tion, and one be sent to the bereaved parents of the deceased.

ATTEST.

JOHN FOSTER.
JESSE J. WALL.
GEO. C. BUTZ.

L. RAY. MORGAN,

Recording Sec'y.

Committee.

SCIENTIFIC AND TECHNICAL SCHOOLS.

BY GEN. FRANCIS A. WALKER.

*Address of General Francis A. Welker, LL. D., President of the Massachusetts Institute of Technology, on the occasion of the formal opening of the new Engineering Building of The Pennsylvania State College, February 22, 1893.

The opening of a new building, dedicated to the work of education, under whatever name, in whatever grade, cannot fail to be an occasion of interest to every teacher and to every one deserving the name of scholar; and should not fail to excite pleasure in the breast of all citizens, lettered or unlettered, who regard the welfare of the Commonwealth. But a celebration like this of to-day, where a large and commodious building for instruction in engineering, both theoretical and experimental, is dedicated to its uses, in the presence of the Executive and members of the Legislature of a great State, is an event especially to attract and delight those of us who have devoted ourselves to what we deem a reform in education, by which many of the traditional studies and exercises of the College shall be replaced by courses not only more immediately and practically useful to the student and to the community, but also, as we conceive them, more truly educational, in the sense of more fully calling forth and developing the powers of observation, reflection, judgment, and self-determination; in the sense, moreover, of more completely arousing the interest of the pupil and commanding the exertion of all his faculties and energies in congenial work. As one who has, for full twenty years, been connected

with scientific and technical schools, schools, standing in the same relation as this is to the State and the Nation, I do, with all my heart, congratulate the President and Trustees of the Pennsylvania State College, and the Governor, Legislature, and citizens of this great commonwealth, upon the completion of this noble and commodious structure, conceived and built under the inspiration of the new education.

The growth of scientific and technical schools, during the past thirty years, has savored of the marvelous. Before the war there were, indeed, a few institutions which boldly departed from the college type and essayed to educate their students in science and the technical applications of science. First of these in point of time, and still of high rank amid a host of schools of similar aims, one must name the Rensselaer Polytechnic Institute of Troy. Then came, simultaneously, in 1846-7, the Scientific School of Yale, now known as the Sheffield School, and the Lawrence Scientific School of Harvard, the latter destined to remain through a long term of years chiefly a school of research; the former, from the first, important alike as a school of research and as a school of instruction. Your own institution came into existence in the later years of this period, though under a less pretentious name. The school with which I have the honor to be connected, was chartered by the legislature of Massachusetts four days before the firing on Sumter.

The close of the Great Rebellion marked the beginning of a new epoch in our national life, in more than the particular of the extinction of human slavery. Those four years of tremendous conflict had wrought the nation up to the appreciation of a greatness which does not manifest itself in fine phrases and moving utterance. If the war had done nothing else for our people, it would have done much simply in teaching them that deeds are greater than words. The American people, through those long days of anguish and suspense, learned how much higher and nobler is the power that can do and dare and endure, than