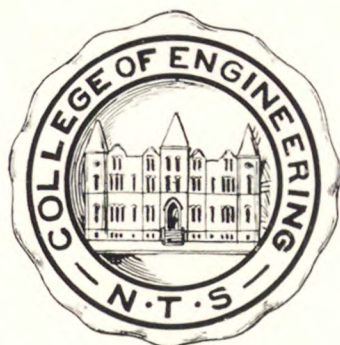


KEM LEC MEK

1925

The 1925
KEM - LEC - MEK

THE ANNUAL
OF THE STUDENTS
COLLEGE OF ENGINEERING
NEWARK
TECHNICAL SCHOOL



NEWARK, NEW JERSEY
VOLUME THREE

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FOREWORD

It is with the hope that this volume carries on the work of explaining both the Co-operative System and the ideals of our College that we now offer it to our readers.

May it serve in the future as a reminder of our college days; of the work both at school and in the industries and of the many pleasant hours with our old college chums.

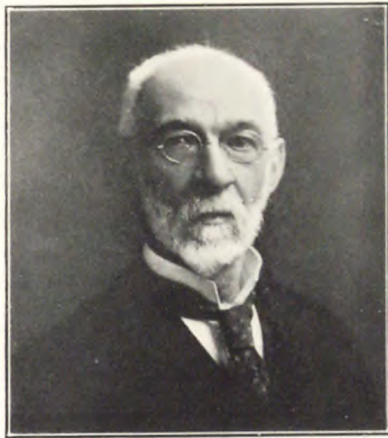
COLLEGE OF ENGINEERING
 OF
 THE NEWARK TECHNICAL SCHOOL
 THIS IS A STATE INSTITUTION GOVERNED BY THE
 BOARD OF TRUSTEES
 OF
 SCHOOLS FOR INDUSTRIAL EDUCATION
 OF
 NEWARK, NEW JERSEY

APPOINTED BY THE GOVERNOR
 EX-OFFICIO MEMBERS

HON. GEORGE S. SILZER, *President*
 Governor of the State of New Jersey
 HON. FREDERICK BREIDENBACK
 Mayor of the City of Newark

APPOINTED MEMBERS

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PETER CAMPBELL, <i>Vice-President</i> -----	1925
HERBERT P. GLEASON, <i>Treasurer</i> -----	1926
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HALSEY M. LARTER-----	1928
WILLIAM L. MORGAN-----	1926
SAMUEL E. ROBERTSON, M.D.-----	1927
WILLIAM C. STOBÆUS-----	1925



These are the properties of the rational soul:
it sees itself, analyzes itself, and makes itself
such as it chooses; the fruit which it bears it-
self enjoys—

M. ANTONINUS, About A. D. 180

This volume is respectfully dedicated to
Charles A. Colton, E.M., Sc.D., the first Direc-
tor of the Newark Technical School.

THE DEAN'S MESSAGE

"Creation's cry goes up on high
From age to cheated age.
Send us the men who do the work
For which they draw the wage."

The first and the most important function of our college is to train men to be men in the deepest sense of the word. To be men who can DO the real work of the world ought to be the aim of every young engineer.

The most important thing in life is to be able to do; to do what you should do efficiently and smilingly, no matter whether you happen to like it or not.

A man who can and will consistently do what duty demands no matter what circumstances arise, we speak of as a man, a man of character. All the great men and all the good men of our own time and of all time possess this ability to do, to accomplish in the face of obstacles, this thing called character.

Character is the first, the deepest and the most vital principle making for success.

All great men, all great engineers have done their duty, not counting the cost.

All great men and engineers do and have done their work well, whether easy or hard, whether pleasant or unpleasant because it was a part of the job.

The doing of what the job calls for is a direct measure of character.

Your work in this college has taught you that brains without motivation are of slight importance. You have seen many of your fellow students fall by the way. A few perhaps because they lacked brains, many because they lacked character. They could, but would not do what the job called for. You have perhaps

come to realize that what happens to boys in school may happen to men in the world.

You have seen and experienced some of real life as distinguished from College Life through your co-operative work. You see that character is paramount. You see that having brains is not enough. You see that brilliancy seldom attains the ultimate goal.

Character implies action. Character becomes evident only in action.

You must DO the job. The emphasis is on the DO.

Do is at the bottom of character. Character and its consequent success means doing. Neither character nor success can quibble. The successful man never explains nor apologizes—he does not have to, he does things.

Character and success mean action, mean doing, mean accomplishing.

An electric generator may be properly designed, properly constructed and may contain all the elements for successful operation. It may be an example of the application of rational laws and empirical practices and yet if it does not move there is no power, there is no output. There is no character, no success. There must be *action, there must be movement.*

If I were to choose one word for a motto for you of '25, DO would be the word.

Associate with it the thought that "do" means, action in spite of all obstacles, it means getting the job done at any cost, in spite of any and all circumstances.

"Do" means power to consummate.

Power to consummate measures the character of a man; in the final analysis measures the man.

ADMINISTRATION



ALLAN R. CULLIMORE

S.B. in Civil Engineering (Mass. Institute of
Technology)

Dean of the Faculty, Director Newark
Technical School



FRED W. LAVENBERG

Supervisor of Co-operative Work

DEPARTMENT OF APPLIED MATHEMATICS



HAROLD N. CUMMINGS
A.B. (Bates), S.B. in Civil Engineering
(Mass. Institute of Technology)
Professor of Applied Mechanics



BEDROSS KOSHKARIAN
A.B. (Euphrates College), A.M. (Yale)
Associate Professor of Applied Mechanics



H. H. METZENHEIM
B.S., E.E. (Cooper Union)
Instructor in Mechanics, Mathematics
and Electricity

MECHANICAL ENGINEERING DEPARTMENT

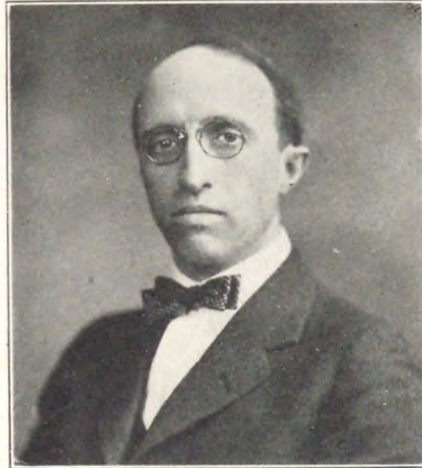


J. ANSEL BROOKS
Ph.B., M.E. (Yale)
Professor of Mechanical Engineering



A. PERRY ROBERTS
M.E. (Stevens Institute)
Instructor in Mechanical Engineering

DEPARTMENT OF ELECTRICAL ENGINEERING



JAMES C. PEET
E.E. (Syracuse)
Professor of Electrical Engineering



WALTER KRAUSNICK
S.B. in Electrical Engineering
(University of Missouri)
Associate Professor of Electrical
Engineering



