THE STUDENTS' ANNUAL
NEWARK
TECHNICAL SCHOOL
The 1924

KEM LEC MEK

THE ANNUAL
OF THE STUDENTS

COLLEGE OF ENGINEERING

NEWARK
TECHNICAL SCHOOL

NEWARK, NEW JERSEY

VOLUME TWO
To PETER CAMPBELL

"like a ship destined not to rot in the harbor, but to plow new paths over the sea, and to tend ever through self exercise toward praise and the fruits of glory."

ALBERTI 1492
FOREWORD

May this year book serve as a lasting memoir to the graduates of fellowship unusual, peculiar to a small college. May it also serve to show to those interested some of the advantages that we believe accrue from the Co-operative System of Education. We have fond hopes that this book will be received as favorably as its predecessor. Consolidating gains is accompanied by tasks comparable in magnitude to those encountered in blazing a trail. May succeeding staffs find the task less arduous and the pleasure as great as we have found them.
THE DEAN'S MESSAGE

In a message to the graduating class I want to stress again the fundamental importance of character. You as professional engineers will be judged primarily as men. The world will not expect that you come from this college finished technicians. It will not expect that you exhibit the maturity and judgment of fully developed professional men. The world has a right to expect, however, that you can show that you have a real foundation of character. Honesty, industry, sincerity of purpose, and a sense of deep responsibility you must show. In this day and at this time particularly these attributes are of the deepest significance and of the greatest value. In all honesty and in all sincerity I believe that every one of you has shown to us that you possess in a measure these attributes. The development of them is your first and your greatest duty to the school, to your community and to yourselves. As engineers we hope you may make your mark in your chosen profession. As men we hope and expect that your influence will be felt in the upbuilding of the community, the state and the nation. A training such as you have had will prove valuable to you as individuals but in a very much broader sense it will only be worth while if it is reflected directly in the progress of mankind, through your efforts for and with your fellow men.
"Study to show thyself approved a workman that needeth not to be ashamed."
The foregoing advice was given about two thousand years ago by a leader to a small
group of men banded together for human uplift, and probably nothing better could
be said to the students in our College. The advice calls for an honorable attempt
to hourly analyze your own work, and find out whether the College is being honored,
and whether when our students are called on to enter industry as co-operative
workers, that the Faculty will say: "These are men whom we are proud to supply."

The co-operative method possesses a wonderful possibility. The Trustees and
Faculty of the College are saying to the industrial activities of our time, "Here are
our lads—try them out." The industries in most cases, with a built-up, valuable
experience, are opening their doors and giving a splendid opportunity to our students.
They are trusting you to back up the statement of Director Cullimore, the Faculty
and the Trustees of the Newark College of Engineering, that only men are being
supplied who are determined to show themselves approved workmen.

To the industries who have shown confidence in our work, the Vice-President
of the Trustees would desire to thank all for their patience and co-operative spirit.
THE GRADUATES

"Now on the burning forge of life
Our fortunes must be wrought."
IRA BERGMAN
171 Elizabeth Avenue, Newark, N. J.

Course:
Chemical Engineering.
Graduated South Side High School 1919.
College of Engineering 1920-1924.

Co-operating Concerns:
Alexander Seidler Company.
Nairn Linoleum Company.
Proctor & Gamble.

Honors:
Phi Delta Sigma Fraternity.
Senior Class Vice-President.
Senior Dance Committee.
Circulation Manager Kem-Lec-Mek.

Ira is a master of the snappy come-back. No one is respected by him in his desire to have the last word. He usually has it because his opponents have something else to do, and Ira is yet to be seen at work. Not that he is lazy—not at all—but he always wants to do something else, and he has never yet arrived at the point where there is nothing else to do but the thing at hand. If he does ever arrive at that stage he will be too tired to do anything, so what is the use?
George Booruji
10 Lafayette Avenue, Summit, N. J.

Course:
- Electrical Engineering.
- Newark Technical School 1919.
- College of Engineering 1920-1924.

Co-operating Concerns:
- General Electric Company.

Honors:
- Staff Photographer Kem-Lec-Mek.
- Senior Dance Committee.

