TO THE CLASS OF 1946
OF THE RICE INSTITUTE

MATRICULATION ADDRESS
WEDNESDAY MORNING
SEPTEMBER 16, 1942
Ladies and Gentlemen
of Rice 1946:

At the first meeting to be held in your honor we offer for your entertainment our traditional cast of four ushers and one speaker. There are no flowers, no music, no prayers except my own on the way over here for grace to meet the present hour, and now perhaps yours that it may not be long.

As all of you are well aware, the gentlemen ushers are young Rice seniors, ere long to become grave, old seniors and leave their Alma Mater for the wide, wide world. I wish to thank these gallant gentlemen for their courtesy to you and their kindness to me this morning: Mr. Harvey Howard Ammerman, President of the Students Association, Mr. John Nesbett Leedom, President of the Senior Class, Mr. James Ward Hargrove, Editor of The Thresher, and Mr. Robert Edward Tresch, Captain of the Football Team.
FIRST THINGS AND LAST

With faith, foresight, and fortitude, the trustees have been tending these three hundred acres for a generation. They assembled the acres and purchased them thirty-three years ago for the immediate furtherance of the founder’s far-reaching plans. To the same high end and for thirty consecutive years in the exercise of courage, knowledge, and skill the researchers and instructors of the faculty have been engaged in enterprises of organizing, building, developing, administering, and the like. For example, in seeding the soil of minds they have been planting ideas, growing and testing theories, cultivating ideals, subjecting those ideals, theories, and ideas to hard, concrete facts, and seeking to adapt specimens of all three of them to fit and to transform the stark realities of the actual world in which men and women live, and move, and have their being.

Thus the faculty and trustees have been preparing and sending forth living products of science and learning, living exemplars of
character and duty, living exponents of training and service, living promoters of invention and discovery, living, conscientious, thinking women and men bent on a livelihood, perhaps a fortune, certainly a career, for themselves, and on securing for others enjoyment of freedom, recovery of justice, attainment of righteousness, and discovery of truth. The current of their contributions, though never torrential, has been strong and continuous, and carries to the four quarters of the earth and the twelve winds of heaven.

These businesses of the trustees and faculty were begun in times of peace, only to be involved a little later in war, thereafter to be continued under new conditions of peace, and now again to be carried on and forward in war. Their first class of raw materials, a hand-picked lot of hardy, climbing freshmen, arrived in the autumn of 1912, for graduation in 1916 and for unanticipated enlistment in the armed forces of the country in '17 and '18. And now, thirty years later, the faculty and trustees receive their thirty-first class, restricted, as every freshman class
has been from the autumn of 1924 on, to four hundred carefully selected seedlings of unusual promise, for graduation either normal or accelerated in 1946, but subject to transplanting when, if, and as the government of the country may require.

I am very happy to participate in their warm welcome, congratulations, and best wishes to you, on an occasion at once memorable and momentous alike to you and to us. These acres, these years, and all that they hold of strength and beauty and spirit from the founder’s bounty are yours to have and to hold with us, with your predecessors, and your successors, so long as you prove worthy of the confidence and the trust we place in you this day.

You come into a good name and a sound reputation. We look to you to maintain and to enhance the good name and the sound reputation. Ambition, brains, character, tact, and wit will enable you to meet these great expectations of ours and simultaneously to win your own bright futures provided you work hard, keep hope hanging high, and do well what you do. There is no other
way. It will be the way with you whenever and wherever you go. For, the first things of these acres and these years—the beauty, the principles, the spirit, the poetry, of this place, once you get them, or they get you—will be the last things to leave you. In that sense, at least, they are eternal for all of us.

ALEXANDER OF MACEDON

At this season of the year, almost exactly twenty-three centuries ago, Alexander of Macedon was born. Legend associates miracles with his birth, while authentic history asserts his own belief in the divinity of his mission. That unfulfilled mission, as it ultimately developed, was nothing other than the unity of humankind. He died in Babylon at sunset, June 13, 323 B.C., in the thirteenth year of his reign and the thirty-third year of his age.