ALBERT A. NIMS
B.S., E.E. (Worcester Polytechnic
Institute)
Assistant Professor of Electrical
Engineering

CHEMICAL ENGINEERING DEPARTMENT



V. T. STEWART
Ph.B. (Syracuse), S.B. (Mass.
Institute of Technology)
Professor of Chemical Engineering



JAMES A. BRADLEY
A.B., A.M. (Harvard)
Associate Professor of Chemical
Engineering



FREDERICK D. CRANE
A.B., A.M. (Union College)
Ph.D. (Johns Hopkins)
Associate Professor of Organic and
Industrial Chemistry

ENGLISH AND PHYSICS DEPARTMENTS



H. GRAHAM DUBOIS
A.B., A.M. (Johns Hopkins)
Professor of English



FRANK N. ENTWISLE
C.E. (Princeton)
Associate Professor of Physics

“THE CO-OPERATIVE SYSTEM”

When one of our students mentions to an outsider that the College of Engineering is run on the Co-operative System, he is, more often than not, met with a blank look of inquiry. The Co-operative System does not lend itself easily to exploitation, and so is not generally known outside of engineering circles. It is even true that many of the present students received their first introduction to the idea when they visited the school with the purpose of looking over the place before applying for admission.

The previous issues have, in a measure, given working definitions to this plan as it has been developed in the College by Dean Cullimore. In this issue we print a short history of the Co-operative System, introduced in 1903 by Dean Herman Schneider of the University of Cincinnati, and adopted in effect if not in toto by many of the engineering colleges of America, including Stevens Institute and the Massachusetts Institute of Technology. Thru illness this spring, Dean Schneider was unable to write the article personally, as he had intended doing but at his request, Professor Park of the University of Cincinnati has prepared the article that appears on the following pages, giving what we believe to be an excellent view of the system during its early days, and of some of the developments that have been added in the course of the last twenty years.

THE EARLY HISTORY OF THE CO-OPERATIVE SYSTEM

BY CLYDE WILLIAM PARK
Professor of English,
College of Engineering and Commerce,
University of Cincinnati

The co-operative course of the University of Cincinnati was not the product of an academic laboratory of pedagogical research. It originated rather in an investigation of the actual working conditions of commercial engineering practice. At the time when the course was conceived, practical men were especially severe in their criticism of the graduates of engineering colleges. The old apprentice system had broken down under the strain of a complex industrial organization, and it seemed that the engineering colleges were making but little effective effort to supply the link between theory and practice. Many teachers of engineering felt that they had done their whole duty when they had taught a traditional body of theory and had seen to it that the student retained at least 70 per cent of his book knowledge until after the final examinations. A few instructors conceded the desirability of hitching theory and practice side by side, but did not believe that such an arrangement was feasible.

The plan usually followed for uniting practice with theoretical instruction was the installation of school shops. The objections to this plan, however, were so numerous as to discourage its general adoption. In the first place, if school shops were to be fully illustrative of actual practice, they would have to include miniature reproductions of electrical plants, foundries, structural iron works, machine shops, railroads, construction companies, chemical industries, and all the other vast and complicated machinery of the industrial world. To duplicate all these plants would, of course, be out of the question; and merely to represent a few typical processes would involve such tremendous expense that only a few institutions could afford the luxury. Moreover, even in the most heavily endowed colleges there was danger that the pay—and

hence the quality—of the teaching force would suffer, because of the increased outlay needed for equipment. A further objection to school shops lay in the fact that they must inevitably fall behind the times in a few years. To remodel the shops and revise the shop courses frequently enough to keep pace with the swift progress of engineering development would be clearly impracticable. Neither did it appear feasible to put the school shops on a commercial basis and have the professors and students compete with business men engaged in actual production. From every angle, the school shop appeared impracticable. Yet it was clear that a well-planned course in the practice of engineering was desirable, since it would not only prepare the student better for his future work, but would also enable him to retain and understand a much larger proportion of his theory.

A solution of this vexing problem came to Professor Herman Schneider in a curious way. One evening, as he was walking across the campus of an eastern university where he was teaching, he heard the answer in the blast of a Bessemer furnace at a neighboring steel plant. Instantly the idea appealed to him as perfectly simple and obvious. Here was something better than any conceivable school shop—a million-dollar laboratory, with unlimited possibilities for illustrating the applications of technical theory. In this plant many graduates of this same college would find employment, as others had done before them. Why should they not learn as students to translate their book knowledge into terms of industrial processes?

As a contribution to educational philosophy, the co-operative plan was so simple and obvious that, even in the days when it was a novelty, its underlying theory was not difficult of interpretation. Primarily, it calls for a sequential

training in both theory and practice. This necessitates the coordination of theoretical and practical training in a progressive educational program. Since the agency which furnishes the practical experience is always some branch of actual industry, the reciprocal relation between school and shop permits the fullest possible utilization, for educational purposes, of equipment used in commercial production. Obviously, the arrangement of alternating periods is a mere administrative detail. From the employer's point of view, the most important elements of the co-operative plan are: First, the selection of workers; and, second, the awakening of an enlightened interest in their work through co-ordinated instruction.

From the standpoint of the school and the student, the most important feature of co-operative education is the realization of theory through its practical applications. In a very literal sense, the studies in the curriculum become "applied subjects." In the use of the word "co-operative," emphasis is placed not only on the kind of training given, but also on the relation between school and industry, and on the method of bringing them together.

In recent discussions of educational matters there has sometimes been a tendency to confuse with the co-operative plan types of education which clearly are not included in the foregoing description. In fairness to other methods and philosophies of education as well as to the co-operative system, the several methods should be sharply differentiated. In the study of a system, not isolated features, but a collection of attributes, and the object and method of their combination, should be considered. Manual training, trade schools, continuation schools, apprentice systems, and the more legitimate forms of vocational and "earn-while-you-learn" schools may have some things in common with the co-operative plan, and with each other; but in underlying theory and method they are different. Each should be judged according to its own theory, standards, methods, and results; and its place in the general scheme of education should be determined accordingly.

It was several years before Professor Schneider found an opportunity to test the co-operative

plan in actual practice. In the meantime, he had been called (1903) to the chair of civil engineering at the University of Cincinnati. During the first school year (1903-4), the retirement of the president precluded the submission of plans for the new course. The plan was presented to President Dabney soon after his appointment (1904), but because of the pressure of regular business he was unable for some time to consider any changes. In the fall of 1905, President Dabney approved the plan and presented it to the board of directors. After considerable discussion, the board authorized the introduction of the co-operative course on a small scale, to begin with the school year 1906-7.

