That society may draw due benefits from wells of natural knowledge three kinds of workers have to stand side by side. First, the investagator, who, pursuing truth, extends discovery, with little or no reference to practical ends. He constitutes the fountain-head of the knowledge that is for distribution. Other hands may reap the harvest, but his sets and rears the seed. After the investigator comes the teacher. To him it belongs to diffuse the knowledge won. This honourable and difficult task receives its best reward in seeing the small spiritual beginnings of a pupil widen out into the spiritual beginnings of a master. Thirdly, there is the applier of natural knowledge. His part consists in making scientific knowledge directly serve practical needs. It is this work which to the popular idea often presents the whole of science, or all of it that is commonly termed "useful." The practical results of this work are often astounding to those i merant of the steps by which they have been reached. The greatest of these steps, however, is usually the first one, made in the laboratory of the investigator. These three co-workers are coequal in the priesthood. Science and the applications of science are one growth, united together even as the fruit and the tree. The proper hearth stone round which the community should group these laborers, laboring for a common end, is the University. There the sacred flame of learning is fed from many sides by many hands.

It is sometimes said that pursuit of science renders a man deaf to the appeals of ractical life. That it tends to withdraw him from the everyday interests of the people That I do not believe of any science. Certainly not of biology and the medical sciences Why, from their very outset these subjects draw the mind toward study of an organization the most complex and the most perfect it can examine. The ancient simile that our old school classic, Livy, drew between the human body and the body politic the state, has not lost but won significance as the centuries have run. The achievement of the microscope has been the discovery that living things, whether plant or animal-all living things of more than minutest size-are common-wealths of individually living These cells, as they are called, are living stones that build the units. house of life. In that house each stone is a self-centred, individually living microcosm, individually born, breathing for itself, feeding itself, consuming its own substance in its living, and capable of and destined for an individual death. Each cell lives by exchanging material with the world surrounding it. In other words, its bulk depends on its surface. Hence surface increasing as the square, and volume, as the cube, cell-size, is circumscribed by tiny limits-microscopic limits. Had the dependence been greater than it is, and the average size of the cell