An Oxford examiner, in the habit of putting rather absurd questions, once asked: "What would have been Alexander the Great's politics had he been alive now?"

One of the answers was: "Had Alexander the Great been alive now he would have
been too old to take any interest in politics.”

Students of politics have never lost interest in Alexander of Macedon. That interest is very much alive today. During the current decade there have come to my desk a sheaf of monographs about him and no fewer than half a dozen stout new lives of him. And I am neither politician nor historian.

Yours is a many-sided interest in Alexander. Most of the objectives we are fighting for in the present war were Greek in their origins. Alexander was a Greek, a Macedonian Greek, to be sure, but none the less a Greek of the Greeks. Aristotle, the most learned Athenian of his day, was his tutor for seven years, while in physical education for military service he underwent the long and severe training of Greek athletes. Homer was his Bible, daily in his hands, nightly under his pillow. Achilles was his hero. Before starting on his Persian expedition he placed a wreath on the grave of Achilles at Troy.

Alexander’s career was a successful career of conquest throughout. But in the end he
strove with all the might left in him to bring victorious Greeks and vanquished aliens into harmony under conditions of mutual respect and of parallel progress for both. We have reason also to think that he was the first of his countrymen to profess belief in the brotherhood of man, of all men, and the fatherhood of one God, over all men. But whether early or late is immaterial. The thing certain is that Alexander's final mission was the unity of humankind, unity in freedom, not unity under force. His last word was not conquest, but cooperation. Had he been of our day, he would be one of us, fighting with and for the United Nations, and at the front, to the finish.

SIR ISAAC NEWTON

Who was the Duke of Marlborough?" "The Duke of Marlborough," the student replied, "was a great general who never went into action without a firm determination either to win or to lose." The student might have been quoting from words of Sarpedon to Glaucus in the twelfth Iliad of Homer: "Let
us go forward, whether we are to give glory or to win it.”

Marlborough brought fame in war to the Age of Queen Anne, which covered one of the most remarkable periods in the annals of England. The Queen immediately made the Earl of Marlborough a Duke. Not long thereafter she visited Cambridge and had the honor of knighting Isaac Newton at Trinity College. Still another glory of her short reign was the new St. Paul’s Cathedral of Sir Christopher Wren. Marlborough and his military campaigns, Newton and his mathematics, Wren and his churches: it is a difficult choice to make, but I take Newton as my next war hero for you.

Isaac Newton was born on Christmas Day, 1642. He was given the name of his father, who died before his birth. He was so unpromising a child at birth that the Spartans would have cast him out to die. He survived eighty-four years, and became, almost in his youth, the great Newton. My earliest grammar school essay was about him. It consisted chiefly of two statements: what a wonderful Christmas gift he was to
the whole world, and he was the greatest mathematician that ever lived: the first was my own, the second of course second-hand, but there is no reason to revise it even today. Curiously enough, yet not so curious when you think how common the experience is, young Isaac Newton did not take to geometry at the start. In the end he became not only an extraordinary geometer, but invented independently a most powerful implement of mathematical analysis, and finally established his epoch-making theory of gravitation.

In this connection it is important to distinguish between facts and opinions. We do not impose opinions upon you here. We expect you to do your own thinking and to reach your own conclusions and opinions in that way. The foregoing statements about Newton are facts. The following are opinions. In my opinion, the three highest achievements of the human mind in the physical sciences are first, and still the greatest, Newton’s theory of gravitation; second, Maxwell’s theory of electricity, magnetism, and light; and third, in our own
day, Einstein's general theory of relativity with its revolutionary results. But there is this difference. And what I am now about to say are facts. Newton had to make the mathematics he needed; in that sense he was a self-made mathematician. Maxwell and Einstein found the mathematics they needed ready-to-wear, with some of Newton's patterns still in style.