While the educational aspect of the co-operative plan was under consideration by the university authorities, its practical application to local industries was taken up with numerous manufacturers, superintendents, foremen and engineers in Cincinnati. Most of these men showed interest and faith in the scheme as a general proposition; but when it came to adopting it as an actual business policy, some were chary of so radical an innovation. Typical of their objections to accepting co-operative apprentices were the statements that two men could not work alternate weeks at one machine, and that a crowd of "rah-rah" boys would disturb the shop organization. The latter objection coincided remarkably with the fear which had been expressed by some of the university instructors, that a group of "boiler makers" would destroy the scholastic atmosphere of an educational institution. By the end of a year of persistent interviewing, twelve concerns had agreed to try the co-operative system for nine months—the college year. These firms offered employment to students in electrical and mechanical engineering courses.

The peculiar requirements of the co-operative course developed a new type of student. The "co-op," as he was called, was alert, rugged, and independent. He was generally more serious than the "regular" student, but on occasion he displayed a sense of humor and a buoyancy which showed that, though he might be sobered by his practical work, he was not at all depressed by it. The difference lay rather in the fact

that he had known the steadying influence of responsibility. Not only his personal advancement, but also the outcome of an important educational experiment, depended upon his success, and the realization of this fact seemed to give him a new sense of loyalty to his college and a determination not to disappoint those who had trusted him. It was inevitable, of course, that the "co-op" of the early days should be self-conscious. He was the center of interest in a great educational clinic, and the knowledge that he was constantly being analyzed, photographed, and written up gave him a feeling of aloofness from the rest of the student body. This feeling, doubtless, was largely responsible for his "class consciousness," for there never was a more clannish group than the members of the first co-operative class.

For a time the attitude of the other students was such as to enforce this exclusiveness. It is a pleasure, however, to record that the old animosity between the two groups of students has disappeared. The co-operative students and the others have found that they have a great many things in common and no essential differences. The very fact that their interests and experiences are in some respects unlike, has made their association mutually beneficial. Community of interest, especially in athletic and social activities, has developed a wholesome university spirit. Evidence of the present solidarity is found in the prominent part taken by co-operative students in every kind of student activity. On the various athletic teams and in all the musical, social, and other organizations there is a large proportion of co-operative students. In view of recent developments, it would be hard for either group to understand that the "ostracism of the boiler makers" was once seriously considered.

After the entire feasibility of the co-operative course had been proved by a year's trial, there remained the question of how rapidly the university could adjust itself to an increased enrollment and to a greater number and variety of industries. Plenty of students were now willing to enter the course. More than 400 inquiries from prospective students were received during

the first year and a large proportion of those who inquired made formal application for admission. The scholarship records of the new applicants admitted were well above the usual requirements for college entrance, and some of the men who enrolled as first-year co-operative students had spent one year or more in academic work at other colleges. Many employers who had thought favorably of the plan, but had hitherto been reluctant to introduce it, no longer hesitated to ask for co-operative apprentices. The number of students who could be admitted, however, was limited by the crowded condition of classrooms and laboratories at the university, and also by the policy of the engineering faculty. The acceptance of fewer students was favored, because it would permit a more careful selection of men and would afford a better opportunity to study the pedagogical and administrative details of the course.

By the end of the first four years of operation, which may be called the experimental period, the co-operative plan had been fully vindicated. It had shown itself to be adapted to a variety of courses, including civil, chemical, and metallurgical engineering and to a range of industries from railroad construction to ink manufacturing. It had survived a panic and the ensuing industrial depression. The old theoretical objections, that two men could not alternate successfully at the same work, and that the "lag" on Monday mornings would be equally prohibitive at school and in the shop were disposed of once and for all by the answer that these difficulties were found not to exist in practice. If anything, "blue-Monday" lost some of its proverbial languor, since the students came refreshed to each new task, with their wits sharpened by a change of surroundings and of occupation.

In this early period most of the questions regarding the feasibility of the co-operative course were answered, and the soundness of the general principle was firmly established. The way was thus opened for specific adaptations of the co-operative plan in a great variety of institutions and under widely varying local conditions. The growth of such co-operative courses, especially within the past decade, is a familiar phase of America's educational history.

“Let us now praise
famous men”

—*Ecclesiasticus*



CHARLES BAUER
223 Second Street, Newark, N. J.

Course:

Electrical Engineering.
Central High 1917-1921.
College of Engineering 1921-1925.

Co-operative Concerns:

Crocker-Wheeler Co.
General Electric Co.

Honors:

Student Member A. I. E. E.
Phi Delta Zeta.
"Say it while Dancing."



CHARLES M. BEYER
142 Forrest Road, West Orange, N. J.

Course:

Mechanical Engineering.
Newark Technical School 1916-1921.
Motor Transport U. S. Army 1917.
College of Engineering 1921-1925.

Co-operative Concern:

Gould and Eberhardt.

Honors:

Chairman A. S. M. E.
N. T. S. Fraternity.
"O Sole Mio."



FRANK W. BORMAN

33 Lawrence Avenue, West Orange, N. J.

Course:

Electrical Engineering.
East Side High School 1917-1921.
College of Engineering 1921-1925.

Co-operative Concerns:

Crocker-Wheeler Co.
General Electric Co.

Honors:

Class President 1921 and 1922.
President, K. V. A. Society.
Beta Alpha Theta.
"Formation W—Hip!"



E. LAURENCE BURNETT

422 Passaic Avenue, Passaic, N. J.

Course:

Mechanical Engineering.
Passaic High 1916-1920.
College of Engineering 1921-1925.

Co-operative Concern:

Singer Mfg. Co.

Honors:

Secretary A. S. M. E.
Associate Editor KEM-LEC-MEK 1924.
"In generating the hypocycloid——"



PHILIP G. COBB
105 Avon Avenue, Newark, N. J.

Course:

Electrical Engineering.
South Side High 1916-1921.
College of Engineering 1921-1925.

Co-operative Concern:

Weston Elec. Inst. Corp.

Honors:

Student Member A. I. E. E.
Editor, KEM-LEC-MEK.
"Art for Art's Sake."



DONALD S. COLLARD
189 Hornblower Avenue, Belleville, N. J.

Course:

Chemical Engineering.
Belleville High 1917-1921.
College of Engineering 1921-1925.

Co-operative Concerns:

Proctor & Gamble.
Chemical Co. of America.

Honors:

Treasurer 1924-1925.
Beta Alpha Theta.
"Find me tall men."



FREDERICK M. DAMITZ

283 Speedwell Avenue, Morristown, N. J.

Course:

Chemical Engineering.
Morristown High 1913-1917.
College of Engineering 1921-1925.

Co-operative Concerns:

Proctor & Gamble.
Chemical Co. of America.

Honors:

Class President 1923-1924, 1924-1925.
President A. A. 1924-1925.
Varsity Basketball 1924-1925.

