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IN CHARGE OF THIS ISSUE
S. H. Hemenway.....K. B. Castle

THE BIG OPPORTUITY OF COLLEGE

Few college students ever realize the magnitude of their opportunity. They attend an institution of higher learning with the attitude that their courses of study are all that they have to learn. Time not absorbed by the curriculum is for pleasure. On this principle, which they hold to be right, they lead artificial lives and eventually graduate with false ideas and standards in their minds and, worse still, the big opportunity of college ungrasped.

If asked what he is in college for, any student will reply, "To get an education." When asked what that education is, he answers, "Mechanical Engineering" or "Electrical Engineering" or some other course. The education he seeks is all in the course leading to the degree and when he is granted his diploma his education is finished. This is the average view of the matter and its blindness is typical of the modern college man.

Few men as they enter college examine themselves and really tabulate the many forms of their own ignorance, and with this synopsis of the voids in their mental make-up as a basis, work out a schedule of study and reading to fill in these gaps in their minds. Thousands of people are ignorant of music and content in that ignorance. Just as many know nothing of painting and sculptery and have no desire to learn. Countless others shrink from the printed page. In all these arts infinite pleasure is to be found. The man who ignores them merely denies himself the delight which is easily found in even superficial contemplation of the wonders which they bring forth. By turning their back on such things as music, art, literature, and drama, men cheat themselves by narrowing the range of their pleasures.

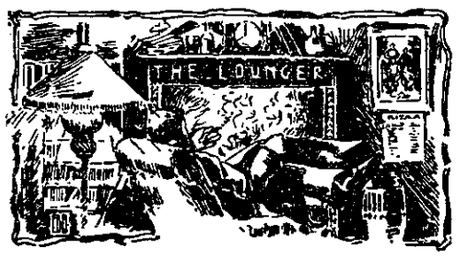
College is the place for young men to broaden themselves by study, not only of the courses which they have elected, but also of the whole world and the best that is in that world. The time for enriching one's mind with knowledge of humanity's treasures is amply afforded by the average undergraduate schedule. The opportunity is so easy to grasp. The college man who fills his young acquisitive mind with the best products of brush, pen, chisel, and chord, is finding a real education. Filling in the blanks in one's mind with some appreciation of the finest works of the human brain is a gain more to be desired than mere understanding of the laws of matter. The big opportunity of college lies not in the acquiring of facts and knowledge of science,—that is the minor part—but in the chance to develope one's personality and enrich one's mind by acquaintance with the finest expressions of the human soul. This learning multiplies one's sources of delight and nourishes the spirit.

Here in the Institute the courses of scientific study demand much of the student's energy and time. It is proper that these demands be met to a full measure. But after rendering unto Caesar the things that are Caesar's, the wise man turns avidly to seek knowledge of the arts and the world itself. In that effort he grasps the big opportunity of college.

SETTLING DOWN

The beginning of every scholastic term seems to mark a distinct restlessness and struggle against settling down to work again among the student body. Whether it is because of the inability of most of us to forget about a very pleasant vacation or because we think that work at the first of the term is negligible, it cannot be said. However it is on account of this restlessness, this inability to settle down, that costs many men those long tiresome hours of "grinding" at the end of the term in the often unsuccessful attempt to catch up with their courses. A man may think that cutting the first or second class in a subject, or not paying much attention to the academic work at the start, will make no difference in the end. While it may make no difference in his final knowledge of the subject, it at least causes the professors to think, and quite justly, that the man has not much interest in his subject and is generally indifferent. It is a saying at Technology that to stand moderately well in your studies, it is necessary to conscientiously do your daily work. This is a good rule for the new men to learn and the old ones to remember.

It does not mean that one has to turn into a grind, we have plenty of those already, but it means to keep things from piling up until the end of the term, then to be buried in an avalanche of work around examination time. The institute is a school where your education is built up on your previous knowledge. Every subject is dependent on the previous one, every class on the previous class, and when a man starts to put off his work he soon finds himself without the proper foundation, without a clear conception of what he is studying, and he puts the course down as being too deep for him. A new term is now starting and a new year. Most of us have new instructors and new courses. Here is certainly a good opportunity to lay the foundations for a successful year's work by getting the jump on your subjects, and by settling down.



