

MATHEMATICS IN WAR PERSPECTIVE.

PRESIDENTIAL ADDRESS DELIVERED BEFORE THE AMERICAN MATHEMATICAL SOCIETY, DECEMBER 27, 1918.

BY PRESIDENT L. E. DICKSON.

AN army officer of high rank, now facing the problems involved in stopping the huge war machine which he had helped to build, recently remarked to me that this getting out of war is far more trouble than getting into it. The armistice has put me in the same boat and, for the purposes of this address, came a few weeks too soon. I had already put myself under obligations to numerous friends, including two in England and France, for furnishing me authoritative information on the rôle of mathematics and its applications in the war. While this information is fortunately no longer needed for its initial purpose, it bears on the timely question of the kind of preparedness which the nation should adopt. While science has played an important rôle in this war, it would undoubtedly play a dominant rôle in a future war, and no scheme of national preparedness will prove adequate which does not insure an ample supply of highly trained scientists and furnish to all men effective training in the fundamentals of exact science. Owing to its recognized value as a fundamental part of military education, I expressly include mathematics, especially trigonometry and graphical analysis. Let it not again become possible that thousands of young men shall be so seriously handicapped in their army and navy work by lack of adequate preparation in these subjects. Nor should so many instructors in courses for prospective officers again be chosen from those who had just passed hastily through the course, not to count those who had merely taken a few private lessons. Fortunately the more widespread and more effective scientific training here advocated as an essential part of national preparedness for war furnishes at the same time the surest means to retain and increase our material prosperity, to add to our health, comfort and conveniences, and so to train our youth in the unravelling of the mysteries of the universe and in habits of drawing accurate conclusions from correctly observed facts that they may the more surely become sane, reliable and efficient citizens.