## "The Education Which Our Country Needs." President Northrop of Minnesota.

More than sixty years ago Edward according to established rules of train-Everett in an address at Yale College ing. It is easy to do this in many described most felicitiously the spirit thickly settled parts of Europe where and purposes of an occasion like this, generation after generation from fath-

this, and of the addresses they draw dren of a family are destined to be forth, is not to impart stores of infor- scattered, and each child may in the mation, imboriously collected; not to course of his life live in a dozen differbroach new systems, requiring core ent grades of civilization, and quite fully weighted arguments for their probably pursue a dozen different emdefence, or a multitude of well arranged facts for their illustration. We New England to running a cattle meet at these literary festivals to pro- canch in southern California-the dle and animate the spirit of improve- ever-moving population with its conment in ourselves and others. We stantly changing environments, and to leave our closets, our offices, and our assimilate it with the steady influx in these pleasant paths; to prevent the every us con under heaven, becomes those of us who are no longer young, kinsfolk and acquaintances in that fully continued, will remove. to make acquaintance with the ardent part of the country in which they have and ingenuous who are following after us. The preparation for an occasion and promoting the works in which of knowledge and the literature of like this is in the heart, not in the their fathers before them have been power. I would divide education in head; it is in the attachments formed, and the feelings inspired, in the bright morning of life. Our preparation is in the classic atmosphere of the place. in the tranquility of the academic grove, in the unoffending peace of the occasion, in the open countenance of long-parted associates, joyous at meeting, and in the kind and indulgent bestows its animating attendance on our humble exercises.

Efficacy of Education, as the Great Human Instrument of Improving the Condition of Man., By education he more in colleges—practically the same everywhere and for all. It is a strikhave come in the last half century a people with wonderful adaptability, that today while I admit all that Mr. But there are altogether too many Everett claimed for education in the jacks of all trades and good at none, olden time, I ask your attention to a Our merchanic arts, our agriculture.

to you upon a plain and practical sub- san of Germany, would put our Ameriject-the Education which our Coun- can antisans to the blush, if they bad ject the expression which our Country Germans are trained for years to do

I believe that different peoples require different education and that a few weeks. This results from our the same people may require different freedom which lets men do whatever education at different stages of their they think they can do whether they development. There are peculiar con- are qualified for it or not. As for ditions both of population and of development in this country, which justify departures in education from the good wages if he has merely learned lines of work which may be the most desirable in some other countries, 1 need mention only two or three.

First: Our population is not homogeneous. It is not changed merely from time to time by the death of the fathers and the succession of the chil- ought to be, and as it would be if every dren, but on the contrary it is constantly receiving accessions in large free, but were required to know thornumbers from other countries and oughly the trade or profession which races, and other civilizations.

Second: Our people are all equal in political rights and political power, It is as necessary for the day laborer to know what is best for the country as it is for the man of any other position. In many countries political power is vested in a few, and only these few have anything to say as to national policy. Practically it makes no difference whatever to them whether the milifons know anything about politic lay with regularity. cal science, history, sociology or not. They are simply to tread in the steps with the people. Legislation will be determined ultimately by the people. If the people are intelligent and wise, there will be consistency and continuity in legislation, but if the people are not intelligent and wise, they will go like an avalanche one year against a McKinley bill, and the next year grow frantic to reverse their former verdict and shout "Great is protection and McKinley is its prophet.

settled and our population is exceed-Not only is there a regular movement from the old states to the new ones, but there is an irregeast, to the south, to the south to the sout

country is inhabited by people among whom can be found three generations of the same blood in the same place. Recklessness and change are our present characteristics. What we shall do next is uncertain. When a family's destiny is practically settled at birth er to son the occupations are the same. "The great utility of occasions like But when as in this country the chilployments, from school keeping in been born, keeping up the interests erature into two kinds—the literature

actively engaged.

ommentary on the enanges which ingenious people, an inventive people, I shall offer no apology for speaking of his business possessed by the artiwhat men in this country will undertake to do after acting as a belper for spending years to learn a trade or business when one can get just as sannttering of the business, the American is not such a fool as to do hat. In brief, our whole system of industry is wasteful. Work that should be done once for all, is done over a dozen times because never done as it man in every occupation were not so