"George" has a specialty. It is building transformers. Most any
day he can be seen parading around the place with a handful of
pancakes and hysteresis loops. His pockets bulge with kilowatts,
and when he hears a bit of gossip, he immediately steps-it-up into
a wild yarn. This shows how people unconsciously become like the
things which continually occupy their minds. Anyway, if George
can step-up the two or three things he knows into enough to pass
an exam, we will feel proud of our electrical department.
CECIL S. DAVIS
171 Overlook Avenue, Belleville, N. J.

Course:
Chemical Engineering.
Graduated Laconia High School 1918.
College of Engineering 1919-1924.

Co-operating Concerns:
International Coal Tar Products Company.
McNab & Harlin Company.
Van Dyk Company, Synthetic Perfumes.

Honors:
Senior Class Day Committee.
Reviewer Kem-Lec-Mek.

As a minister's son, Davis is a total failure. Not that he doesn't cut up with the women. We understand that there is a girl in Belleville—but since no one knows where that is, why go into details? Davis always parks his vote along with the professors when an argument comes up. This shows a keen sense of direction, of the eternal fitness of things—or something. But why argue? If a man is right he should be supported and Davis knows that the professors are usually right.
F. RAYMOND FOGEL
475 Norwood St., East Orange, N. J.

Course:
Mechanical Engineering.
Graduated Central High School 1917.
Baltimore Polytechnical Institute 1918.
College of Engineering N. T. S. 1920-1924.

Co-operating Concerns:
Gould & Eberhardt Company.
Bethlehem Steel Corporation.
Frankfort & Aberdeen Arsenal.
Buick Motor Car Company.
Western Electric Company.

Honors:
Senior Class President.
Beta Alpha Theta Fraternity.
Business Manager Kern-Lec-Mek.

Gentle reader, this is not an exceptionally high forehead. The surplus is face which is increasing as the years go by and as the fur which covers the domes of ordinary mortals recedes as a sort of timber line driven back by a period of glaciation. What forehead there is, however, marks a man of intellect as distinguished from the common gunman or safe-cracker. Brains will improve the quality of any sort of work.
CARL P. MANNHEIM
29 North Seventeenth Street, East Orange, N. J.

Course:
Chemical Engineering.
Graduated East Orange High School.
College of Engineering N. T. S. 1920-1924.

Co-operating Concerns:
Proctor & Gamble.
Chemical Company of America.
Seaboard By-Product Coke Company.

Honors:
Senior Dance Committee.
Art Editor Kem-Lee-Mek.

"— the champion was badly battered but still in the ring when the gong sounded, ending the round." As we reach the end of "Round Four" Curley does not look at all like a champion; furthermore, he never did. Between shifting around from one plant to another and bucking the Faculty here at college he is rather battered but he is still in the ring. This follows, "The harder they get hit the stiller they are." Another thought: G. K. Chesterton makes one of his characters say, "All men look dignified when they are dead," so we still have hopes for Carl.
Course:
Chemical Engineering.
Graduated East Side High School 1919.
College of Engineering N. T. S. 1919-1924.

Co-operating Concerns:
Nairn Linoleum Company.
Egyptian Lacquer Company.
The Celluloid Company.
Western Electric Company.

Honors:
Phi Delta Sigma Fraternity.
Chairman Class Day Committee.

"Leo" is essentially a politician. We have yet to see anyone get so much with so little effort. A mighty gift of gab combined with an ingratiating personality has won him friends in places where they count. This is a good way to get ahead but there are others not nearly so easy which we common mortals have been forced to take because we lack what might be called "divine fire."
LAWRENCE J. PATTERSON
173 North Maple Avenue, East Orange, N. J.

Course:
Chemical Engineering.
Graduated East Orange High School 1920.
College of Engineering N. T. S. 1920-1924.

Co-operating Concerns:
Nairn Linoleum Company.
E. I. DuPont de Nemours Co.

Honors:
Beta Alpha Theta Fraternity.
Senior Dance Committee.
Assistant Editor Kem-Lec-Mek.
An embryo engineer by the name of "Pat"
Studies engineering but knows less of that
Than he does about women. And darn little knowledge
He'll have about either when he gets out of college.