The grounds of the Stute as marked out for parking show some very interesting works of art. To navigate ones car successfully into one of the stalls and then find that it is for instructors only is enough to make any fliver hound flunk his triple E. While carrying on this work why not reserve a section for co-eds, men on activities, the gang from the Dorms and a private one for the Lounger. He would very much appreciate a good location for his bus. A five buck deposit would help the poor bankrupt bursar's office to its feet. The rate might be five for the key, and an added fiver for each week. And then for all-glassed-in car hounds who never believe in signs, there might be a fine of another five bucks. The Lounger nominates the T. C. A.'s stenog for the job of tagging all the offenders, as she has nothing to do now that the Frosh have all received their Bibles, and the book exchange has equaled the Coop in exploitation of those who buy books. Besides no one would have the heart to object.

One of the sharers of the eleven buck raise last year,disappointed because he could not convince his other coadjutors to hold the Prom in the Walker gym tells the Lounger that the Indian club is willing to enter into a lease with anyone desiring to hold a dance on the gym floor. The Lounger thinks that the Stute Committee might be willing to appropriate some of its activities raise to running the elevator which would be a decided attraction. Well the Lounger's good old WDC has gone out and so has the gas logs, and as he has no matches to start the pipe and no two-bit pieces for the meter, he must hie himself to sleep.

Once more seating himself comfortably in his old armchair, the Lounger gazes idlely into the firelight, and pulls hard upon his blackened corncob, a relic of those happy days spent at the surveying camp. Again those mystic symbols "B. S." faintly appear in the glowing embers, as in ye olde days, but alas, the coveted honor of being an Alumnus is still in the distance.

It is good to be amid the old surroundings again and pause in the Main Lobby in the late afternoon and watch the merry, care-free and carfree Freshmen trampling through, loaded down with drawing boards, books, et cetera. Poor creatures, they know not what the future holds for them.

The Lounger exhorts the Freshmen not to be downcast. Their lot is hard. After mastering the intricacies of the tabular view, they begin to realize that life is real and earnest. They will gaze happily at the burning match held between their fingers and reflect solemnly upon the fact that a chemical reaction is taking place, leave many schekels at the Coop for books that will cause them to spend many long and monotonous hours thirsting for knowledge and perform other unpleasant feats, which remind him forcibly that this is indeed a hard and cruel world.

But they must not give up the ship. All days cannot be sad and dreary. Every dog has his day and so hath the Freshman. Subscribe to THE TECH, follow the activities and a year's time they, too, may be haughty Sophomores who have entirely forgotten how it felt to be a frosh.

GOING TO SUMMER CAMP?

If you expect to go to summer camp or have been in summer camp, get a copy af The Benchmark 1921 and see what was done in Student Activities last year. On sale at the Coop and at Walker.

COMMUNICATIONS

THE ORDNANCE UNIT OF THE R. O. T. C.

Among the several R. O. T. C. Units at M. I. T. is that of the Ordnance Department, the great engineering manufacturing branch of the Army which makes the Tools of War with which the combatant troops are armed. There is more truth than humor in the saying that Ordnance makes the soldier *offensive*, for the Infantry without their rifles and grenades, the Cavalry without their pistols and sabers, the Artillery without their guns and ammunition, and the Air Service without their syncronized machine guns and bombs would be merely organized civilians and not soldiers.

In this mechanical age, these Munitions, these Tools of War, present a frightful problem; for Nations, not Armies, now rage War. Formerly a Nation's fighting strength was measured by her capacity to mobilize man power; now her capacity to mobilize Munition Power shares equally in importance, and in fact is the Choke Point of National Preparednes, for these Tools of War are not a peacetime produce, and the problems both of suply and trained personnel of the Ordnance Department are quite different from those of the other great service branches which can draw directly on their peacetime industries and professions for assistance.

The immensity of the Ordnance Effort during the Great War is not generally known and difficult to realize. The task of the Army in 1918 was to raise and equip five million men by the Spring of 1919. At the time of the Armistice, nearly four million were engaged solely in the production of Ordnance and Army Ordnance was using labor and material at the rate that would biuld a Panama Canal every thirty days or three modern battleships a week.

