What is Claimed is:

1. A method for knitting and forming a weft-knitted fabric with varying thickness by a flat knitting machine, the method comprising steps of:

driving the flat knitting machine to knit a basic structure by at least one of two needle beds of the flat knitting machine, wherein the basic structure is selected from a single-layer fabric or a double-layer fabric; and

controlling the two needle beds on the flat knitting machine to knit a three-dimensional structure connected with the basic structure, wherein a thickness of the three-dimensional structure is greater than a thickness of the basic structure, the three-dimensional structure comprises two surface layer portions and a supporting portion connected with the two surface layer portions and located between the two surface layer portions, wherein the flat knitting machine is controlled to be temporarily suspended from feeding a supporting yarn at a junction between the three-dimensional structure and the basic structure, thus the junction is without the supporting portion, and the supporting yarn is fed from the supporting portion after the two surface layer portions are knitted with a plurality of stitches.

2. The method for knitting and forming the weft-knitted fabric with

varying thickness by the flat knitting machine as claimed in claim 1, wherein during a process of knitting the supporting portion, the flat knitting machine drives two knock-over bits of the two needle beds to displace and change a size of a mouth of the flat knitting machine, and a height of the supporting portion is not a fixed value.

3. The method for knitting and forming the weft-knitted fabric with varying thickness by the flat knitting machine as claimed in claim 2, wherein when the basic structure is the double-layer fabric, two fabric surfaces of the double-layer fabric are closely attached to each other by tuck knitting or transfer knitting through the flat knitting machine.

4. The method for knitting and forming the weft-knitted fabric with varying thickness by the flat knitting machine as claimed in claim 1, wherein when the basic structure is the double-layer fabric, the flat knitting machine feeds a cross-linking yarn to enable two fabric surfaces of the double-layer fabric closely attaching to each other by an action of the cross-linking yarn, and the cross-linking yarn is without supporting capability.

5. A weft-knitted fabric with varying thickness, comprising:

at least one basic structure, selected from a single-layer fabric or a double-layer fabric; and

at least one three-dimensional structure, connected with the basic structure, wherein a thickness of the three-dimensional structure is greater than a thickness of the basic structure, the three-dimensional structure comprising two surface layer portions and a supporting

portion connected with the two surface layer portions and located between the two surface layer portions, wherein the supporting portion is formed by at least one supporting yarn which is temporarily suspended to be fed at a junction between the three-dimensional structure and the basic structure, thus the junction is without the supporting portion.

6. The weft-knitted fabric with varying thickness as claimed in claim 5, wherein a height of the supporting portion is not a fixed value.