CONTRIBUTIONS OF ZOOLOGY TO HUMAN WELFARE

My colleagues in this symposium have emphasized the important contributions to human welfare which have come from zoological research and the application of the resulting discoveries. On the contrary, I shall tend to stress the contributions which biology, and in particular zoology, may make through education which aims to extend scientific knowledge to everybody. Moreover, my colleagues have chosen to speak concerning the contributions of zoology to human welfare in lines which are directly useful with reference to the physical well-being of the human race. Hence they have emphasized the practical bearings of zoological science in its applications to the production of useful animals and plants and in the relations of certain animals to human health. In short, a strong case has been made for zoology as a science which has immensely important contributions to the economic and hygienic welfare of the human race. With all this emphasis on zoology in its direct material or physical bearings on human life, I most heartily agree. As a matter of education, I believe in "applied zoology" which stresses the science of animals as they economically or hygienically affect mankind; but I regard zoology limited to its direct material usefulness, to its contributions to physical human welfare, as failing to develop the possibilities of the science as it may affect racial welfare and intellectual welfare. Hence, I have devoted my paper to zool-

1 Read by title before Section F, American Association for the Advancement of Science at Pittsburgh, December, 1917.