Pat is a musician. When but a mere child he played on the linoleum.
He never seemed to get over his childish habit for he still continues
this activity at Nairn's. Of course being a chemist he plays a dif-
ferent tune than before.
JOHN W. NILE
400 Boyden Avenue, Hilton, N. J.

Course:
Electrical Engineering.
Graduated Newark Technical School 1919.
N. T. S. Evening School 1919-1920.
College of Engineering N. T. S. 1920-1924.

Co-operating Concerns:
Gould & Eberhardt.
Crocker-Wheeler Company.

Honors:
Senior Class Treasurer.
Class Day Committee.

No camera can do justice to the flaming thatch of our "Jack." Coupled to this fiery headpiece he has a meek-looking physiognomy, which belies the stuff behind it. Like all other big game hunters, he hesitates to speak of his adventures. It was quite accidental that a mounted specimen of an Alaskan mosquito was discovered in his trophy room. Rumor hath it that Jack, alone and without any weapons, went into the den of this monster and after a terrific hand to hand struggle, emerged half fainting, dragging the lifeless carcass of the beast behind him. It was such courage which enables him to extract dues from our more recalcitrant members. With his consistent plugging Jack should go a long way, if he gets a good rolling start.
SAMUEL REIGENSTREICH
116 Watson Avenue, Newark, N. J.

Course:
Electrical Engineering.
Graduated Eastern District High School 1915.
College of Engineering N. T. S. 1920-1924.

Co-operating Concerns:
American Transformer Company.
General Electric Company.
Westinghouse Electric & Manufacturing Co.
78th Division, United States Army.

Honors:
Class Representative A. A.

Every picture tells a story. This one tells of a lad burrowing his way through cords of text books to the point where he knows a rheostat from a brush discharge. Knowledge of this sort is rare among graduates and Sam is to be congratulated on the way he has outstripped the men with whom he toed the mark in 1920. Sam is runner up in the contest to see who can make the profs talk the longest after the hour is up.
WILLIAM PERRINE
230 Glenwood Avenue, East Orange, N. J.

Course:
Chemical Engineering.
Graduated East Orange High School 1920.
College of Engineering N. T. S. 1920-1924.

Co-operating Concerns:
McNab & Harlin.
Van Dyk & Co., Synthetic Perfumes.

Honors:
Beta Alpha Theta Fraternity.
Class Day Committee.

Bill is one of those fortunate mortals who were born tired. He even smokes his pipe upside down so he won’t have to dump out the ashes, but even then he kicks because he has to push the tobacco in tighter. Nevertheless, we maintain that those so constituted who can get away with it are favorites of the gods. It will be a comforting thought for the “Sons of Rest” to know that they have an exponent high in engineering circles.
ADRIAN W. STEVENS
31 Mercer Avenue, Plainfield, N. J.

Course:
Mechanical Engineering.
Graduated South Side High School 1916.
Newark Technical Evening School 1919-1921.
College of Engineering N. T. S. 1921-1924.

Co-operating Concerns:
Gould & Eberhardt.
Essex Station, Public Service Electric Company.

Honors:
Senior Dance Committee.
Senior Class Secretary.
Assistant Business Manager Kem-Lee-Mek.

The above is not the result of camera distortion nor has the subject ever been in a railroad accident. This is Steve's regular picture face, developed by consistent attendance at the Branford. He is a great seeker after beauty—a veritable connoisseur when it comes to picking them. Need we say more? In addition to this his chosen vocation, he toys with a text-book now and then and has accumulated enough information to escape the wrath of the Faculty. Steve bears out the maxim "He who goes slow, goes far (if he keeps going long enough)."
CHARLES A. SHULTZ
Railroad Avenue, Jamesburg, N. J.

Course:
Electrical Engineering.
Graduated Jamesburg High School 1918.
S. A. T. C. Rutgers 1918-1919.
Rutgers College 1919-1920.
College of Engineering N. T. S. 1920-1924.

Co-operating Concerns:
Seaboard By-Product Coke Company.
Public Service Electric Company.

Honors:
Lambda Chi Alpha Fraternity.
Vice-President Electrical Society.