"Will somebody make a motion?"



A. GRANGER DAVENPORT

Mountain View, N. J.

Course:

Mechanical Engineering.
Montclair High 1917-1921.
College of Engineering 1921-1925.

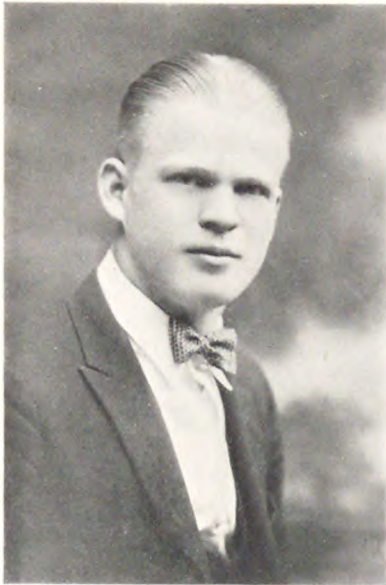
Co-operative Concern:

Gould and Eberhardt.

Honors:

Treasurer A. S. M. E.
Class Secretary 1924-1925.

"Fire! Fire!"



CHARLES A. FAUSEL

6 Wildwood Terrace, Glen Ridge, N. J.

Course:

Mechanical Engineering.
East Side High 1916-1919.
Newark Technical School 1919-1923.
College of Engineering 1923-1925.

Co-operative Concern:

Gould and Eberhardt.

Honors:

A. S. M. E.
Senior Ball Committee.

"He was only an old circus horse."



H. C. HESSE

597 Belmont Avenue, Newark, N. J.

Course:

Mechanical Engineering.
East Side High 1913-1915.
Newark Technical School 1916-1919.
College of Engineering 1923-1925.

Co-operative Concern:

Singer Mfg. Co.

Honors:

Vice-President 1924-1925.
Chairman Senior Ball Committee.
A. S. M. E.
A. A. E.

"Over an old warped drafting board."



HARRY E. HOSKING

21 Schuyler Street, Belleville, N. J.

Course:

Electrical Engineering.
Belleville High 1917-1921.
College of Engineering 1921-1925.

Co-operative Concern:

Crocker-Wheeler Co.

Honors:

Student Member A. I. E. E.
Class Secretary 1923-1924.
Varsity Basketball 1924-1925.
Art Editor 1925 KEM-LEC-MEK.
"Any ice today?"



FRANK A. JILLARD

136 Hamblott Street, East Rutherford, N. J.

Course:

Mechanical Engineering.
East Rutherford High 1917-1921.
College of Engineering 1921-1925.

Co-operative Concern:

Crocker-Wheeler Co.

Honors:

Circulation Manager KEM-LEC-MEK 1925
A. S. M. E.
Beta Alpha Theta.
"The Prof's all wet."



KENNETH S. MARSHALL

Mountain View, N. J.

Course:

Mechanical Engineering.
Montclair High 1917-1921.
College of Engineering 1921-1925.

Co-operative Concern:

Gould and Eberhardt.

Honors:

A. S. M. E.
Phi Delta Zeta.
"Want to buy a Ford?"



ROBERT J. MORGENROTH

485 Stuyvesant Avenue, Irvington, N. J.

Course:

Mechanical Engineering.
Barringer High 1915-1917.
3rd Division, U. S. Army 1917-1919.
College of Engineering 1921-1925.

Co-operative Concerns:

Crocker-Wheeler Co.
Gould and Eberhardt.

Honors:

Business Manager KEM-LEC-MEK
A. S. M. E.

"Speech is Silver."



HERBERT B. POLLARD
Maplewood, N. J.

Course:

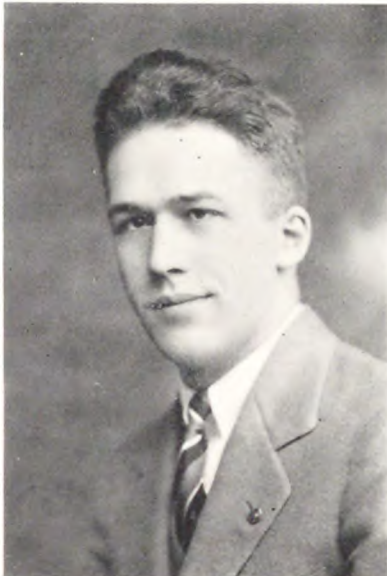
Mechanical Engineering.
South Orange High 1915-1919.
College of Engineering 1923-1925.

Co-operative Concerns:

Seaboard By-Products Coke Co.
Public Service Gas & Electric Co.

Honors:

A. S. M. E.
Beta Alpha Theta.
"Silence is Golden."



LESTER D. SMITH
17 Lehigh Avenue, Newark, N. J.

Course:

Electrical Engineering.
Aviation Service, U. S. Army 1918.
Newark Technical School 1919.
College of Engineering 1921-1925.

Co-operative Concern:

Weston Elec. Inst. Corp.

Honors:

Chairman Junior Prom Committee.
Student Member A. I. E. E.
A. A. E.
Beta Alpha Theta.
"In balancing a neutrodyne."



WILLIAM D. VANDER SCHAAF
Clifton, N. J.

Course:

Mechanical Engineering.
Clifton High 1916-1920.
College of Engineering 1921-1925.

Co-operative Concerns:

Crocker-Wheeler Co.
Singer Mfg. Co.

Honors:

Vice-President 1923-1924.
Chairman Class Night.
A. S. M. E.
Beta Alpha Theta.

"How about it, big boy?"

THE CLASS OF 1925

In reviewing four years of college life one is naturally placed at a definite disadvantage, for it is difficult to determine what is and what is not suitable material; should one speak of the dog that suddenly appeared in the Mathematics Recitation during the Freshman Year, or of the Sophomoric hair cutting parties, or of the Junior Industrial Relations, or of the real man-to-man attitude of the professors during the Senior Year? All of these have a part in a final judgment of the Class of 1925. We were a pretty raw bunch of amateurs at the start, did everything backwards even those of us who should have known better.

When we think of those who have gone, Thobieson, Phelps, Mort and the rest, who can but sigh and say "Times have changed." In this connection, we must give honorable burial to the "Dirty Six," dead in fact, but never officially declared a past issue. This group was perhaps the model of our class organization of the last two years. At least both the Dirty Six and our organization of the Junior and the Senior Years got things done. It is a lamentable fact that fate did not allow the Six to continue intact.

Shall we recall for a moment another who has gone and who has left a lasting impression? Miss Shirley Dodman. She was with us for the first two years, the only girl in the college, at the head of the class scholastically most of the time. Had she furnished nothing other than the desire in the class to equal her

standing, she would still have been a factor in our development. She furnished more than this, many a husky cub engineer has been known to park his chewing tobacco as she came into the class.

