the little distinctions and differences that seem so unimportant when he receives his work without thought from your hands have their proper weight now that he has sat in judgment on another; and what would be a monotonous drudgery to the teacher sitting alone in her room becomes an inspiring exercise, developing thought, judgment, and a juster appreciation of grades and per cents.

Some will object that the corrections will not be honest, but I do not find it so; however, I require the corrector to sign his name in light lead-pencil at the end of the paper and if he makes a mistake which he cannot explain, such as rediting a wrong answer, or debiting a correct one, I take it from his grade.

Lam sure that this plan will work well in all grades above the fourth, and I think in the third and fourth grades of average intelligence it could be used with some modifications.

telligence it could be used with some inclusion and the work in The greatest gain is to the class; which sees all the work in different light for this responsible connection with it. Whether a different light, for this responsible connection with it. they are satisfied with their grades or not they see plainly where the blame, rests, and have no feeling that you just "did it," as sometimes happens.-N. E. Journal.

## A FEW HINTS ON TEACHING FRACTIONS.

## BY AUGUSTA TOVELL, ST. LOUIS.

The use of objects, in any way, is a great improvement on the old methods of teaching arithmetic. But in many cases figures are made the basis of an arithmetical operation, and the objects are

used as a means of explaining the figures.  $\frac{1}{2}$  of  $\frac{3}{2}$  means nothing to a child, and although lines and other objects mug be used to illustrate the manner in which we obtain  $r_{0}^{3}$  for the answer, still he has no definite idea in his mind of what he has done. His imagination can make no picture of  $\frac{1}{2}$  of  $\frac{3}{5} = r_{0}^{3}$ .

If objects, either present or reproduced by the imagination, after having been frequently handled, were made the basis of arithme-tical operations, and the figures made secondary,—that is, a means of recording what has been done,—we should find arithmetic a much more protitable study than it is as we frequently find it taught.

I noticed once, in a primary school, where the number-work was too much abstract, a little girl who did not seem to get on with her arithmetic work as well as she was expected to do. One day some question in money was brought up as a sort of diversion ; she was ready enough at this, and far better than any of the others in the class. I found that she was quite familiar with all the parts of the dollar, and could tell what change to give in almost every case I gave her. I asked her how she learned so much about it, and she told me that her father sometimes let her help him sell in the She was learning arithmetic in the store better than in store. school.

We will place ten apples before a class that is beginning fractions. We will suppose that, from the beginning of their instruction in number, they have been taught to find  $\frac{1}{2}$ ,  $\frac{1}{2}$ , etc. How many apples have we here? "Ten."

How many times can you take two apples out of these ten? "Five times."

Then what is a fifth of ten apples ? "Two apples."

Now one of you may give me three-fifths of ten apples. How many? "Six apples."

Now put each fifth by itself. I want half of your three fifths ; can you give it to me ? Some one will discover that one of the groups

of two must be divided to get this, and will give me three apples. What part of ten apples is one apple? "One-tenth." Three apples? "Three-tenths." Now we will write what we have done. Tell me what you did.

I gave you half of three-fifths, and it was how many apples? "Three apples."

And three apples is-? "Three-tenths of ten apples."

Write it all in figures. " $\frac{1}{2}$  of  $\frac{2}{3}$  of 10 apples = 3 apples =  $\frac{3}{10}$  of 10 apples.

Cut an orange into four equal parts, what part of the orange is one piece ? "One-fourth."

(Holding them together)-What part can I make of two pieces ? "One-half."

If I take one-fourth away from one-half, what shall I have left? "One-fourth."

We will cut these fourths in half; how many pieces have we now? "Eight."

What part of the orange is one piece ? "One-eighth."

Give me half of the orange ; now I must H.ve you four pieces. You may take one-fourth of the orange from my half. How many pieces did you leave me ? "Two."

What shall I call them ? "Two-eighths."

Now see how many eighths it will take to make three-fourths of the orange ? "Six-eighths." How many eighths will it take to make 1, 1, and 1? "Seveneighths."

Now take one-fourth from seven-eighths. Five are left. Five what? "Eighths."

Now get three-fourths and see how many times you can get two-eighths out of it. "Three times."

Now, will some one take three-eighths of the orange and then give me one-half of it. Some child will som see that one of the picces must be cut in half. Now what have I? "You have one and a half eight.s."

Now, I will cut my eighth in half. If I wore to cut all the eighths in half, how many pieces should I havo? Then what shall I call them ? "Sixteenths." "Sixteen."

How many sixteenths make half of three-eighths? "Three

sixteenths.'

Now, how many little boys must I call up here if I give two six-teenths to each of them ? "Eight."

Then how many times can I get two-sixteenths out of sixteen-sixteenths? "Eight times."

The little boys may put down the pieces, and I will take six of them. How many sixteenths are there left ? "Ten."

I have some pieces of paper; each of them will hold just three-sixteenths of the orange. How many pieces will it take to hold the ten-sixteenths? "Four."

Are all the pieces full ? "No; one has only one-sixteenth on it." If a piece of paper holds three-sixteenths, what part of a piece will it take to hold one? "One-third."

Then we will tear off one-third for this odd sixteenth. Now, tell me how many of my pieces of paper I have used. "Three and onethird of them.

How many thirds would that make ? "Ten thirds."

If we were to take our ten-sixteenths and put them together in twos, how many would we have, and what should we call them ? "We should have five-eighths."

How many times could I get three-sixteenths out of five-eighths? Three and a third times." Or what ? "Ten-thirds times."

Now we will write:  $\frac{19}{10} \div \frac{1}{10} = \frac{10}{10}$ ; or,  $\frac{1}{9} \div \frac{1}{3} = \frac{31}{10} = \frac{10}{10}$ . It will be seen that in this way all the operations of fractions can be brought in.-N. E. Journal of Education.

## for Friday Afternoon.

## SPELLING REFORM.

"Spell Phthisic," (said our amiable and most conventional teacher, whom we all liked). Jim, a little cunning rebel, as he was,

answers, "T-i-s-i-c," shid the teacher, and the dialogue went on. "Why do you spell it with a *pth*?"

"To show that it is from the Greek, and means consumption."

"Couldn't we know it to be from the Greek and meant consumption without the pth ?"

ary for it." "And if you spell it with a *pth* you needn't turn up the dictionary, need you?" "Perhaps you could, but you would have to turn up the diction-

"No, you blockhead, that is to say, if you know Greek, the form

of spelling would tell you that it was Greek." "Do English people generally know Greek before they learn to spell English?"

"Of course not. What a foolish question !" "Well, why did they make the word so we have to learn Greek spelling before we learn English spelling ?"

"Why, because that is the right way to spell; who ever heard of it being spelled another way? And when you learn Greek it will strike you with great pleasure to see how simple the spelling and meaning of Phthisic would have been had you only known Greek before you learned to spell."

"Do all English people, then, learn Greek after they learn to spell so as to be struck with this great pleasure ?"