SECTION XII.

To convert direct motion in a given curve, and of velocity either equable or variable by a given law, into alternate rectilinear motion; of velocity similar to that of the original motion, either equable, or variable according to a given law, and in the same, or in different planes of direction.

The given movement must be converted into a direct circular movement by some of the methods given in Section X; and the direct circular movement thus obtained, changed into an alternate rectilinear movement, by Section VII.

SECTION XIII.

To convert direct motion in a given curve, and of velocity either equable, or variable by a given law, into alternate circular motion; of velocity similar to that of the original motion, either equable, or variable according to a given law, and in the same, or in different planes of direction.

The given movement will be converted into a direct circular movement, by some of the examples of Section X.; and the movement so obtained, changed into an alternate circular movement by reference to Section IX.

SECTION XIV.

To convert direct motion in a given curve, and of velocity either equable, or variable by a given law, into motion in a given curve; of velocity similar to that of the original motion, either equable, or variable according to a given law, and in the same, or in different planes of direction.

A 14.

If the given movement be converted into a direct circular movement by the methods shewn in Section X, the required movement in a curve, may be obtained from the direct circular movement so obtained by the same Section.