We were fortunate in our choice of a Class Advisor, Professor Peet. We all can remember the hard knocks that he softened for us, especially during our first two years, when we were still strange to the system. As the Foster-father of the class he has combined both wisdom and tact in his recommendations. To the incoming classes we could give no higher recognition to Professor Peet than to say that he is a real personality with whom to be associated.

No survey of our college life would be complete without the mention of the Co-operative System and Dean Cullimore. It is thru his abilities and rare qualities that the Co-operative Scheme has achieved success in the College of Engineering. We of the Senior Class, who have come to realize in some small measure the responsibilities and duties that are vested in him, feel that in return it is the obligation of every class and every man of every class to make every effort to support his decisions. To underclassmen this may seem to be stated in terms that are too positive to be tenable. We feel that such a point cannot be stressed too strongly. It is not only the obligation one incurs as a student, but it is the real man-like thing to do.

And so we, who are about to leave, can only add, "Carry On."



THE CLASS OF 1926
 Front Row—Lee, Edwards, Reamer, F. N. Entwisle, Class Advisor, Cox, Orosz, Huneke.
 Second Row—Brendlan, Ditsch, Kopf, Ripley, Fischer, Precheur, Newton, Probst.
 Third Row—Coe, Monahan, Runyon, Goellner, Perry.

THE CLASS OF 1926

Every one has experienced that "Spring Feeling," when, after a long, cold and dark winter, when the sun begins to assert itself, bringing us warm, balmy days. Strange tho it may seem, the Junior Class experience this spring feeling just at the beginning of a long winter and immediately following a hot summer. The cause for this unusual state of feeling requires little or no explanation. The Class had just emerged from a "winter" in the form of two years of underclass work, and was about to enter into a "spring and summer" in the form of two years of upperclass work. Again, it felt good to be back in school after having been out all summer.

Upon their return to college in the fall of 1924, the members of the class realized that

their activities, both athletic and social would necessarily be limited on account of co-operative work. During the preceeding years, the class had been active in these respects, having given one dance during the Freshman Year, and having worsted the Sophomores in athletics. In the Sophomore Year we were moderately successful in interclass athletics and furnished the majority of the Varsity Basketball Team. We also conducted two dances in the school gymnasium, and established a precedent by holding a Class Banquet, a function which has since become annual. This event was one to be remembered; the speeches of Professors Entwisle and DuBois were models of extempore oratory. In fact they so inspired one member that he

immediately rose to sublime heights of oratorical achievement. All five of Steinie's words were clear, distinct, and forcefully delivered.

This banquet really marked the parting of our ways. A short time after we bade one another good-by and went out to obtain further practical education in the industries, so that we might be better fitted to contend with the myriads of industrial problems to be encountered in engineering.

We were divided into sections, alternating in periods of college and industrial work. This made it impossible for those in alternate sections to meet each other except at class meetings or social events. Despite this handicap, our class still presents the unusual spectacle of a body of men not broken up into self-centered groups. This friendly feeling, combined with a sound industrial and technical training will carry us far on our chosen way.

The first social event of our Junior Year was the Smoker given by us after the memorable Soph-Frosh Football Game. The purpose of

the Smoker was to promote good fellowship and acquaint the Freshmen with the upperclassmen. As we view it in retrospect we believe that our efforts were not in vain.

Again we furnished several men, including the captain, for the Varsity Basketball Team. Interclass games constituted the extent of our athletic activities for the Junior Year, and despite the fact that the class was divided by the Co-operative Program, the combined Junior-Senior Teams, with principal personnel drawn from the Junior Class, were successful in competition.

One of the outstanding social events of the season was the Junior Prom, held at the Newark Athletic Club. It was a success in every sense of the word, due undoubtedly to the efforts of the Committee, aided by the class as a whole. Even the weather obliged.

In all its activities the class has shown a unity of purpose demonstrating that we are "one for all and all for one."





THE SOPHOMORE CLASS, 1927

Rear—R. Winans, E. Hess, A. Werner, W. Hull, L. Balenson, C. Forsythe, A. Mueller, F. Schetty.

Third Row—J. Drukker, A. VanVoorhees, H. Axtel, T. Cunliffe, F. Wolpert, R. Jenkins, G. Ditzel, H. Willhardt, R. LeGrand.

Sitting—L. Koch, A.A., W. Opdyke, Sec., K. Cox, V.P., Mr. A. P. Roberts, Faculty Advisor, H. Dierman, Pres., M. Elias, Treas., E. Weinstein, A.A.

Front—H. Patton, J. Kane, J. Kapesky, S. Weinfeld, A. Cenci, N. Pico, E. Toth.

THE CLASS OF 1927

And as the frightened mortal timidly knocked at the Pearly Gates, there was a tumult of sound that strengthened to the mightiest of roars. "And who is there?" called the Keeper of the Gate.

"A single Freshman pursued by the Sophomores, Sir."

The Sophomore Class did all but chase the Freshman off the earth for the first few weeks. But that was our privilege, even unto impromptu bobbing parties—impromptu as far as our guests were concerned.

As Freshmen last year we started out, as all Frosh do, to pry open this oyster they call

the earth and to see what it contained. And for a new bunch we succeeded very well. From the start we got back of everything with a vim, from school work to athletics and social events. The first task—licking the Class of '26 at football proved to be a very gratifying one, for, despite our newness in the school and the comparatively short time for preparation, we managed to win by a comfortable margin.

And then came the Smoker. We who had so recently been battling on the field of athletic rivalry found that our trials were in no manner finished. After the customary introductions were completed, things went along a lot easier,

and we gained our first glimpse of what the school really stands for. Then followed reports and recitations, and recitations and reports until the next pleasing interlude, Parent's Day, the day before Thanksgiving, when we had the honor of dragging our esteemed associates, the Sophs, around the lot in the Tug of War. And then on until Christmas and the rumors of the terrible mid-years.

And then the deadly clam after exams. Even Willhardt sober for the moment. Came the storm when marks were posted and when the skies had cleared and the casualties were accounted for we came back to the swing, wiser by far than we had been five months previously, more adapted to our work, and, as always, ready for a good scrap.

The Baseball Season afforded another opportunity for varying our activities, and, as was to be expected, we were successful in again demonstrating the superiority of the class.

Final exams found us ready to go out into the industries and gain our first impressions of labor, factories, and hard work. The faculty seems to think we do not get enough during the school year.

On our return, we found ourselves the proud possessors of the privilege of tormenting even as we had been tormented. All went well until someone broke some unimportant glassware about the school during an exciting wrestling bout occasioned by a discussion on why we won the football game.

Parent's Day again and the Sophs victorious over the Frosh in the Basketball Game, but not, sad to say, in the Tug of War.

