almost as unknown¹ as agreement in the latter. There we have an almost universal unity of thought; here unity of thought probably never existed; it is unknown. Popularly we can say that at the one extreme lie knowledge and certainty, at the other faith and belief. There is, however, a very large extent of ground between these two extremes. This is covered by all such intermediate thought as rests partly on knowledge, partly on faith, where certainty is largely mingled with belief. This large intermediate region, where changes and fluctuations are fre- intermediquent and rapid, is the proper home of philosophy, which mathemati-cal science occupies itself with the grounds of certainty and belief, and religion. the origin of knowledge and faith, and the relations in which both stand to each other. Were all our thoughts either purely mathematical — *i.e.*, referring to number, measurement, and calculation, or purely religious-i.e., referring to our individual concerns and personal convictions,----the need of a continued compromise or mediation would be unnecessary, the question as to the grounds of certainty or belief would never arise. But no sooner do we wish either to apply our strict mathematical notions and processes, or to bring our personal convictions into practical use, than the two kinds of thought come into contact, not to say into conflict, and there is need of some theory according to which this contact may be regulated, this conflict settled. And as the occasions for such contact change with the demands of practical life, or

¹ It may be doubted whether this is quite correct, looking at the controversies which have been connected with many mathematical theo-ries—such as the theory of parallel lines, the meaning of infinitesimals,

the correct measure of force. These controversies, however, referred really to applied, not to pure mathematics, and were settled by introducing correcter and more stringent definitions.

20. Philosophy