the Life Question." After a few preliminary remarks he continued:

"What now are we to understand by the word 'Life' in this discussion? A noteworthy parallel is disclosed in the progress of human knowledge between the ideas of life and of force. Both conceptions have advanced, though not with equal rapidity, from a stage of complete separability from matter to one of complete inseparability. Life is now universally regarded as a phenomenon of matter, and hence of course, as having no separate existence. But there still exists a certain vagueness in the meaning of the term 'Life.' Two distinct senses of this word are in use; the one metaphysical, the other physiological. The former, synonymous with mind and soul, at least in the higher animals, has been evolved from human consciousness; the latter has arisen from a more or less careful investigation of the phenomena of living beings. It need scarcely be said that it is in the sense last mentioned that the word "Life" is used in science. The conception represents simply the sum of the phenomena exhibited by a living being.

"Moreover, the progress which has been made in the solution of the life-question has been gained chiefly by investigation of special functions. But the functions of a vital organism are themselves vital. What then is the meaning of 'vital' as applied to a function? Fortunately the answer is not difficult. 'Life,' says Küss, the distinguished Strasburg physiologist, 'is all that cannot be explained by chemistry or physics.' Guided by such a definition the work of the physiological investigator is simple. He has only to test each separate operation which he finds going on in the organism and to declare whether it be chemical or physical. If it be either, then since each function is non-vital, the entire organism must be non-vital also. Hundreds of able investigators, provided with the most effective appliances of research, are now in full cry after the life principle. Naturally, a vast amount of collateral knowledge is accumulated in the process. The quantitative as well as the qualitative relations of things are fixed, and many important facts are collected.

"As a first result of recent work, the living organism has been brought absolutely within the action of the law of the Conservation of Energy. Whether it be plant or animal, the whole of its energy must come from without itself, being either absorbed