

THE RIDDLE OF THE UNIVERSE

to-day that ether is a "pure hypothesis"; this erroneous assertion comes not only from uninformed philosophers and "popular" writers, but even from certain "prudent and exact physicists." But there would be just as much reason to deny the existence of ponderable matter. As a matter of fact, there are metaphysicians who accomplish even this feat, and whose highest wisdom lies in denying or calling into question the existence of an external universe; according to them only one real entity exists — their own precious personality, or, to be more correct, their immortal soul. Several modern physiologists have embraced this ultra-idealist view, which is to be found in Descartes, Berkeley, Fichte, and others. Their "psycho-monism" affirms: "One thing only exists, and that is my own mind." This audacious spiritualism seems to us to rest on an erroneous inference from Kant's correct critical theory, that we can know the outer world only in the phenomenal aspect which is accessible to our human organs of thought—the brain and the organs of sense. If by those means we can attain only an imperfect and limited knowledge of the material world, that is no reason for denying its existence altogether. In my opinion, the existence of ether is as certain as that of ponderable matter—as certain as my own existence, as I reflect and write on it. As we assure ourselves of the existence of ponderable matter by its mass and weight, by chemical and mechanical experiments, so we prove that of ether by the experiences and experiments of optics and electricity.

Although, however, the existence of ether is now regarded as a positive fact by nearly all physicists, and although many effects of this remarkable substance are familiar to us through an extensive experi-