

THE PHILOSOPHICAL REVIEW.

THE RÔLE OF EXPERIENCE IN DESCARTES' THEORY OF METHOD. II.*

IV. DESCARTES ON HYPOTHESES.

IN so far as Descartes admits the utility and the necessity of crucial experiments in physical inquiries, it is already evident that he is at least tacitly admitting the existence of an element of hypothesis in the situation. The "many different ways" in which "any particular effect" may be "deduced" from the principles are really so many hypotheses, all in accordance with general mechanical laws, but between which only further experiment can decide which is the one that gives the true cause. But the obvious problem now arises, how under these circumstances can we ever *know* that we have discovered the true cause? For how can we ever be sure that we have excluded all even of the mechanically possible alternatives? If this problem cannot be resolved the "absolute certainty" which Descartes desires for the whole of his physics will after all extend only so far as the general principles themselves, and not to the details of the explanations offered of particular phenomena. That Descartes is aware of the difficulty is already evident from a remark quoted above:—"experiments themselves often give us occasion to deceive ourselves, when we do not sufficiently examine all the causes they may have." And it is noteworthy that he does not here expect, and nowhere else ventures explicitly to claim, that this difficulty can be in any way met by means of a *priori* deduction. Here and elsewhere it is to *experience* once

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