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would be difficult to point to a more complete demonstration of the fact that natural knowledge, pursued for its own sake, without any direct view to future utility, will often lead to results of the most unexpected kind and of the very highest practical importance? (*Nature*, Sept. 2, 1909).

We see, then, that undue insistence on the practical utility of science is not historically justified, and that hasty criticism of lines of scientific work as purely theoretical is likely to be very unjust. What practical result may flow from an apparently abstruse and detached investigation no one is wise enough to predict, and inventions usually rest on a patiently established theoretical basis. Minerva-like birth of discoveries is rare. As Prof. Stephenson puts it: "Discoveries which prove all-important in secondary results do not burst forth full grown; they are, so to say, the crown of a structure raised painfully and noiselessly by men indifferent to this world's affairs, caring little for fame and even less for wealth. Facts are gathered, principles are discovered, each falling into its own place until at last the brilliant crown shines out, and the world thinks it sees a miracle."

The ultra-practical man's impatient "What's the use of it?" may be occasionally a sound corrective, since science, as well