of it a constitutive or explanatory principle. It affords no means of analysis; it determines no specific change; it contributes no formula of relation. At whatever level it appears this conception stands only for the unresolved residuum by which reflection is faced.

Thus in the study of organic life it may be that the biologist is unable to state the facts of development in terms of the known chemistry of the cells, or of the local relation of parts in the segmented ovum and their polarities and bilateralities, or of the influence of external agents upon the organisms; but it is nevertheless inadmissible to formulate the problem in terms of a conception which falls without this whole system of principles and to say that, since the chemical and mechanical conceptions which we are now able to apply to organic development have proved inadequate to the statement of that process in its entirety, we must conceive it as autonomous and treat it in terms of entelechies. mousness is a conception which falls without the domain of science altogether, because it applies to the thing only in its self-dependent totality-with which philosophy deals-and not to the thing in its relations to other things, as science must conceive it. Only in terms of their interaction can the empirical reason explain things at all; and in the case of organic development, as of all other processes, explanation must be through the determination of specific causal relations.

This mechanistic conception of science is of course a purely methodological assumption into which no ontological meaning is to be read. Its nature is misunderstood when, for example, it is called materialistic. The mechanistic conception applies to all facts which fall within the domain of science, whatever the metaphysical interpretation which may be given to them.

ROBERT MACDOUGALL

NEW YORK UNIVERSITY, October 14, 1912

A PROTEST

To the Editor of Science: Permit me to offer an emphatic protest against the closing

paragraph of Dr. Dorsey's letter in this week's SCIENCE (December 6). It is Dr. Dorsey's right, if conscience and judgment impel him, to express disapproval of missionaries in respect to either their purpose or methods or both, but to accuse them of "distortions," made from mercenary motives, is an utterly unjustifiable bit of spite. It not only reveals lamentable ignorance of facts, but betrays that intolerant and biased attitude of mind against which scientific men are supposed to particularly guard, and which in my judgment vitiates Dr. Dorsey's whole argument.

HUBERT LYMAN CLARK

QUOTATIONS

THE EFFICIENCY NOSTRUM AT HARVARD

There has been a great deal of groping in the dark over the problem of raising the quality of our universities and colleges. But light has appeared at last. There will no longer be any futile casting about for improvements here and changes there, no more mere scratching of the surface. Somebody at Harvard has gone straight to the heart of the matter. Indeed, he has solved the whole problem in point of principle, though of course the details of the beneficent revolution he has started remain to be worked out. What has been needed all along has been some simple and yet profound guiding principle, and this is what the new move at Harvard supplies. See that you get your money's worth out of each professor —this is the philosopher's stone, which, firmly and steadily applied, is going to transmute into gold all the baser metal of our university faculties.

Seldom has a great reform been ushered in so noiselessly. "Harvard professors and instuctors," so goes a newspaper account, "are thoughtfully rubbing troubled brows to-day while they ponder over an intricate network of blanks and spaces whereon Assistant Controller Taylor has requested them to record the exact disposition which they make of all time spent in the interests of the university." The assistant controller states that he desires these data for the purpose of using them "as