

the construction and conduct of their institutions of learning, even a few of the principles that sanitarians all agree upon, we would at once see a reduction in those forms of disease which are traceable to their present neglect. —C. R. Agnew, M.D., in *The Teacher*.

STUDYING UNDER DIFFICULTIES.

Four or five years later she received her first introduction to mathematics, by one of the most curious accidents that could be imagined, through a fashion-magazine. At one of the tea-parties given by her mother's neighbours, she became acquainted with a Miss Ogilvie, who asked her to go and see fancy works she was engaged upon. "I went next day," Mrs. Somerville writes, "and after admiring her work, and being told how it was done, she showed me a monthly magazine with colored plates of ladies' dresses, charades, and puzzles. At the end of a page I read what appeared to me to be simply an arithmetical question; but in turning the page I was surprised to see strange-looking lines mixed with letters, chiefly X's and Y's, and asked, 'What is that?' 'Oh,' said Miss Ogilvie, 'it is a kind of arithmetic—they call it algebra; but I can tell you nothing about it.' And we talked about other things; but, on going home, I thought I would look if any of our books could tell me what was meant by algebra. In Robertson's 'Navigation,' I flattered myself that I had got precisely what I wanted; but I soon found that I was mistaken. I perceived, however, that astronomy did not consist in star-gazing, and, as I persevered in studying the book for a time, I certainly got a dim view of several subjects which were useful to me afterward. Unfortunately, not one of our acquaintances or relations knew anything of science or natural history; nor, had they done so, should I have had courage to ask any of them a question, for I should have been laughed at." —From "*A Sketch of Mary Somerville*," in *Popular Science Monthly* for May.

THE VALUE OF SLANG.

"Slang has this value, that it shows how language grows. The English tongue is so

vigorous that it seizes whatever it needs for growth, just as it did in its infancy. At that period direct imitations of sounds were constantly made into words, as the young vandals of to-day use 'chink' for 'money.' Farther on in the growth of the tongue, it took from ordinary speech these imitative words, and converted them to new uses, just as you say 'ticker' for 'watch,' and 'puff' for 'advertisement.' The contraction of words is another stage, as, 'mob' now perfectly good English, was at first merely slang for the Latin *mobile*, the fickle crowd, as 'cab' was slang for 'cabriolet,' and 'furlong' for 'furrow-long,' the length of a furrow, and as 'nob' is slang for 'nobility.'

"We make words from men's names in the same way. I suppose 'boycotting' may be good English soon. 'Martinet,' now indispensable, was the name of an historic general over-strict in discipline. 'Derrick' was a famous hangman of the seventeenth century, in honour of whom the roughs nicknamed the gallows-like hoisting apparatus; and these are two, only, out of scores of cases.

"Many of the words that are now respectabilities of conversation were once gutter-children. 'Drag' for instance, was a thieves' word for carriage, and 'dragsmen' the particular variety of thieves who followed the carriage to cut away the luggage from the rack behind. But 'drag' is good English now for a private coach. 'Kidnap' was thieves' slang for child-stealing; that is, to 'nab a kid.' 'Tie,' for cravat, was as much the slang of low life as 'choker' is now. 'Conundrum,' and 'donkey,' and 'fun' were all slang words, though perhaps not so low. 'Bore' was slang, and so were 'waddle' and 'bother.'" —St. Nicholas.

SOME DEVICES IN ARITHMETIC.

Among the many original and successful devices used here for presenting examples in arithmetic in such a way that the pupils can clearly see the relations, are the following:

The teacher brought into the class a pair of grocers' scales, four paper bags containing coffee, and a large empty paper bag. On the outside of one of the bags of coffee was