This great work was made possible by the thousands of Engineers throughout the country who became Ordnance Officers. Of these former Ordnance Officers, nearly three thousand now hold reserve commissions in the Ordnance Department; but these are not enough; and, further, we are faced with the fact that most of those who fought the War will be written off the books of National Preparedness in twenty years. To meet this need the Army Ordnance has organized R. O. T. C. Units at a few specially selected engineering schools, of which the Ordnance Unit at M. I. T. is one. Enrollment in these units is limited to those students who are taking certain prescribed subjects and who maintain a satisfactory degree of scholarship.

At M. I. T. only those men taking courses II and X are now eligible. After the second year the Ordnance Department requires no additional military instruction other than that given as part of the regular courses, but relies on the opportunity afforded by the summer camp at Aberdeen Proving Ground to give practical instruction in the handling of material and the proof firing of guns and carriages.

These six weeks at Aberdeen—the Great Outdoor Laboratory of Army Ordnance—are more than instructive. they are interesting. Here the men learn to handle not only the Ordnance material now issued to the Artillery, the Infantry and the Air Service, but also to assist in the tests of new and experimental types. Here they see the new large calibre Browning Machine Gun and tests with improved tracer bullets at free balloons, and the new American 155 Gun which outranges the French 155 GPF of the War by more than five thousand yards. Here are caterpillar mounts that run thirty miles an hour and carry a 75 M/M Gun. Here they are now testing the new 50 calibre 16-in. Gun on a disappearing carriarge, the largest single unit of Ordnance ever built in the United States. Here also big and little tanks are tried out over various abstacles.

But the Aberdeen camp is not all work, as any of the men who were there last year will tell you. There is salt water swimming and boating, tennis and golf, and dances with the fair damsels of the nearby summer colonies. Baltimore is only thirty minutes away and Washington and Philadelphia but an hour and a half. It is a wonderful plant for a good time if you want to use it.

The Ordnance Department is the big manufacturing branch of the Army and believes in giving its future officers practical experience in its shops. Last summer twenty-one Ordnance R. O. T. C. students were employed at Watertown Arsenal at $3.68 a day, and more at other arsenals throughout the country. Unfortunately, under the pressure of economy, the work at arsenals has been so reduced that only a few of the R. O. T. C. students may be employed next summer. The Ordnance Department is also endeavoring to arrange so that a few selected graduate Ordnance students from each engineering school may be called into active service as Ordnance Reserve Officers and assigned for a year to duty at that Arsenal for which they are especially fitted by their training. It is believed that a year's practical work as a supervisor in the Ordnance shops will not only increase their military, but their economic value, and that with the assistance of the Ordnance Department they will find jobs which will well repay them for their year's work at the arsenals.

In a major emergency, the nation must look to its educated men with trained minds, especially to engineers, to officer its millions of men which will then form its Armies. The Ordnance Department believes that a special obligation rests with the future mechanical and chemical engineers to enroll in the Ordnance Unit at M. I. T. the first engineering school selected to train Ordnance Reserve Officers, and so make their training effective.

T. W. MAISH,
Major Ordnance Dept.,
U. S. A.

T. C. A. INITIATES

(Continued from Page 1.)

out at Brown last year and proved very successful.

In campaigns for the Christian Association work at other colleges last year, the amounts raised were generally larger than that asked here this year. Last year there was a deficit in the amount raised for the local association and some of the work carried on had to be financed out of funds provided by the Advisory Board. The amounts raised by some of the other colleges last year were, Princeton, $8000, Harvard, $4,050.00, Dartmouth, $1800, while Technology's budget this year calls for only $2300.

Offer Service Opportunity

The Association is an organization of the students, fasulty tnd Alumni of the Massachusetts Institute of Technology for the purpose of fostering among the members of the Institute the best ideals of Christian living and to enlist them in active Christion service.

Those who desire to join the Association, can do so, and will be given opportunity to do Boys' Work, Educational Class Work, Church Relations, Bible study, and General Work.

If the Asociation has helped you, they ask you to aid them in joining and invites you to help them to help others.

APPOINTED ASS'T PROFESSOR AT UNIV. OF MISSOURI

The University of Missouri has appointed J. H. Lovett '14 as assistant professor in its Department of Electrical Engineering. He has undertaken the task of building up a strong electrical engineering department in the university and will attempt to carry out a program similar to that of the Institute. To the regular courses he will add courses in Power Station Design and Electrical Transmission and Distribution of Power. Professor Lovett was formerly assocsiated with the New England Power Company.

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