> he undertakes to follow. I suppose there has been enough money wasted on trying to get malk from beef cattle and to make beef of milk cattle, to pay off our national debt-all from ignorance-an ignorance only equaled by that of the lady who kept poultry and wondered how it was that with ten hens she only got one egg a day. Nine of her hens were roosters, who cannot be relied on to

There is today a demand for edueated men in a multitude of occupaof their fathers, and the king and no- tions than formerly had no existence bility take care of the state. But with or were conducted by uneducated men. us this is all changed. The power is The whole world of labor is to be engaged in the application of scientific principles to mechanics or to agriculture, to transportation, to social life or municipal life,-The haphazzard method of doing things by guess has got to stop-and the laws of nature are to be applied to nearly every thing that invites human labor our educaoccupations for which in the olden time there was no call to fit any one Third: Our country is not yet fully The situation of itself would require a revolution in the scope of our educational work. Our whole country would be indignant if any one should say that we had not made great progres plar movement of population in all di- in education in the last half century rections-from the west back to the that our colleges and universities were east, to the south, to the southwest, in no better than those of fifty years

deate; and I think that the indignation of the country at such a statement would be just.

Yet I do not by any means believe that we have reached an educational millennium. If any college officer or any teacher of a public school contemplates with perfect satisfaction the resuits of the training given to the average student, all I have to say is that

he is easily satisfied. For myself, I frankly admit that, while guiding an educational instrution in the best way I cam, so as to make it most serviceable to the state from which it draws its life, and so as to keep it at least from being left high and dry on the shore, while the rest of the educational world sails proudly on, I am far from being certarn that we are headed for the right port, that we are using the best forces mote kind feeling; to impart new conditions are seriously changed—and in the best way, or that we are likely strength to good purposes; to enkinsults when our voyage is ended.

But while admitting that our education is not perfect, I am far from studies, to meet and salute each other of a purely foreign element from thinking that most of the evils in our in these pleasant paths; to prevent the every property on under heaven, becomes country are to be charged to defects diverging walks of life from wholly more difficult and more discouraging, in our educational system. They are estranging those from each other who It is at once seen that it is going to evils which would exist under our were kind friends at the outset; to pay take time, to make this mixed mass, pre-at conditions-no matter what our homage to the venerated fathers, the splendid people that shall ulti- might be our theory or plan of eduwho honor with their presence the remately occupy this country and live cation-but they are also evils which turn of these academic festivals and restfully and peacefully with their I am sure our educational work, faith-It has been customary to divide lit-

the same way. Every one who knows anything about the matter, will admit an ideal one. There is a tremendous that in respect to the amount of waste of force in all directions; and knowledge imparted, our institutions not a little of the educational work of learning are incomparably superior done under these conditions is like the to those of former times. The sciences training of a sportsman, who, having are practicably the product of the fired at a calf, supposing it to be a present century, and the thorough and tions still visible. On the other hand, deer, and having failed to hit it, ex- systematic teaching of the sciences has smile of the favoring throng, which plained his lack of skill by saying that been possible but little more than a single subject of biology, animal and bestows its animating attendance on he fired so as to hit it if it were a deer generation. History and literature plant life, is so broadly and minutely and miss it if it were a calf. Quite fre- were never taught as they are today studied, that it might easily occupy Mr. Everett chose as his topic on the quently it is a calf, and perhaps it is until comparatively a few years ago. the undivided attention of the student occasion referred to, "The Nature and fortunate that we miss it as often as Other branches of learning might be for the whole four years of college life, named of which the same could be and the student might graduate an ac-said. The student when he completes curate observer of nature, a muster of his college course now, knows a great the scientific method of investigation, deal more certainly than the graduate but with no knowledge of the prinknew fifty years ago. But how is it ciples of eloquence, and no power in in respect to power—in respect to real lifs practice. Here, doubtless, would intellectual vigor and the ability to impress others with his ideas and to gain, but a loss if eloquence is to be guide the thought of the age. James regarded as the chief end of education.
T. Field, the great publisher, the But the world for half a century has friend of authors and scholars and no ceased to regard eloquence as the chief subject which distinctly implies that our business interests of every kind mean author and scholar himself, said thing to be desired even in a states education no longer is and no longer have suffered from being undertaken some years ago, that no man of very man, and much less in a scholar. Chatshould be the same for all—even for by men with no adequate training for marked power had graduated from ham and Burke no longer thunder in all who are found in the same college, their work. The thorough knowledge any colleges of the country since 1855, the British parliament, but men in All the eminent American authors like Hawthorne. Longfellow, Lowell and Holmes, preceded this dead try needs. I emphasize in this sub- not long ago got past blushing. The line of 1855. Yade college has the honor to have three of its graduates at the present time on the bench of the supreme court of the United States. They have all been appointed in recent years, and they were all worthy of appointment; but they were all in college before 1855, and the latest to graduate was in 1856.