Within this plain and honest looking example of mid-Jersey architecture there surges a wild and turbulent spirit, which manifests itself now and then, mostly then, in an orgy of some sort. The last time this spirit overcame him, Charlie thundered into Petty's and bellowed, "Gimme a malted milk." In his sober moments he acts as the guide and mentor of the Jamesburg Boy Scouts. Aside from these strenuous activities Charlie finds time to do a lot of studying. After all, it is only human for a man, especially for one who takes his work to heart, to skid at intervals from the straight and narrow.
ROBERT WIDDOP
46 Evelyn Avenue, Phillipsburg, N. J.

Course:
Mechanical Engineering.
Cayuga High School, Canada, 1916.
Detroit Institute of Technology 1919-1920.
College of Engineering N. T. S. 1920-1924.

Co-operating Concerns:
Edison Portland Cement Company.
Second Division, United States Army.
Ingersoll Rand Company.

Honors:
Editor-in-chief Kem-Lec-Mek.
Class Day Committee.

If "Bob" had been a pugilist he would have been called "One-Round Widdop" because he is singular in number and just about as round as they come. There is only one drawback, he is too good natured. All corpulent people are because they are too lazy to fight and too fat to run. As it is, Bob manages to worry along as a sort of mechanical engineer in a cement plant. This should prove to be a great relief to other industries.
ARThUR L. VanderLip
14 Race Street, Hillside, N. J.

Course:
Electrical Engineering.
Graduated Hornell High School.
College of Engineering N. T. S. 1920-1924.

Co-operating Concerns:
Crocker-Wheeler Company.

77th Division, United States Army.

When a man stands high in the estimation of his classmates there is always a reason for it. Vanderlip has a habit of coming to about three minutes before the end of class with a bunch of questions which cause the professor in charge to miss a wonderful opportunity to stop talking. This, however, is not the reason for Vanderlip's high standing in the minds of the graduating class. If there is a reason, we want to know it, for he is admired by all of us.
Over the falls and into the Whirlpool.
No more rivers to cross.
SOME years ago, in September, 1920, to be more definite, the main hall of our Academic building was nearly filled with a large group of young men whose faces wore a look of uncertainty and expectancy. But when a very dapper-looking man appeared and bade the members of the Freshman class to follow him, these faces lighted up and seemed to say, "Well, things are beginning to happen anyway"—and they did happen. The group that followed Professor Cummings spoke of themselves from that time on as "we."

Strangers to one another, we were unable to resent any action taken by the Sophomores to enforce the rules laid down for our guidance, but the very tyranny which we had to hear proved to be to our advantage for it forced us to seek out our fellow sufferers for mutual protection and thus it materially hastened our class organization. As Freshmen we centered our efforts into getting established in our academic work. This monopolized our time to such an extent that the class of 1924 was not prominent in either social or athletic events during its first year.

When we became Sophomores we had learned how to do our work efficiently and it was then that we considered some activities as a class. A host of husky and formidable Freshmen suggested an inter-class football game. A survey of our ranks disclosed a few men who could play football and a few more who expressed their willingness to try. With this pitiful aggregation we met the Freshmen and were completely defeated. The feature of the game was the grit of our men, every one of whom played throughout the entire contest. This was necessary because we had no substitutes and the only excuse that anyone had for quitting was sudden death. As it was, ten of us repeatedly stood around on the field waiting for the eleventh to come to so that we could resume the game. The Freshman-Sophomore game has since become an annual affair and stands as a monument to the martyrs of 1924. In December of our second year we united with the Juniors in giving a very successful dance to the Freshmen. We terminated our social activities for that year by holding a very successful Sophomore dance.

As Juniors we made our first contact with industry under the co-operative system and suffered complete upset until we grew accustomed to the system of alternating work and classes. We gave a smoker in honor of the Freshman class on the evening of the annual football game. We handed them smokes, cider and doughnuts along with a lot of free advice, an ordeal which we did not have to sit through when we were Freshmen.

The struggle and confusion of our undergraduate years is finally dying away and we pause to consider our losses. Of forty men who started with us as Freshmen only fourteen survived. The few of us left still cherish the memory of those who started with us.

Senior activities require greater effort and carry more responsibility than those of undergraduate years. The outstanding successes of this year are the publishing of the college year book and the Senior ball. The gaiety of Senior Week warps the ship of the class into the harbor towards which it set sail four years ago.

