The fact is that a great many sensible and honorable men act as if they believe that "the gift of God may be purchased with money," because this, like most false doctrines, contains an element of truth. The element of truth is plain enough. He who is inspired by a Daemon, can not deliver his message, if his bodily needs are not satisfied. It is rank simony—besides being ridiculous—to believe that the offer of a prize of a million will cause a better play than "Hamlet" to be written or finer researches than those of Pasteur to be accomplished; it is not simony but elementary common sense to believe that a nation which condemns poets and research chemists to hopeless poverty is unlikely to breed Shakespeares and Pasteurs.

These considerations are so obvious, their application in the field of art and literature, to *that* manifestation of the Holy Ghost, so universally admitted, that one must suppose the would-be purchasers of discoveries in the field of medicine do not really understand that the operation of the spirit there is comparable with that of the literary or artistic daemon. Perhaps the reason is that no general readers and very few medical men have any sense of the secular continuity of research and its applications. It is not, generally speaking, true that either the rise or decline of a great killing disease, such as tuberculosis or cancer, exhibits discontinuities certainly referable to some one factor. In the popular sense of the words, there is no disease the "cause" of which is more exactly known than tuberculosis. No scientific communications were ever more exact and complete than those in which Koch described and defined the "cause," the living germ, which is responsible for the morbid changes. One might expect—to judge from popular utterances—that failing a knowledge of the "cause" we should be powerless and having such knowledge, omnipotent in our struggle with tuberculosis. An examination of the annual rates of mortality over the last seventy years dispels any such illusion. The discovery of the "cause" has neither accelerated nor slackened the rate of decline. Bubonic plague, again, ceased to be a prime cause of mortality in this country rather more than 200 years before its "cause" was known; knowledge of its "cause" has not enabled us to conquer it in British India. Scarlet fever is (at present) a small factor of mortality, although its "cause" is unknown. Diphtheria, on the other hand, is an important means of death, but its "cause" has been isolated and exactly studied.

From these facts we may infer that the "cause" of a disease, in the popular sense, is but an incident of research, not the goal of a natural philosopher. The professed enemies of research have indeed inferred from some of these facts that laboratory investigation is worthless and, in drawing that inference, have been as illogical as the enthusiasts who conceive medical research as a true adventure of Sherlock Holmes. If instead of reading *about* the work of great investigators we studied the classics of the science themselves, we should find that the great men never expected to pass at once from the isolation of a "cause" to the conquest of a disease—another overworked metaphor of popular medicine. The importance they attached to the discovery of a "cause" was the power it conferred of simplifying the conditions of study, of making it possible to imitate the operations of nature under controlled conditions. We may freely grant that, in fact, at the present time, scarlet fever is a much less formidable disease than diphtheria, although sixty years ago it was probably a more serious disease and that laboratory research has, so far, given us no aid in the struggle against scarlet fever. Even so, in a very real sense, the terrors of scarlet fever are greater than those of diphtheria. The reason is this. The simplification of the issues which the isolation of the bacillus of diphtheria permitted, the consequent possibility of an experimental study of means of immunization, has given us a method of prophylaxis which, however far from perfection it may be, is demonstrably efficient, so efficient that we may be absolutely certain that such rates of mortality as were not uncommon 100 years ago in large populations will never again be seen in a civilized country. We can make no such confident prediction regarding scarlet fever, we have *no* experimentally suggested prophylactic, good, bad or indifferent. If the type of that disease changes again—200 years ago, in Sydenham's day, it was as mild as it is now, sixty years ago it was one of the great killing diseases of childhood—we shall not be much better off than in the influenza epidemic of 1918 and for the same reason. The instances of anti-typhoid inoculation within the sphere of prophylaxis or of salvarsan, within the field of personal cure, are similar. The epidemiological problems neither of the enteric fevers nor of syphilis have been completely solved by the isolation of the "cause," but in each case the isolation has led to a sensible diminution of human misery. But that the isolation of a "cause" shall in fact lead to a right use of the means of discovery which the isolation has rendered possible, another condition must be realized—there must be a man of genius fit to use the tools placed in his hands. It was not the discoverer of the "cause" of enteric fever who devised the vaccine; Ehrlich did not discover the parasite of syphilis. Lister's work would have been impossible without that of Pasteur, but Pasteur could not have done what Lister did. Everybody, I suppose, realizes the greatness of both Pasteur and Lister; nobody wastes time in disputing which was the greater. In the achievement of any great thing many have cooperated; it is