The Venezuela commission appointed by President Cleveland, was composed of five distinguished citizens, three of whom are graduates of Yale college-Gilman, White and Brewer; all three were in college before 1855. Was Mr. Field's dictum correct, that the age of developed power in colleges ended, so far as appears, in 1855?

Even if the dietum were true, it need not fill us with alarm. What Mr. Field especially lamented, I suppose, was the disappearance of the creative power as represented in oratory, poetry, and prose literature. But men write and think as clearly now as they ever did. The country needs today a good many things more than it needs a great poet. I say it even at the risk of being called a Philistine. What this age needs is knowledge. What this age wants to use for its own advancement to the highest civilization is knowledge. What this age, therefore, s trying to get is knowledge-knowl edge not for a favored class, but for the world-every important fact and principle discovered-to be used for

the good of the race. It is not, therefore, necessarily discouraging if we are compelled to admis that in our efforts to broaden the field of study and to satisfy the very general demand of the age for a more practical education, there seems to have been a certain loss of power to the individual student. It is more in the seeming than in reality; more in the method of its application than in the power itself, and it does not by any means follow that there is in the aggregate a loss to the community.

Modern scholarship, despite its tendency to specializing, is no longer a deep and narrow stream sweeping everything before it in its well-worn channel; it is rather a countless numof streams ever dividing into new

tifying broad territories that would otherwise be barren and unfruitful.

The irrigating disches that can make a sage brush desert bear abundantly orange and lemon, prone and apricot, grape and olive, are not as suggestive of power as fae noisy stream, whose falling waters turn the wheels of a great mill, but they are not less benifijudged by results, is not less. That nexplicable power which lifts the sap from the roots and forces every branch and twig to bud and blossom until all nature is clothed in the garments of spring, is a silent torce whose movements are unheard, but whose effect in transforming the world of nature, all the hurricanes in the universe cannot equal. Power and noise are not synonymous terms

You remember that the seven liberal studies which the scholastics of the middle ages called the trivium and the quadrivium, were grammar, logic and rhetoric, the triple way to eloquence; and arithmetic, astronomy, geometry and music, the quadrivial way to whatever else in culture was deemed desirable. We have not abandoned a single one of these studies, but we have added a great variety of other studies which the present age requires. Every student must choose as wisely as he can what will contribute most to his

own success in life. When an intitution provides instruction in every department that can reasonably be desired, there is no antagonism created between the old education and the new. Both are provided, you take your choice, the refrashments are served on the European plan. If you wan't to attain to eloquence, the old path is open to you with the foot-marks of many generain every well endowed university, the single subject of biology, animal and and the student might graduate an acparliament today discuss the budget and home rule as practical questions very much as they would discuss the value of different breeds of cattile, or of rotation of crops. Facts have taken the place of tropes, and common sense fills up the void created by the departure of Greek and Latin quotations. The rhetorician is at a discount even in congress. The man who can tell all about the effect of taking the tagiff off wool and putting a tariff on hides, of making lumber free and of putting a duty on coal, who can lay down any one principle of finance which will be accepted as true by both the gold and the silver men of the country, he is the man for the times, while the eloquent declaimer on the abstract rights and wrongs of capital and labor, is of little account. Legislation is no longer a matter of feeling and emotion. It is a practical matter coming home to men's business and bosoms, and to be decided largely by evidence gathered by the patient student of statistics in the field of political science.

Edward Everett spoke two hours at lettysburg-a pellucid stream of classical eloquence—and not fifty men in the country today cither know or care what he said. Abraham Lincoln followed Everett with a speech of three minutes, a plain statement of facts appealing to the highest patriotism, and today thousands of Americans, from the child in school to the old man in the chimney corner, can tell what he said. The world has ceas ed to care much for mere words, however choice and elegant.