The Thanksgiving Dance held in the Reception Hall was the most ambitious affair we had as yet attempted. It was, in all senses of the word, a success, and we feel that it offers a mark for other classes to strive to attain. Permitted as we are to hold few dances during the underclass years, we believe that they should be good ones.

The Basketball Season again found us in the van supplying Varsity Men, and a liberal amount of talent for the interclass teams.

Now comes the task of preparing ourselves to enter the industries for the second time, to return to school as upperclassmen in the fall, with the full responsibilities of the Co-operative Schedule on our shoulders.





THE CLASS OF 1928

Front Row—Hequembourg, A.A., Nims, Class Advisor, Gibbons, Deany, Bush, Meyer, C.R., Falconer, Koch, VanBrunt.

Second Row—Speckman, Gorka, Goldbach, Condit, Swackhammer, Chidnofsky, Holgersen, Higgins, Moro.

Third Row—Dorn, Cozier, Greenley, Rutledge, Donahue, Tacarko, Kuhn, Siess.

Top Row—Schulte, Rosenblum, Probst, Silberfeld, Weidig, Spinanger, Paret, Bingle, Hamje, Meyer, R.M., Geïress, Kirchof, Mayer.

THE CLASS OF 1928

When we made our first appearance in the College of Engineering of the Newark Technical School, September 22, 1925, the remainder of the college was dumbfounded, thunderstruck. The Faculty and Office Force worked overtime to make room for us; not that the brain matter involved was stupendous, but that our numbers were many. Added to the other efforts in our behalf, the Sophomores consumed much midnight oil planning new and more terrible schemes for sending us dashing about the building on foolish errands. Despite our greenness, we plunged eagerly into activities. The first problem confronting us was that of

producing a Football Team with which to combat the Sophs. We had already learned that nothing is ever lost, but we had not reached that edifying place in our curriculum which postulated how to produce something from nothing. With the help of the Juniors a conglomeration of mixt indifferences was developed, and in due time the Freshman Lamb was lead to the slaughter and duly executed. The only consolation we obtained was in the last gasp when the lamb gave a final bleat and rolled the merry Sophs down the runway. The rally had come too late, and we were ignominously defeated. After the game we elected our class

officers and started on the road to fame and glory.

Basketball next claimed our attention. We contributed much toward the game which has become the major sport of the college. The day of days arrived when the Freshman team stepped onto the floor and sent the College Varsity to the dressing rooms too befuddled to know what had happened. Yea, truly, the Frosh had trimmed the Varsity.

We were not all athletes. At the middle of the first semester it was announced that the Freshman Class had raised the standards of the College scholastically. Engineering had at last found its great men of the future. This announcement did not make us conceited, but served to make us work harder.

At the annual Parent's Day we were again

doomed to disappointment. We lost the Cane Spree and the Basketball Game, but dragged our heavier opponents over the lot in the Tug-of-War.

In the meantime several of the Freshmen had been placed on the Varsity Basketball Team and were doing creditable work. The mid-year rolled around. Aftr the battle was over and the smoke had cleared away, it was found that we had again more than held our own in the ranks of scholarship.

It was in the Basketball Season that we began to redeem our shattered glory. Our team was one which would have done credit to any Freshman class.

From past performance we venture to predict a glorious future for our glorious class.



THE ALUMNI

- Adams, Earl -----Advertising Department, Weston Electrical Instrument Corporation,
Newark, N. J.
- Bergman, Ira -----Chemical Engineer, Fox Film Corporation, New York City.
- Bjorklund, G. H.-----Engineer, Gould & Eberhardt Company, Irvington, N. J.
- Boorujy, George -----Electrical Contractor—in business for himself.
- Craig, Donald K.-----Assistant Manager, Weston Electrical Instrument Corporation, Phila-
delphia, Pa.
- Crutchlow, William ---Engineer in Laboratory, Edison Company, New York City.
- Davis, Cecil -----Chemist, Van Dyk Chemical Co., Jersey City, N. J.
- Fogel, Raymond -----Mechanical Engineer, Public Service Railway Company, Kearny, N. J.
- Fraser, F. C.-----Chemical Engineer, Public Service Railway Company, Essex Station.
- Holmes, Milton -----Assistant Chemist, Waldrich Bleachery, Delawanna, N. J.
- Jacobus, Frank L.-----Engineer, Westinghouse Lamp Company, Bloomfield, N. J.
- Kosches, Morris -----Teacher, Mathematics, Central High School, Newark, N. J.
- Mannheim, Carl -----Chemical Engineer, Tide Water Oil Co., New York City.
- Mosch, Leo -----Chemical Engineer, Nairn Congoleum Company, Kearny, N. J.
- Nile, Jack -----Electrical Engineer, Public Service Railway Company, Marion, N. J.
- Patterson, Lawrence ---Chemical Engineer, Devoe & Reynolds, Newark, N. J.
- Perrine, William -----Chemist, Van Dyk Chemical Company, Jersey City.
- Reigenstreich, Samuel -- Production Engineer, General Electric Co., Newark, N. J.
- Schultz, Charles A.----Mechanical Engineer, Seaboard By-Product Coke Company, Jersey City,
N. J.
- Spielvogel, Joseph -----Advertising Manager, International Filter Co., Chicago, Illinois.
- Spofford, J. G.-----State Department of Education, Trenton, N. J.
- Vanderlip, Arthur -----In business for himself—Albany, N. Y.
- Waller, Elwyn -----Engineer in Laboratory, Edison Company, New York City.
- Widdop, Robert -----Mechanical Engineer, Edison Portland Cement Co., Stewartsville, N. J.
- Wludyka, Joseph P.----Production Engineer, Nairn Congoleum Company, Kearny, N. J.

THE STAFF

PHILIP G. COBB, '25, Editor
J. BRENDLEN, '26, Associate Editor
FRANK JILLARD, '25, Circulation Manager
FRED REAMER, '26, Associate Circulation Mgr.
ROBERT J. MORGENROTH, '25, Business Mgr.
A. L. KOPF, '26, Assistant Business Manager
H. E. HOSKING, '25, Art Editor
EDWARD FISCHER, '26, Assistant Art Editor
HERMAN C. HESSE, '25
S. FISHMAN, '27
EDWARD WEINSTEIN, '27
C. M. BEYER, '25
J. F. DITSCH, '26
J. A. GIBBONS, '28

ACKNOWLEDGEMENTS

The compilation of a book of this size is made only at some personal cost to those interested. We feel that no apologies are due when we consider the lack of experience on the part of the staff.

We want to extend our thanks to Dean Cullimore for his many efforts to lighten the task. We want to thank those of the College Office who have been ready at all times to come to our assistance.

And, finally, we hope that the KEM-LEC-MEK will each year become a bigger better book for the best college there is.

