

We thus see that in the second half of the nineteenth century great changes were effected, not only in the views which the scientific mind takes of nature, but still more regarding the importance and value which philosophers attach to any and every scientific view of nature and to the fundamental conceptions on which it is based.

In the first instance, we find that nearly all the leading ideas employed in scientific theory and explained in scientific text-books have been either replaced or remodelled. Thus the word force has been either more clearly defined and circumscribed in its meaning, all subjective attributes being stripped off which originally attached to it, or it has been discarded and replaced by the term energy. Something similar has happened with regard to the term matter, which has

wart' (1905). He closes his exposition with the following curious words: "A world could be conceived in which no science was possible. That it has come to be otherwise can only appear as an accident. Such an accident is, for us, the regularity of the course of nature in consequence of which our conclusions as to the succession of phenomena, which would have as such only provisional value, acquired practically unlimited value; it does not occur to us so much as even to think of an alteration of the laws of nature, although we cannot say that such alteration were impossible. A second favourable circumstance which places our science practically much higher than it is theoretically, is the similarity of human beings with regard to the intellectual process: were this not so, then what one

individual finds would have no meaning for another. Then not only the real, but also the formal sciences would be impossible. We see, therefore—what is frequently overlooked—that also their possibility depends on a supposition which, fortunately, is practically always fulfilled, although we have no right whatever to expect it. Thus we see that the actual existence of science in the ordinary sense of the word depends on the fortunate, but accidental, reality of two suppositions, to expect which we have no theoretical right whatever. In the foregoing, the ways have been described in which man has tried to gain knowledge: that he has succeeded in this is a mere accident; from our point of view we cannot assert anything more" (p. 141).