The four years we have spent at "Tech" have been well spent. We have learned many of the things which are vital to success in any field of endeavor. The Dean and the Faculty have struggled patiently to give to us a true and ennobled conception of our obligations to society and to our profession. It shall be our aim to justify their efforts.
THE JUNIOR CLASS

In the Fall of 1921 there entered the College a band of raw recruits—rough stock—destined to have a notable part in the development of the school, and also to have the school produce great changes in them, both individually and as a class. The Class of '25 organized, elected officers and very soon established itself as a part of the production plan of the school. Among the first operations to take place was the annual football game, Freshmen against Sophomores. This could very well be termed a "rough turn" but for the fact that we dulled the cut by beating our opponents. The affair was pleasantly lubricated the same evening at the Junior Smoker, our first social event of a college nature. Here we learned for the first time of the other side of college curricula. The grind of our work took off some of the rough surface, and by the end of the year we were shaped up to a working surface, and ready for the summer co-operative period. During that time, a sort of breathing spell, we were trued up for the ensuing work at school. There is no better way of finding a man who can stand on his
own feet than to take all the props from under him. And therein lies the reason for industrial training during college years.

Those of us who remained after the year of hard knocks began our Sophomore year ready for the drilling which we received during the term. We again conquered in the football game, defeating our new Freshmen, and gaining the right of enforcing the Freshman rules. The Smoker again introduced a Freshman class to the school, this time fresh from the athletic defeat, that did much for their solidarity in the days to follow. During this year we also received a preliminary polishing through the dances that were given by the various classes, including several dances conducted by our own class. The June dance of the Sophomore class established beyond question the criterion for future college dances.

The Junior, the present year of our class, connotes the buffing and polishing period, after which there comes the final finish and ultimate release as Seniors. This year has seen us in the cooperative industries, establishing contacts, studying factory methods, and learning the how and the why for the myriads of industrial problems we encountered. The outstanding event of the year, socially, was the Junior Prom, held at the Robert Treat Hotel. This dance, with its attendant formalities, was the most successful of its nature and established a mark of rivalry for the future Junior classes.
LOOKING back over the last three years, the period between matriculation and the present, let us pause to analyze what has happened during that period. The following is a brief survey of what we believe to be the most important developments effected by our engineering education under the co-operative system of our Alma Mater, The College of Engineering of The Newark Technical School.

The work of the first two years at our school does not differ materially from that of other colleges except that it gives a wider range of material so that the student entering the co-operative scheme in the Junior year may have sufficient grounding in the fundamentals of engineering. As a result of the first two years' work, the student about to enter the co-operative system has the ability to learn; the first year of college life demanded an immense amount of effort to get the assignments completed. Efficiency in study was rather low until we developed a system which enabled us to grasp the fundamentals with facility. It calls to mind the story told us by a prominent engineering educator. The story goes that an engineer, called upon to give professional advice to the directors of an organization contemplating a certain project, was required to present his report twenty-four hours after notification. The subject was of an exhaustive nature requiring the use of a large number of references. He asked himself, "Is it possible to peruse all available references?" Evidently he could not do so. The thing to do was to determine the most widely accepted reference on the subject and then to establish the facts without making any attempt to acquire the entire descriptive matter. He noted the principal points on paper, arranged them and then proceeded to analyze. After establishing the fundamentals in his mind he introduced his own ideas formed by previous experiences and then compiled his report.

This young engineer showed that he had sufficient fundamental knowledge in engineering to know what to seek and how to seek it; he had the ability to learn.

One of the many traits acquired through our engineering training is the ability to learn. Henry Adams says, "What one knows is, in youth, of little moment; they know enough who know how to learn."

Technical knowledge characterizes the engineering profession but there are many other essentials. Our term "technical knowledge" does not mean the encyclopedic type of knowledge. This, the system at our college discourages, for it does not develop mental independence. The advancement of society is accomplished partly through the use of old ideas, but mainly through the development of original conceptions.

The acquired technical knowledge is but material upon which we work for the purpose of developing our mentalities; specialization upon specific problems is not practiced. By mental development is meant: first, the disciplining of the mind to enable it to carry a logical train of reasoning from the various premises to the correct solution; second, the development of the self-confidence which enables it to form an opinion concerning the validity and importance of whatever we read.

