Example.

$$\text{1.} \begin{cases} \overset{\text{mult.}}{32} \times \overset{\text{mult.}}{7} = 224 \text{ product, in multiplication.} \\ \text{pro. } 224 \div 7d = 32 \text{ multiplicand; and} \\ 224 \div 32 = 7 \text{ the divisor,} \end{cases}$$

$$\text{2.} \begin{cases} 42 \times 12 = 504 \text{ product.} \\ 504 \div 12 = 42 \text{ multiplicand; and} \\ 504 \div 42 = 12 \text{ multiplier.} \end{cases}$$

$$\text{3.} \begin{cases} 9936 \times 23 = 228528 \text{ product.} \\ 228528 \div 23 = 9936 \text{ multiplicand; and} \\ 228528 \div 9936 = 23 \text{ multiplier.} \end{cases}$$

Such exercises as these, if well explained, will help much in leading scholars to a correct knowledge of the theory of processes. Every step of a process has its principle; and it is the duty of the educator to show them how the principle, worked, produces results; how the numeral truth, that $3 \times 9 = 27$; and how the reverse processes $27 \div 9 = 3$; and $27 \div 3 = 9$, have all a processal agreement. For if 27 be the sum of three nines; it must also be the sum of nine threes. Analyzing 27 by 9, gives $9 \times 9 \times 9 = 27$; and by 3 gives $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 = 27$. Or, taking a larger number, say 9936, to be increased 23 times gives a result of 228528. This product decreased 23 times by 9936 is exhausted—proving the process to be correct; otherwise; 228528 divided by 23, gives 9936; or by 9936, gives a quotient of 23.

A few such examples will lead them to see how processes in multiplying and dividing check and prove each other.

But I would strongly recommend, accustoming them to prove the working of questions or of processes at each step of advance. This is a much better way than proving the ultimate results of processes. It is carrying the proof along with the work. To illustrate this, take the following examples:

$$\begin{array}{r} 42769 \\ 75 \\ \hline \end{array}$$

$$5) \; 213845 \text{ product}$$

$$\overline{42769} \text{ proof}$$

$$7) \; 299383 \text{ product}$$

$$\overline{42769} \text{ proof}$$

$$\overline{3207675} \text{ ans.}$$

$$2993830 \text{ proof of adding.}$$

$$75) \; 3207675 \; (42769$$
$$300 \div 4 = 75 = \text{proof of the multiplying}$$

$$20 + 300 = 320 = \text{do. of the subtracting.}$$

$$207$$
$$150 \div 2 = 75 = \text{do. of the multiplying.}$$

$$57 \div 150 = 207 = \text{do. of the subtracting.}$$

$$576$$
$$525 \times 7 = 75 = \text{do. of multiplying.}$$

$$51 \div 525 = 576 = \text{do. of the subtracting.}$$

$$517$$
$$450 \div 6 = 75 = \text{do. of multiplying.}$$

$$67 \div 450 = 517 = \text{do. of subtracting.}$$

$$675$$
$$675 \div 9 = 75 = \text{do. of multiplying.}$$

In these examples I have put down the different steps of proof for plainness. In training pupils this is not necessary. By a little practice they will be able to test each step at sight—writing no figures, except in very large operations.

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(To be continued.)

Always In Trouble.

There is a variety of gifts in teaching; and most good teachers are characterized by some peculiar qualification which is mainly the secret of their success. And not only does this variety hold good in regard to the means by which teachers succeed, but it also pertains to their deficiencies and faults which prevent success. Some are wanting in firmness and decision; others, in kindness and sympathy. Some have neither judgment nor tact; others are cruel, or indolent, or wanting in enterprise. And thus it would be very easy to make the list a long one. But of all the faculties which characterize teachers, we know of no one whose legitimate fruit, sooner or later, is so surely failure, as what may appropriately be called the faculty of always being in trouble. We do not mean to say that teachers are the only persons who have this faculty. Far from it. It is found in people of every calling in life; but in occupations where its possessors come less in contact with the public and their interests, and whose duties are less delicate. it does not always become so manifest nor produce consequences so lasting and injurious, as in the case of the teacher.

This faculty may not, perhaps, be defined with precision in mental philosophy, nor in the Phrenological Guide, but it surely exists. Of this, fellow teacher, you probably have not the slightest doubt. You have known such teachers. If there is any one thing they can do better than another, it is, to use a common, but a very meaning expression, to get into hot water. It is their forte; and they certainly appear to be very ambitious to magnify their calling. Now it is a very unfortunate combination of qualities and habits that constitutes such a character. It is a constant source of unhappiness to the teacher, making his life one continued scene of fretfulness, trouble, and dissatisfaction; and keeping up a state of discontent and turmoil in the school and neighborhood. And it is the more to be regretted, from the fact that it is all unnecessary and easily avoided by the exercise of a moderate degree of discretion and common sense.

There are teachers who have very exaggerated and very ridiculous ideas of the authority with which they are vested, upon becoming the presiding geniuses of the schoolroom. To make a display of that authority, and to create a sensation, seem to be the leading object of their work. It almost seems as though they supposed schools were established to give them an opportunity to show that they are masters, and that they wield the sceptre in their little kingdoms. Such teachers will fail of doing a good work, and will have trouble for various reasons. They have no true conception of their duties as teachers, and cannot, therefore, discharge them acceptably. In the discipline and management of their schools they will overdo, in every sense of the word. That will engender unkind feelings on the part of the pupils, and make antagonists of those who ought to be friends and co-workers. The malicious and the mischievous will feel irritated and provoked, and will accept the teacher's indiscretions and officiousness as a challenge for a trial of skill and mastery. Even the best of pupils will gradually, and sometimes unconsciously, assume an attitude which, if not hostile, is certainly wanting in cordiality. In such circumstances, the relation between the teacher and pupil promises little good, but much harm. Not only will that degree of harmony and good feeling requisite for a successful school be wanting, but aversion and hostility will continually exist. This will greatly impair and generally destroy the usefulness of any school. It is very true, we admit, there often will be conflicts in school, and the teacher will be obliged to grapple with opposition and insubordination, and to put them down effectually. But no teacher can afford to be continually at war with the adverse elements of his school. The campaign against them may be vigorous and decisive, but it should not be a protracted one. If a peace cannot be conquered speedily, it will be better to change tactics or generals.

This class of teachers are very frequently affected with jealousy of any interference, real or imaginary, with their rights and authority. Of course they are on any thing but pleasant terms with school committees, and the parents of their pupils. Not unfrequently there is a state of mutual recrimination and backbiting. Now, in the first place, every person who proposes to enter the school room as a teacher, should previously understand fully the relation, duties, and rights of committees, teachers, and parents, respectively, as defined by the law