Macaulay's catalogue of the achieve ments of modern learing is inspiring It shows what man has done. But it does not touch the question as to what man is o be. Is he to be sweet or bitter in his temper? Is he to be refined or coarse, a gentleman or a boor, a Gladstone of a Gradgrind, in sympathy or out of sympathy with mankind, a glad listener to the voices of love, and beauty, and harmony, and art, and nature which is the art of God, or insensible to everything which his eye can not see nor his hand handle.

We must not neglect the enliure which will determine which of these the student is to be, while we grow wild over studies which may determine what the student shall be able to

COMMENCEMENT ORATION Comparatively a small area of the system of education did not really ed-little power, are nevertheless forever which bread and butter do not conand unceasingly irrigating and fruc- tribute. We want to make human life comfortable. We want to save men, it possible, from hunger and cold and misery. But we do not want to reduce universal human existence to a dead level of mere comfortable animal life, As Lear well says: "Allow not nature more than nature needs; man's life is cheap as beast's.

There is something to man besides cent in their work, and their power, body. The mind, the soul, is itself to be cultivated. Taste is to be refined and gratified. Music, art, literature, none of these do for man wintt food does, but they create and direct far-

> reaching longings, aspirations, aptisudes; they contribute to his growth and perfection and happiness, and they must never be excluded from our system of education as things not needed. Old Homer with his divine epic, and his words that echo the voices of nature in the most entrancing way, is as refining in his influence as ever; the Greek tragedies are as grand as ever. Virgil is as delightful, Shakespeare is as thousand-souled. All of these if permitted to do their legit mate work for the student, will do for him something that the mere education of knowledge cannot do.

The glory of our modern education is its adaptation to the wants at once of the race and of the individual. It provides for both the material and piritual wants of the student. It does not reject poetry and literature because chemistry and physics are more important; nor does it reject science because literature gives a different kind of culture or a better culture. It furnishes whatever will help man to do the best work, and also whatever will help him to be the best man. And that is just what is needed. This provision for both culture and knowledge is today the most marked feature of university life in this country. Harvard has in some respects taken the lead; John Hopkins was the pioneer and the other universities willingly or unwillingly, have followed. Even venerable old Oxford, where tradition has so long been the law, has now, according to a recent writer, fallen into the hands of the specialists has, as grumbling writer says, substituted for the old idea of a liberal expention, a multitude of parrow and technical schools, for cramming the memory and starving the intellect. education may have been defective, adds this writer, but at least it was an education and not an apprenticeship.

In all of our universities of today,

a student if he wishes an education

can still get it; or if he wishes what

this writer calls an apprenticeship, he can get that. That is the best education which fits if man for the greatest usefulness. No man is likely to be very useful who does not observe accurately and reason correctly, however much he may know. The man who cannot draw just conclusions for his own guidance is not likely to be a safe guide for others in any field of complex human activity. Whatever discipline to the intellect can possibly be given should be given, whether the intellect is to Je applied to creating, inventing, adapting, using matter; or inspiring, invigorating, or leading mind. In either case utility is the controlling consideration. Very few men can afford to use their brains merely as an object lesson of what discipline can accomplish, or as an attic for the storage of antiquated fur altwhat they can use. No doubt a plumber who cannot read Latin and Greek will answer our purpose very well, if he will keep our water pipes from bursting, our gas pipes from leaking, our sewerage from setting back livto our handry tubs, and the family from dyling in consequence of unear conditions produced by himself. If we cannot have both culture and mechanical skill in our plumber, let us by all means have that which is essential his doing well the one thing which he proposes to do. The same khought applies to the whole body of engineers and students in technical schools. they are to be masters of their technical work they must forego to some extent general culture, as the classical student for culture foregoes the world of practical science. The most important and fundamental rule of education is not to leave out, whether in foundation or in structure, the one thing necessary to fit us for what we propose to do. And the most important rule for educational institutions is the corollary of this. Make it possible for every student to get what is neces sary for the best foundation at he in his future work. But the subject which the student, in college needs especially to pursue is not necessarily that which appears to be most closel related to his future work. I have no doubt that elemistry and boton and mechanics are much more important to a farmer than Latin and Greek

(Considued on page 3.)