and invest it in a drinking saloon.

3. WHY TIMBER IS PAINTED.

When water is applied to the smooth surface of timber, a thin layer of the wood will be raised above its natural position by the expansion or swelling of the particles near the surface. In colloquial phrase, working men say that when water is applied to a smooth board, the grain of the timber will be raised. Every successive wetting will raise the grain more and more; and the water will dissolve and wash away the soluble portions with which it comes in contact. As the surface dries, the grain of the timber at the surface, having been reduced in bulk, must necessarily shrink to such an extent as to produce cracks. Now, if a piece of oil-cloth be pasted over the surface, the timber will be kept quite dry. Consequently the grain of the wood will not be subjected to the alternate influences of wet and heat. As it is not practicable to apply oil-cloth already made, a liquid or semi-fluid material is employed for covering the surface, which will adhere firmly, and serve the purpose of oil-cloth in excluding water that would otherwise enter, to the injury of the work. Metallic substances are painted to prevent oxidation or rusting of the surfaces which may be exposed to moisture.

It is of primary importance to make use of such materials as will form over the surface a smooth and tenacious pellicle, impervious to water. Any material that will not exclude water sufficiently to prevent the expansion of the grain of the timber, or the oxidation of metallic substances, must be comparatively worthless for paint. Linseed-oil possesses the property of drying when spread on a surface, and forming a tenacious covering, impervious to water. Spirits of turpentine, benzine, benzole, and certain kinds of lubricating oil, all of which are frequently used in preparing paint, will not form a covering sufficiently tough and hard to resist the action of the water; for which reason, the paint that is made by employing these volatile materials will be found comparatively worthless for outside work. A pigment is mingled with the oil to prevent the timber to which the paint is applied from absorbing the oil. The design is not to saturate the wood with oil, but simply to cover the surface with a coating resembling a thin oil-cloth.

V. Educational Intelligence.

—Chicago pays her teachers according to their efficiency, making no distinction between males and females.

—Boston expends \$30,000 annually for musical education in its public schools.

—Virginia has 2,800 public schools in operation under the new school law.

—New Hampshire, Michigan, California, and Texas have determined to try the experiment of compulsory education.

—NORMAL SCHOOLS.—We are happy to observe that the organization of Normal schools, those indispensable agencies in the management of any system of public instruction, is attracting deserved attention among our friends in the South. In other sections of the country much progress has already been made towards providing for the education of teachers. Illinois has a Normal University, with an endowment of \$300,000. New York has eight Normal schools, for the support of which \$150,000 are appropriated annually. Massachusetts has five, Vermont three, and New Jersey and Connecticut each one.

—TEACHERS' INSTITUTES.—The value of Teachers' Institutes has been so conclusively demonstrated, that in some of the States these associations are encouraged and sustained by annual appropriation. New York expends \$20,000 a year for their maintenance; Maine, \$4,000; Connecticut, \$3,000; Massachusetts, \$3,000, and Minnesota, \$2,000. By-law warrants on the county treasurer, in annual sums of about \$200, are honoured, in support of institutes, in New Jersey, Iowa, Michigan, Vermont, Indiana, Arkansas, Ohio, California, and Pennsylvania.