

struction of Mathematics depends. Following the Table of Combinations on Numbers from One to Twenty, have the pupils write out the Combinations of some of the numbers each day, until all the numbers with their Combinations are understood.

Pupils should be required to learn these Numbers and their Combinations so thoroughly that they *can readily repeat orally, from memory*, all the different Combinations that make each of the Numbers from One to Twenty.

Teach Numbers higher than Ten on the basis of ten as a unit.

Children may be led to see the meaning of Twenty (Two Tens, $10 + 10$), Thirteen (Three and Ten, $3 + 10$), etc.

All the Combinations with Ten, in going from Ten to Twenty, may be nicely shown by removing all the tablets from the lower series in the Numeral-Frame (Fig. B) and then inserting the block

with the Number-Form "TEN"  upon it, and moving it along, so as to come under each number, in the upper series in regular order ; *e.g.*,

$1 + 10$, $2 + 10$, $3 + 10$, $4 + 10$, $5 + 10$, $6 + 10$, $7 + 10$, $8 + 10$, $9 + 10$, $10 + 10$.

The "ten-tablet" should be moved along so as to do this in regular or natural order, the numbers in the upper series being placed there out of their regular or natural order :—1, 3, 5, 7, etc.

When a pupil knows a number, he knows it in all its combinations in addition or subtraction.

When he has learned by tuition, that $8 + 5$ are 13, he thinks of the eight and the five as wholes ("complex units"), and of the number thirteen as a whole ("Unity") ; he will also know that each of these numbers is composed of a certain number (as the case may be) of *single or primary units* (ONES).

A clear idea of unity is necessary to Number-Teaching.

"The idea of a unit can begin only from analysis of a whole ; it is completed only by relating the part to the whole, so that it is finally conceived at once in its isolation and its unity to the whole."