Our training develops a sceptical viewpoint—a requisite for success in engineering. The study of sciences tends to establish the truth of the laws by bringing home the idea that their formulation is the fruit of actual experience, and not the product of vivid imagination. However, imagination is a desirable attribute for the engineer since some laws are best illustrated by hypothetical cases. Imaginative power has figured largely in scientific development.

Our co-operative system of education changes the high school boy of a limited outlook to a man of balanced viewpoint who is ready to go out into the world on a competitive basis, able to assume the responsibilities of a practical engineer.

Through childhood and early youth we depend upon the thoughts and guidance of others, but in college we were made to feel the necessity for self-dependence. As an illustration of the way in which the student is trained to as-
sume responsibilities for his acts, we might point out that no definite number of absences is set beyond which scholastic standing is lost. The student must determine whether he can afford to cut a class. Should he absent himself it is assumed that he has done so for some purpose which he deems of greater importance than his attendance: he assumes the responsibility for his decision as to the relative importance.

The student entering industry under the co-operative system has a grounding for two years of academic training in engineering fundamentals, enriched by six months of practical procedure obtained during the vacation periods after the Freshman and the Sophomore years.

The development of modern industry to the present stage of specialization has brought out many complex problems, among which is the need for leaders possessing the ability to solve problems of adjustment and re-adjustment. The attempt of our college to develop men to meet these needs has been highly successful. We shall endeavor to tell how these industrial requirements are met. It is fitting at this point to add a few words of appreciation of our co-operative concerns who have made the development of the co-operative system possible. The companies have helpfully given the student exceptional opportunities to study practical procedure at their plants.

The student during his Junior year spends alternate two-week periods in the industry and in academic work. He is routed through an entire plant, spending as much time in each department as is deemed advisable by the co-operative representative in charge of co-operators, and
by the co-ordinator, the school representative, who visits the plant during each period.

The introduction of the student into industry causes him to realize the importance of his education, and the necessity for becoming more useful to society and to himself. Goethe aptly expresses the idea which underlies the student's determination to secure a higher education—"Make good thy standing place and move the world."

There is every class of position in a modern industrial plant and in its personnel every type of man from the laborer to the executive is needed.

Mental reactions differ as widely as types of work; and to the student these reactions constitute a valuable and interesting study. Quoting Emerson—"Everybody knows as much as a savant. The rude minds are scrawled over with facts, with thoughts. They shall one day bring a lantern and read the inscriptions." Every man in the degree in which he has wit and culture finds his curiosity inflamed concerning the modes of living and thinking of men, especially of those classes whose minds have not been subdued by the drill of school education. The student who has come into contact with the environment created in our modern plant, learns man and matures with greater rapidity during his entire education.

Let us stop to consider the desirable characteristics developed as a result of the contacts with the personnel of an industrial plant. The student soon learns that each individual is an entity and, if you please, a new power—something which differentiates him from any individual who has gone before. Realizing this the student is lead
to analyze the various individuals, distinguishing the desirable and the undesirable characteristics in each. As a matter of natural curiosity he makes a self-analysis in order to determine his own character, giving him a more intimate knowledge of his soul—a clearer light upon humanity. Self analysis tends to develop what we choose to call "internal honesty," the capacity to recognize with truth and sincerity one's own limitations. The understanding of his own limitations enables the student to understand the limitations of others and to come to a sympathetic understanding. It also causes him to apprise other personalities at their true worth and develops in him a greater appreciation for their thoughts and abilities. As a result of intimate association, the student is enabled to make comparisons and to determine the proper place for various types.

The time element is a great factor, perhaps the most important, and as a result of the synchronizing of the practical procedure and our theoretical education through co-operation, it is possible to say that the student has been able to give two years of his life to the application of his education to the needs of society. A student graduating from the usual four-year college course must, after graduation, go through a two-year Business-Freshman Course before he is ready to make a responsible connection with a concern, whereas the co-operative student has laid the foundation of his business career. A final interesting feature in this connection is the way in which time is conserved by the direct application of theory
at the time of acquisition; the theoretical possibilities of a problem are mastered in the school, and the limitations of practice are mastered in the industry.

