

ordinary purposes of life as the proper object and end of science. Nothing could more effectually stop the advancement of knowledge than the prevalence of such views; even the desired *practically useful* discoveries would not be made if researches obnoxious to the fatal question *cui bono* were to be uniformly avoided. . . . Oersted would never have made his great discovery of the action of galvanic currents on magnets had he stopped in his researches to consider in what manner they could possibly be turned to practical account; and so we should not now be able to boast of the wonders done by the electric telegraph. Indeed, no great law in Natural Philosophy has ever been discovered *for* its practical applications, but the instances are innumerable of investigations apparently quite *useless*, in this narrow sense of the word, which have led to the most valuable results."

Dr. A. E. Shipley has recently called attention to two diagrammatic illustrations of our theme. "A few years ago no knowledge could seem more useless to the practical man, no search more futile than that which sought to distinguish between one species of gnat or tick and another; yet that knowledge has rendered it possible to open up Africa and to cut the Panama Canal. This witness," Mr. F. A. Dixey remarks, "is true; and it