PRIMARY NUMBER WORK.—Continued.

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In teaching addition in Grade II, use the combinations learned earlier. For example, they have learned

9+2=11
8+3=11
7+4=11
6+5=11

When they see a 9+2 they have a mental picture of 11. Now teach that a 9+2 or a 2+9 always give a 1, that is when given 19+2, they must think of the next number ending in 1. Lead them to see the number is 21. As busy work have them make a list of the numbers ending in 1 that come after 29, 39, 49, 59, 69, 79, 89, 99. Then have the class write the numbers ending in 1 that come after 22, 32, 42, 52, 62, 72, 82, 92. A number drill on the nines and twos is now in order, e, g.,

19+2 62+9
12+9 72+9
49+2 89+2, etc.

The numbers ending in 2, 3, 4, 5, 6, 7, 8 and 9, may be taught in the same way.

Subtraction is taught directly from the addition table. Ask for two numbers that when added will give 13. You may be given 9+4=13. Put it on the board in the following way:

9+
4
—
13

Now let us take 4 away from 13 by erasing the 4. What have we left? Ans. 9. Ask a pupil to name the number that was taken away from 13. He will answer 4. What have we left? Ans. 9. Now put it down as a question in subtraction

13 —
4
—
9

Follow this up by taking 4 from 23; 4 from 33, etc. Then 13—9 will give a 4, because 9+4=13; 23—9 will give 14 because 14 is the 4 below 23. In subtraction lead them to think that they must look for the 4 that comes below the number.

As busy work have 4 subtracted from all numbers ending in 3, and 9 subtracted from all numbers ending in 3. You see I have chosen 13 as an illustration; the idea may be utilized in all subtraction work.

It is in the second grade that multiplication is begun in earnest.

The class has built up the table of twos as far as 5×2=10. They will readily add a 2 to 10 to obtain 12. Well, then, how many twos to make 12? Ans. 6. Have this added to the list they have. Add 2 to each result until the class have built the table to 12×2=24. Follow this by questions in multiplication using 2 as a multiplier,

e. g.,

6×	3×	9×	10×	12×	7×
2	2	2	2	2	2
—	—	—	—	—	—

Division is taken up as soon as the multiplication has been mastered. Divide the even numbers first. That is 2)4÷ 2)8÷ 2)12÷ 2)2÷ As has been previously stated lead them to see 4 divided by 2 will give 2 because 2 is multiplied by 2 to obtain 4. Next divide the odd numbers by 2. Drill in the idea that the only remainder that is left when a number is divided by 2, is 1. Each table is taken up in this way. In each case teach that the remainder must be smaller than the number by which the number is divided.

After the tables of 2, 3 and 4, have been learned, drills may be commenced.

MULTIPLICATION DRILLS.

1. Have a pupil choose a number. He tells the class it may be divided by 2. The class are to guess what number he has chosen. He calls on the pupils who have raised their hands, until he calls on one who guesses the right number. The pupil will answer in this way. 14 divided by 2 is 7. No. 22÷2=11. No. 16÷2 is 8. Yes. The last pupil chooses a number. Perhaps one that may be divided by 3.

2. A child represents a number; e. g., he represents 8. He tells the class that the number he stands for may be divided by 2 and by 4. The child who guesses may choose 12. He tells the class the number is divisible by 2, 3, 4, 6.

3. Each child has a box and nine two-inch squares. The child puts a number on each card, using the numbers from 1 to 9. These are to be used in class. The cards are mixed up. The teacher chooses a pupil and then a table. She may choose 3. The pupil picks a card from his box and gives the product when multiplied by 3. For instance, the card he selects has 8 on it and he answers 8 multiplied by 3 is 24. The next may