CHAPTER VII.

Of other Forms of Immediate Inference.

Section 533. Having treated of the main forms of immediate inference, whether simple or compound, we will now close this subject with a brief allusion to some other forms which have been recognised by logicians.

Section 534. Every statement of a relation may furnish us with all immediate inference in which the same fact is presented from the opposite side. Thus from 'John hit James' we infer 'James was hit by John'; from 'Dick is the grandson of Tom' we infer 'Tom is the grandfather of Dick'; from 'Bicester is north-east of Oxford' we infer 'Oxford is south-west of Bicester'; from 'So and so visited the Academy the day after he arrived in London' we infer 'So and so arrived in London the day before he visited the Academy'; from 'A is greater than B' we infer 'B is less than A'; and so on without limit. Such inferences as these are material, not formal. No law can be laid down for them except the universal postulate, that

'Whatever is true in one form of words is true in every other form of words which conveys the same meaning.'

Section 535. There is a sort of inference which goes under the title of Immediate Inference by Added Determinants, in which from some proposition already made another is inferred, in which the same attribute is attached both to the subject and the predicate, e.g.,

A horse is a quadruped.
'. A white horse is a white quadruped.

Section 536. Such inferences are very deceptive. The attributes added must be definite qualities, like whiteness, and must in no way involve a comparison. From 'A horse is a quadruped' it may seem at first sight to follow that 'A swift horse is a swift quadruped.' But we need not go far to discover how little formal validity there is about such an inference. From 'A horse is a quadruped' it by no means follows that 'A slow horse is a slow quadruped'; for even a slow horse is swift compared with most quadrupeds. All that really follows here is that 'A slow horse is a quadruped which is slow for a horse.' Similarly, from 'A Bushman is a man' it does not follow that 'A tall Bushman is a tall man,' but only that 'A tall Bushman is a man who is tall for a Bushman'; and so on generally.
Section 537. Very similar to the preceding is the process known as Immediate Inference by Complex Conception, e.g.

A horse is a quadruped.
.'. The head of a horse is the head of a quadruped.

Section 538. This inference, like that by added determinants, from which it differs in name rather than in nature, may be explained on the principle of Substitution. Starting from the identical proposition, 'The head of a quadruped is the head of a quadruped,' and being given that 'A horse is a quadruped,' so that whatever is true of 'quadruped' generally we know to be true of 'horse,' we are entitled to substitute the narrower for the wider term, and in this manner we arrive at the proposition,

The head of a horse is the head of a quadruped.

Section 539. Such an inference is valid enough, if the same caution be observed as in the case of added determinants, that is, if no difference be allowed to intervene in the relation of the fresh conception to the generic and the specific terms.