BAΘ

Beta Alpha Theta fraternity was officially organized in December, 1922, by students of the College of Engineering of the Newark Technical School. Some of the members of the College felt the need of a society which would bring them into a closer fellowship than was afforded by the institution. It was the belief of these men that they had more in common than merely their classroom activities. It was for this reason that six men, students of the College of Engineering, laid the foundations of this fraternity. From this nucleus the roster has grown until it now numbers twenty-seven names.

We point with pride to our alumni members who have taken their places in the industrial

world with men from other institutions. Although these men have left their Alma Mater, they are still active in fraternity affairs.

In the past two years, the fraternity has held two formal dances which members of the faculty and student body have attended.

Beta Alpha Theta is a local fraternity, its members coming only from the student body of the College of Engineering. Realizing the standing of local fraternities in other colleges and considering the conditions at "Tech" the members deem it advisable to continue as a local fraternity.

The fraternity invites the co-operation of all other societies here at college for the advancement and welfare of the institution as a whole.

ALUMNI

Gustave H. Bjorklund.....	'23
Donald K. Craig	'23
Freckerick C. Fraser	'23
Milton Holmes	'23
F. Raymond Fogel	'24
Lawrence J. Paterson	'24
William Perrine	'24

ACTIVE MEMBERS

Frank W. Borman	'25	Robert W. Jenkins	'27
Donald S. Collard	'25	H. Rupert LeGrande	'27
Frederick M. Damitz	'25	Howard G. Patton	'27
Frank A. Jillard	'25	Albert A. VanVoohees	'27
Herbert B. Pollard	'25	Russell R. Winans	'27
Lester D. Smith	'25	Henry K. Hamje	'28
William D. VanderSchaaf	'25	Jerome E. Hequembourg	'28
Charles J. Lee	'26	Robert M. Meyer	'28
Howell B. Axtell	'27	F. Murray Paret	'28
Paul L. Cunliffe	'27	Gustave R. Weidig	'28

PHI DELTA ZETA

Four brief, yet flourishing years ago, two students set out to instill in the most worthy sons of their Alma Mater the precepts of manhood, straight living, and good fellowship that form the foundation of everything worth while in life. Their object was to bind through scholastic ideals, industry, sobriety, and nobility, men of courage of heart who were gentlemen in every sense of the word. The seed of these ideas has produced a tree which has grown from a mere seedling at the College of Engineering of the Newark Technical School to its present height and stateliness, cultivating to the greatest capacity the Supreme Love and Comradeship of True Fraternal Brothers.

Comradeship and Fraternalism are assets to a college man. An engineer who has not experienced the effects such as these symbolize will find difficulty in succeeding, for he has not fully learned how to treat others as his comrades and brother humans. "Do unto others as you would have others do unto you," is the keynote of true Fraternalism. "Bear malice toward none" is another light which illuminates the path toward success.

On these two and their like have the seeds of Phi Delta Zeta been planned, germinated and matured.

IN COLLEGIO

LOUIS BALENSON.....	1927	LAWRENCE KOCH.....	1927
RALPH A. BRADER.....	1927	ALBERT S. KOPF.....	1926
EDWARD S. BUSH.....	1928	KENNETH S. MARSHALL.....	1925
RAYMOND COX.....	1927	HERMAN C. HESSE.....	1925
GEORGE DEANEY.....	1928	CLIFFORD SIESS.....	1928
HARRY DIERMAN.....	1927	CHARLES R. MEYER.....	1928
MICHAEL J. ELIAS.....	1927	WILLIAM J. OPDYKE.....	1927
WILLIAM FALCONER.....	1928	KENNETH VAN BRUNT.....	1928
CHARLES R. FORSYTHE.....	1927	EDWARD S. WEINSTEIN.....	1927
J. ASHTON GIBBONS.....	1928	FREDERICK WOLPERT.....	1927
WILSON R. HULL.....	1927	CHARLES BAUER.....	1925
JOHN E. KANE.....	1927	GEORGE DORN.....	1928
EDWARD KOCH.....	1928	ARTHUR SPINANGER.....	1928

THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS

On February fourth, 1925, the committee on college relations of the American Society of Mechanical Engineers granted a charter to the mechanical engineering students of our college, thus instituting a student chapter at our school. It was an ambition realized after more than a year of persistent effort to obtain this charter and the news of the committee's decision was enthusiastically received. Since this time our student chapter has functioned much after the fashion of the parent organization, holding meetings about once a month at which papers on technical and general engineering subjects are delivered and afterwards discussed.

Membership in a student branch of the American Society of Mechanical Engineers carries with it certain advantages both to the student and to his organization. Among these are: (1) The opportunity for development in the art of presenting orally engineering matters before an audience, speaking extemporaneously and stating a proposition clearly and convincingly. (2) The opportunity for discussion of the papers presented, thus stimulating the mind by coming in contact with people of like interests. (3) The contacts which a student member makes with the senior members of the society, some of whom are

leaders in our profession. (4) The receipt of *Mechanical Engineering* issued monthly. This is the official bulletin of the Society. (5) The privilege of purchasing at half rate, papers published by the society. Many other advantages to the student as well as to the college could be enumerated.

The American Society of Mechanical Engineers takes a genuine interest in its student branches and the branch at our college has profited considerably by the suggestions of the parent society. Joint meetings with other student branches are especially encouraged by the society because it affords to the student member an opportunity for meeting men and helps to develop the social aspects of the organization. Up to the present time our student branch has held no joint meetings but plans for the future will include this feature.

On March 31 the joint metropolitan student branches held the annual convention and this was the first convention at which our student branch was represented. Twenty-seven members from the student branch at the College of Engineering at the Newark Technical School attended the convention and enjoyed it entirely.



BASKETBALL TEAM

Front Row—F. Damitz, R. Newton, J. Brendlan, N. Pico, E. Weinstein.
 Second Row—S. Fishman, Manager, L. Patton, C. Meyer, Bush, H. Hosking, Speckman,
 F. N. Entwistle, Coach.

ATHLETICS

The athletic activities during the year 1924-25 have far surpassed those of any year in the history of the college. The great increase in athletics this year over the preceding show that the college will soon be an active competitor in all inter-collegiate sports. In basketball we are already known to the metropolitan district and to New Jersey, and it is in this sport that we are making our initial advance into inter-collegiate competition.

The first athletic event this year was the annual gridiron battle between the Sophomore and Freshman classes. This took place on the afternoon of October 8 at Branch Brook Park and was attended by the entire faculty and student body. The contest ended in a decisive victory

for the class of '27 as it had done in the previous year. The Freshmen were a game lot but could not withstand the terrific onslaughts of the heavier Sophomore linesmen and speedy backs who succeeded in scoring three touchdowns. The game ended with both teams still fighting hard and with a score of 13-0.