Newton got the dominating ideas of his discoveries in his early twenties and had virtually completed his scientific work before he was forty-five. With it all he had unusual practical ability. He invented a new type of telescope, compiled lunar tables for navigators, sat in Parliament, though quietly, and as Warden and then Master of the Mint he was amazingly successful for the last thirty years of his life. He died on March 20, 1727, in his eighty-fifth year, and was buried in Westminster Abbey.

Had Newton been of our day it is tolerably clear what he would be doing. He would be lecturing at Trinity College, Cambridge; he would be high in the confidence and the secret councils of the government;
he would be presiding over commissions, organizing and directing research, and actually engaged in many varieties of scientific warfare service. And I conjecture that he would be quietly, patiently, and perhaps successfully seeking the generalization of the Einstein theory that Einstein himself has been seeking.

FLORENCE NIGHTINGALE, O.M.

Some, indeed many, of the present company may ultimately become either Waacs, or Waves, or wives of warriors. So my third and last hero for you is a heroine, in peace as in war.

Florence Nightingale was born of English parentage in Florence, Italy—whence her name—on May 12, 1820, and was baptized there on July 4th. She was born to high station in society, had looks, brains, money, will, a ready pen, executive ability, everything—but a career. Like Alexander she had ambition, like Newton never married, like both of them each in his own way she was deeply religious in her own way. Neither in the age of Alexander nor in that
of Newton nor in her own youth were careers open to women. The education she received was the conventional education for English girls of the time. It failed to satisfy her. Her parents were distressed, but finally consented to her plans for a career. In England and on the continent she studied hospitals, their organization, and training for nursing.

At thirty-four Florence Nightingale found her opportunity in the Crimean War of 1854–56. With assistance from the government and the help of friends she equipped an expedition of about forty women nurses and set out by land and sea for the front. She converted uninhabitable buildings into hospital units, herself directing the activities of nursing, operating, and healing or burying, sixteen to twenty hours a day, almost to the ruin of her health. She was handicapped by opposition to reform. Besides, those in authority on the ground did not want a woman around. Despite the difficulties, success came with unbelievable swiftness. She soon had 10,000 soldiers under her charge, and saw the hospital death rate
drop in the first five months of 1855 from 2 in 5 patients to 1 in 50. With such a start she of course triumphed in the end. On the conclusion of the war in 1856 the government offered a man-of-war to bring her home, but she declined, travelled back in a French ship, slipped unobserved from Paris into London, went quietly to her country home, and evaded public demonstration in her honor.

Queen Victoria wrote after her return: "We have made Miss Nightingale's acquaintance and are delighted and very much struck by her great gentleness and simplicity and wonderful, clear, and comprehensive head. I wish we had her at the War Office."

That was in 1856! Florence Nightingale had fifty-four years to go. Once again she organized her life to carry on, and this time in London because further travel had become impossible for her. Broken in health, almost bedridden, she continued to work and to plan for humanity almost to the end. "Courage derives from ideas," said Clemenceau. Ideas were the source of Florence
Nightingale’s driving power. And her driving power was terrific. She planned for India what she had accomplished in the Crimea. Her popularity was world-wide and so remained. Nurse training schools bearing her name were established everywhere, especially in the Dominions and in America. A thousand of them in this country joined in celebrating the jubilee of the one in New York City in May, 1910. At that large gathering in Carnegie Hall Mr. Joseph H. Choate, public orator of America and former United States Ambassador to England, delivered the eulogy “testifying to the admiration of the entire American people for Florence Nightingale’s great record and noble life.” She died peacefully, August 13, 1910, in the ninety-first year of her age. Burial in Westminster Abbey was offered, but her own wishes were followed and she rests beside her father and mother in an English country churchyard.

