18. The use of brackets is so frequent in Algebra, that the rules for their removal and introduction must be carefully considered.

We shall first treat of the *removal* of brackets in cases where symbols supply the places of numbers corresponding to the arithmetical examples considered in Arts. 14, 15, 16, 17.

Case I. To add to a the sum of b and c.

This is expressed thus: $a+(b+c)$.

First add b to a, the result will be

$$a+b.$$

This result is *too small*, for we have to add to a a number *greater* than b, and greater by c. Hence our final result will be obtained by adding c to $a+b$, and it will be

$$a+b+c.$$

Case II. To take from a the sum of b and c.

This is expressed thus: $a-(b+c)$.

First take b from a, the result will be

$$a-b.$$

This result is *too large*, for we have to take from a a number *greater* than b, and greater by c. Hence our final result will be obtained by taking c from $a-b$, and it will be

$$a-b-c.$$

Case III. To add to a the difference between b and c.

This is expressed thus: $a+(b-c)$.

First add b to a, the result will be

$$a+b.$$

This result is *too large*, for we have to add to a a number *less* than b, and less by c. Hence our final result will be obtained by taking c from $a+b$, and it will be

$$a+b-c.$$

Case IV. To take from a the difference between b and c.

This is expressed thus: $a-(b-c)$.

First take b from a, the result will be

$$a-b.$$

This result is *too small*, for we have to take from a a number *less* than b, and less by c. Hence our final result will be obtained by adding c to $a-b$, and it will be

$$a-b+c.$$