This, briefly, is the truth as we see it—the faint outline of a painter's charcoal upon a new canvas—the picture still vague and undefined. We are but students in a great and noble art, each striving

"To draw the Thing as he sees It,
For the God of Things as they are."
ANOTHER CO-OPERATIVE CONCERN
THE SCHOOL LABORATORY BUILDING
THE CLASS OF 1926

The Class of 1926 returned to the college in the Fall of 1923 after spending their first summer in the various industries. In numbers we were but half of the care-free group which entered the halls of this institution for the first time in September, 1922, but we were a stronger body as a result of our academic and industrial experience. We were prepared for what was before us and, plunging into our studies, struck out vigorously for the goal which we were now able to distinguish.

It falls upon the Sophomore class of all colleges to regulate and, if necessary, discipline the incoming class in order to curb its over-boisterous spirit and to impress upon it the dignity of its calling. To accomplish this without excessive bloodshed or tonsorial operations is often an impossible task. Thanks to the smooth functioning of our own compact organization, and also to the fact that most of the Freshman class are inclined to respect precedent, we were able to enforce the Freshman Rules without severely straining the official relations between the classes. Although interclass rivalry always runs high, the
real animosity was disposed of in the annual tug-of-war, held on Parents' Day, in which practically every member of both classes participated.

In this college the academic work during the second year prevents, to a great extent, the social and athletic activities which are characteristic of the Sophomore classes in other institutions. However, we have achieved success in both activities. We were able to win the big inter-class event—the tug-of-war—and also the inter-class basketball championship. We conducted one dance in the Fall, and anticipate holding another in the Spring, which we hope will further enhance our reputation in this branch of college activity.

To recount the academic, social, or athletic activities of this group of embryo engineers which constitutes our class, is in a way futile. Although these activities are not mean, they are not the ones of which we are most proud and which we shall value most highly in the coming years. What we shall want to remember, when all this is but a memory, is that spirit of fellowship which prevails among us and which makes us a close-knit organization. To the observer within the college this is rapidly apparent, but it is difficult to convey a picture of our fraternal feeling to one without the walls of this institution.

The class presents the unusual spectacle of a group of men not broken into "Cliques" or self-centered groups. There are no cliques, no combinations; petty grudges are not cherished by one member against another. The fact is that the Sophomore class is an informal fraternity, one for all, all for the college. This friendly feeling toward our fellow students, combined with sound technical and industrial training, carried with us when we break into the work of our chosen profession will, we hope, be responsible for signal success which will add to the reputation of our Alma Mater.
We came, we studied, we conquered—not yet! In September, 1923, we entered upon a new field of endeavor where we found ourselves inadequately prepared to cope with the problems that infested our new environment. As a body we were greatly scared at the thought of being associated with a unique institution of higher learning. This feeling arose from the new ideals imparted to us. One of our new principles is to refrain if possible from war with the Sophomores; another to voluntarily give up the ambition to cause fights and to avoid tonsorial operations. We have found that the path of peace lends itself to the atmosphere of study much more than scratching a bald head or nursing a black eye.

The peculiar atmosphere of the college is one of concentrated work with a generous feeling of good fellowship and jollity. The wild hilarity of ye college man as pictured in song and story is but a myth, the foolishness and absurdities are unnecessary and we find that we get along very
well without them. A sense of duty and responsibility has overtaken us, not alone from the talks by the Dean and the Faculty but from reflecting upon the inscriptions which decorate our walls.

The great annual classic, the football game between the Sophomores and the Freshmen, ended in a victory for us and served as a means for getting acquainted. With Robert Jenkins temporary chairman the class officers elected were: President, R. Jenkins; Vice-President, Forsythe; Treasurer, Falconer; Secretary, Le Grand. Patton and Cox were elected as class representatives in the Athletic Association. Mr. A. P. Roberts was elected Faculty Advisor.

Class spirit is a disease and the class organization depends upon how seriously its members are affected. The members of this class must attend the meetings, work on committees, and show the proper spirit of the school by helping the officers in transacting business. It is necessary for the class members to support all the class activities in order to appreciate the fullness of college life. Lectures and sermons from the Faculty and upper-classmen will not alleviate our lack of interest, so let's get into the business of the class the same as we got into football, basketball and general athletics. Our school is the most important thing in our young lives at present so why not make it the best?

