APPENDIX.

the negative results of an exhaustive process. The question naturally suggests itself whether the construction has been, in the first place, merely the result of a fortunate guess. If it is based upon and has been compounded from elements previously verified, why is it not shown to be so? As it stands, we cannot take the result, and by inverting the order of the reasoning, get at the construction as subjective. No reason for performing the (given) constructive operation is apparent.

tl B

tł

p

n

t!

aı

11

in

cl

ca

th

cc

w

ar

la

 $^{\mathrm{th}}$

of

ki

of

qı

tie

ar

sa

of

N be

tr: ca

st

th

Again, the corollary is stated to be manifest; but, it is certainly not manifest as a corollary to the negative solution of the prop. If the corollary is manifest, it is manifest independently (in itself), and the solution of the prop. might be very well based upon the corollary. By exhibiting the fact stated in the corollary, in the form of a demonstrated theorem, the problem (Prop. I.) might be directly and positively solved in a few lines, and Prop. III. (Theorem) might become unnecessary.

Now, if we suppose the primary purpose of the work was to illustrate the applied method, and that the particular science (chosen for the purpose of illustration) was considered quite subordinate to that purpose, it is much easier to understand how such a form of solution might suggest itself as desirable in this and in some other similar instances. The negative exhaustive process illustrated in this prop. is undoubtedly in some cases of much value, and it may be considered, in some sense, a distinct kind of reasoning; hence, having regard to the primary purpose, it might be thought desirable to exhibit it as illustrating a proposition which from its fundamental character and importance would be more likely to attract attention and interest the mind.

We cannot consider this as furnishing an altogether satisfactory explanation of the form here given to the solution, but it seems to be much more intelligible when so considered, viz., as primarily intended to illustrate the applied method of reasoning.

36