CHAPTER XVI.

Of the Special Uses of the Four Figures.

Section 648. The first figure is useful for proving the properties of a thing.

Section 649. The second figure is useful for proving distinctions between things.

Section 650. The third figure is useful for proving instances or exceptions.

Section 651. The fourth figure is useful for proving the species of a genus.

FIGURE 1.

Section 652.

B is or is not A.
C is B.
.'. C is or is not A.

We prove that C has or has not the property A by predicating of it B, which we know to possess or not to possess that property.

Luminous objects are material.
Comets are luminous.
.'. Comets are material.

No moths are butterflies.
The Death's head is a moth.
.'. The Death's head is not a butterfly.

FIGURE II.

Section 653.

A is B. A is not B.
C is not B. C is B.
.'. C is not A. .'. C is not A.

We establish the distinction between C and A by showing that A has an attribute which C is devoid of, or is devoid of an attribute which C has.

All fishes are cold-blooded.
A whale is not cold-blooded.
.'. A whale is not a fish.

No fishes give milk.
A whale gives milk.
.'. A whale is not a fish.

FIGURE III.

Section 654.

B is A. B is not A.
B is C. B is C.
.'. Some C is A. .'. Some C is not A.

We produce instances of C being A by showing that C and A meet, at all events partially, in B. Thus if we wish to produce an instance of the compatibility of great learning with original powers of thought, we might say

Sir William Hamilton was an original thinker.
Sir William Hamilton was a man of great learning.
.'. Some men of great learning are original thinkers.

Or we might urge an exception to the supposed rule about Scotchmen being deficient in humour under the same figure, thus--

Sir Walter Scott was not deficient in humour.
Sir Walter Scott was a Scotchman.
.'. Some Scotchmen are not deficient in humour.

FIGURE IV.

Section 655.

All A is B, No A is B.
All B is C. All B is C.
.'. Some C is A .'.Some C is not A.

We show here that A is or is not a species of C by showing that A falls, or does not fall, under the class B, which itself falls under C. Thus--

All whales are mammals.
All mammals are warm-blooded.

.'. Some warm-blooded animals are whales.
No whales are fishes.
All fishes are cold-blooded.
.'. Some cold-blooded animals are not whales.