During her life Florence Nightingale was accorded many honors, in many countries, the most noteworthy from England being the freedom of the City of London, con-
ferred upon but one woman before, and the Order of Merit, in which she was the sole woman member. It is a trite saying, but her name and memory will endure so long as men and women strive together in the common interests of humanity. And what a record was hers: pioneer of the Red Cross movement; pioneer in army medicine, in military hospitals, in war nursing for women; pioneer in public health service, in sanitary engineering, and in statistical studies for all these forms of social betterment! "Such a clear head. I wish we had her at the War Office." What a career! What a career for a man! What a career for a woman!

WINNING THE WAR

FINALLY, Alexander, Newton, and Florence Nightingale had each a triple portion of the divine fire we call genius. To be convinced of that we have only to stand up to them, take their measure, and then our measure. Each of them had genius of intellect, genius of character, genius of work. It is from the last aspect, from their
individual devotion to hard, hopeful, and thorough work, that I derive most encouragement. Each of them fulfilled the threefold formula earlier enjoined of you. All three of them worked hard, kept hope hanging high, and did well what they did. And deep down under each you find a concrete slab of uncommon common sense. They possessed and practised in rare combination genius and common sense.

Their fine example as dauntless soldier, intrepid scientist, and crusading saint should inspire and nerve you to discharge your double duty today: your duty to man's humanity to man, and your duty to man's inhumanity to man: to federate the resources of the first, and to crush everlastingly the iniquities of the second.

That is the issue. It is between humanity and inhumanity. That issue sharply defines your duty. It explains the why of your duty. But there remain the what and where and when of your whole duty. For guidance at all such points we look confidently and loyally to the governmental leadership of our country.
I have understanding and sympathy with you in these difficulties that you face this autumn. We face the same difficulties individually and as an institution. We must see them through, perhaps only day by day, but see them through we will. To that end, by and large, we are trying to steer a middle course. In your interests and in the interests of this institution we are trying to steer a middle course between living and working as though there were no war, and working and living as though there were nothing but the war. We are animated and driven by two desires: first, to serve humanity, the country, and the United Nations to the uttermost for the winning of the war, and second, to save all that you and our institutions may become for the peace after you have won, finally and completely, won the war. These two ends of serving and saving can be attained and held only by winning the war. Victory, therefore, must be our first goal.

For three years I have had no other conviction than that we would be going into this war. For nine months I have had no
other conviction than that the United Na-
tions will win this war. I had rather pass on
to you the spirit of hope than any other
thing I could possibly give you. I have
never been able to see how I could live with­
out hope, but that is not a good reason for
you. In my opinion, your good reason for
invincible hope is not only that our Cause
is just, but also that we are ready and will­
ing, every man and woman of us, willing
and ready to die to the last one of us to win
this war. Victory, therefore, is our final
goal.

AN ARDENT WISH

EACH autumn your predecessors have
gone out from this meeting to the
peculiar tasks and opportunities of
the new year under a charge or a wish or a
challenge. My matriculation wish for you
is a stanza of a long poem, by Christopher
Smart, entitled "A Song to David." To
him the poet ascribes qualities I would have
you earn and bear:
Great, valiant, pious, good, and clean,
Sublime, contemplative, serene,
Strong, constant, pleasant, wise!
Bright effluence of exceeding grace;
Best man!—the swiftness, and the race,
The peril, and the prize.
It is a wish of many wings. They were worn worthily by the Psalmist of thirty centuries ago, and by Alexander, Newton, and Florence Nightingale. May they be worthily worn by you.

A STANDING INVITATION

ONE word more. My room has casement windows on two fronts, east and west. They open on the acres and they overlook the years. Now and then I go to one window or another just to see the students coming and going, as they do every hour on the hour. Such moments for me are always bright moments in the day’s work. So will they be, I doubt not, to you.

The room has doors on two fronts, north and south. They bear no number, title, card, or name-plate. The north ones stand open to you at any time in the working day.
Come to see me when you will and let us talk things over from time to time. There may be other visitors, so a telephone ring in advance may spare you an unavoidable wait, yet it might be worth the wait if only to view the acres and the years from the windows of that room.

Edgar Odell Lovett.