With only a few days of hectic practice and with a coach from the Junior class we were able to vanquish the aggressive Sophomores. The Sophs were as much favored as the Freshmen and the pep and teamwork shown on both teams made a great game for the record-breaking crowd of spectators. The good spirit and sportsmanship displayed at the game were of the highest order and typical of the college.

On Parents' Day we were fortunate enough to win the cane sprees under the guidance of Mr. Roberts, but we lost out in the tug-of-war. We were not successful in basketball and keenly felt the loss of some of the athletes from our class.

A word about our Faculty. We have come to know Dean Cullimore and the ideals of which he is an exponent through several addresses at convocations. Behind the Dean is the Faculty, everyone working for our welfare and trying to get us to assimilate the principles which make for character and success.

A year is but a short time in which to transfer our loyalty from old Alma Maters to the College of Engineering but we feel that the college will take all the spirit we can give it.
ATHLETICS

FRESHMAN FOOTBALL

SOPHOMORE TUG-OF-WAR

FLYWEIGHT CANE SPREE

FRESHMAN TUG-OF-WAR

SOPHOMORE FOOTBALL

HEAVYWEIGHT CANE SPREE

SOPH. ANCHOR

MIDDLEWEIGHT CANE SPREE
SINCE the last issue of this annual our athletic outlook has broadened considerably.

The first event of the fall semester was the annual Freshman-Sophomore football game. The “Frosh” won by a score of 20 to 13.

The following weeks were spent in practice for athletic events held on Parents’ Day, Nov. 28, 1923. The events scheduled were the annual Sophomore-Freshman tug-of-war, an inter-class basketball game, and a series of cane sprees. The veteran Sophomore team won the tug-of-war while the Freshmen were victorious in all of the cane sprees.

Then came a period of preparation for basketball. Our facilities for athletic activities are far from ample. To the men interested in a given branch of athletics falls the honor of providing themselves with equipment and a place in which to play. After practice, which was at times shortened by our laboratory periods, a series of inter-class games was started. The Freshmen won the inter-class title and contributed largely to the team which was then organized. Our first game, with the Newark Y. M. C. A., we won by a score of 36 to 28. Two weeks later we met the Junior ‘Varsity of Stevens’ Institute. This game showed the importance of good condition and all-around development. Our fellows put up a splendid game and were leading at one time, but could not stand the pace set by the better developed Stevens’ men. The final score was 33 to 28.

Our final outside game was a return game with the Newark Y. M. C. A., which we won by a score of 58 to 15. The success of the season of 1923-24 cannot be fairly judged by the scores nor by the limited number of outside games played. There was evolved something of paramount importance to our school—morale. The spirit and sportsmanship displayed throughout the season was of the best. Despite the lack of equipment and time for intensive training our showing was good.

At the time this goes to press the baseball season is barely begun. The first game, between the Frosh and the Sophs, resulted in an 11 to 2 victory for the second year men. Considering the available material this season should prove successful.
TO THOSE MEN WHO STRIVE DAILY
TO REVEAL TO US THE MYSTERIES
OF SCIENCE AND THE PRINCIPLES OF
HUMAN RELATIONS—OUR FACULTY.
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- Dean Cullimore and Faculty
- Associate
- Graduates
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ACKNOWLEDGMENTS

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To Mr. Francis Widdop who stepped in and gave of his time and energy, to Miss Grace Johnson for art work, to Mr. Burrowes of the Newark Sunday Call, Mr. McKechnie and Mr. DeVilleroy of the Art Photo Engraving Co. for real interest we acknowledge special indebtedness. We appreciate the great interest and real ability of Mr. W. L. Ellis in pushing the publication of the book. We must especially mention Mr. C. M. Beyer of the staff who filled a definite breach in the organization at a critical time with unstinted loyalty. It would be impossible to thank individually all those who helped but to all many thanks.
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Our advertising section is an index of the leading concerns in this section. They have done a large part in making this book possible. We ask the friends of Newark Tech to extend their patronage to these advertisers not only because of the aid which they have rendered us but also because we know that our friends will profit through dealing with concerns of recognized standing in their respective fields.

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