After school was in session one month, basketball practice was started and the teams in the inter-class league chosen. Each co-operative section was represented by a team, while the Sophomore class was represented by two, and the Freshman by three. Games were played on Tuesday and Friday afternoons and were usually attended by the greater part of the student body. The fight for the leading honors was

nip and tuck, and ended in a triple tie between the co-operative section A team and the two Sophomore teams. The Freshman teams fought valiantly during their games with the upper classmen but were unsuccessful in winning any of these games. Lack of experience seemed to be the main cause for their defeats, but there are some members on the Freshman squad who will undoubtedly be developed into Varsity players. Each of the three teams which shared the leading honors were victorious in all except one of the games in which they participated.

Inter-class basketball was brought to a close on Parent's Day with a game between those arch enemies, the Sophomores and Freshmen. If this had been a battle for existence, it could not have been more arduously contested. Both teams were evenly matched in skill and in stamina. Each group alternated throughout the game in holding the higher score and the difference in the teams' scores never exceeded five points. When there was three minutes yet to play, each team had accumulated thirty points, but a few seconds before the final whistle a Sophomore caged a field goal, making them the victors by a score of 32-30.

Another athletic event on Parent's Day was the cane spree competition. This event which has now taken place for the third time, has become very popular in the college as a means of deciding the superiority of the Sophomores over the Freshmen, and will be a permanent feature on all coming Parents' Days. The spree takes place between two opponents. An ash rod, three feet long and one and one-half inches in diameter is used. The object of the game is the capture of the cane from the hands of the other. About one month previous to Parents' Day the candidates from each class are divided *into groups according to their weights* and start practicing. A series of elimination bouts are then held in each group, and the victor is chosen to represent his group in the inter-class event on Parents' Day.

For the last two years the representatives of the class of '27 have been victorious in all of their bouts. On Parents' Day, 1924, the contestants in the lightweight division were H. Dierman, '27, and J. Spinanger, '28. After a hard fight, Dier-

man won in the second round. The battle between the middleweights, R. Cox, '27, and H. Gibbons, '28, in which the former was triumphant, was the longest bout of the day, lasting four rounds. In the heavyweight clash, L. Koch, '27, wrested the cane from R. Weidig, '28, in eight seconds.

On Saturday evening, December 13, 1924, the College of Engineering basketball team, in the first game of the season, was successful in defeating the team of the Upsala College of East Orange by a score of 36-31. The game was played in the gymnasium of the Upsala College and was well attended.

The team work displayed by the Newark Tech team was much superior to that of their opponents and the "Tech" boys were never pressed very hard except during a short period in the third quarter when the Upsalians staged a rally and tied the score. The rally was short lived, for the "Tech" players retaliated by caging four goals from the center of the court in rapid succession, thereby obtaining an advantage which they retained throughout the rest of the game. While only two players of the Upsala squad were active in plays while their team was on either the defense or offense, every man on the Tech team was active in each play and in acquiring points.

The next basketball encounter was against the Junior Varsity of Stevens Institute which was played in the Stevens gymnasium at Hoboken. During the first half of the game our team outplayed their opponents and the outlook was an apparent victory, the score at the end of this period being 15-7, our team holding the advantage. With the second half, however, the Stevens team seemed to have renewed their vigor and set a terrific pace which the Newark team did not have the stamina to keep up with. Stevens held our team to three field goals in this period and acquired enough points to give them the victory by a score of 24-21.

On the following Saturday the team met the team of the Bloomfield Theological Seminary. The Freshman team took the floor at the beginning of the game but could not withstand the attack of the ministers. In a few minutes the Theologians ran up a score of 19 against our

4, and the Varsity team was placed in the game. The Varsity took the offensive and set a hot pace. They succeeded in evening the score but their opponents caged a goal just before finishing time and were credited with the victory, by a score of 32-30.

On January 31, 1925, our team played host to the team from the Webb Institute of Naval Architecture. This being our home game, was well attended by our student body. The game was interestingly played and a great improvement was noticed in the work of our players. The Newark team took the lead at the beginning of the game and held it until the finish, the final score being 34-26 in our favor. The Webb players displayed a peculiar sort of ability during the game, in being able to take the ball in a far corner of the court and throwing it wildly, and having it go thru the basket.

The team then was inactive for more than a

month and then encountered the Upsala team in a game on our court. During the first half our team followed the hot pace set by the visitors and the score at the end of this period was even, 10 all. In the second half the long layoff began to tell on our boys and they began to drop back slightly, so that the game ended with a score of 26-20 in Upsala's favor.

Thus ended the basketball season of 1924-25, a very successful season from our point of view. Altho we have not been consistent victors, we have proven that we have men who are capable of meeting their opponents and taking the results as good sports. Based on this season's work several new arrangements have been made and several new precedents established. We earnestly believe that this season has been the beginning of a history of successful athletic competition for the college.



COLLEGE STUDENTS

Axtell, Howell B.	Goellner, Howard K.	Patton, Howard G.
Balenson, Louis	Goldbach, Frank	Perry, William K., Jr.
Bauer, Charles	Gorka, Leo	Pico, Nuncio
Beyer, Charles M.	Greenley, Robert M.	Po lard, H. B.
Bingel, Edward L.	Hamje, Henry K.	Precheur, Henri V.
Borman, Frank	Hequembourg, Jerome	Probst, Henry Otto
Brader, Ralph A.	Hess, Eugene	Probst, Karl J.
Brendlen, Joseph	Hesse, Herman C.	Riemer, Fred W.
Burnett, E. L.	Higgins, Gerald	Ripley, Victor H.
Bush, Edward	Holgerson, Walter	Rosamilia, Daniel
Cenci, Anthony	Hosking, Harry	Rosenblum, J.
Chidnofsky, George	Hull, Wilson R.	Rosenfelder, Francis G.
Cobb, Philip	Huncke, Fred	Runyon, Malcolm E.
Coe, John M.	Jenkins, Robert W.	Rutledge, Thomas
Collard, Donald S.	Jillard, Frank	Schetty, Frank
Condit, Warren	Kane, George	Schneider, Allan
Cox, Frederic Poole	Kane, John E.	Schulte, Edward
Cox, Raymond	Kirchhof, John	Siess, Clifford
Cozier, James R.	Koch, Edward A.	Silberfeld, Nathan
Cunliffe, Paul R.	Koch, Lawrence E.	Smith, L. D.
Damitz, Frederick	Kopesky, John	Speckmann, F. William Jr.
Davenport, Granger	Kopf, Albert S.	Spinanger, Arthur
Deany, George T.	Kuhn, J. Leonard	Swackhamer, F. Everett
Dierman, Harry W.	Lee, Charles J.	Tatarko, Joseph
Ditsch, John F.	LeGrand, H. Rupert	Toth, Emerick
Ditzel, George	MacDonald, P. J.	Ulanetsky Herman
Donahue, Raymond	Marshall, Kenneth	Van Brunt, Kenneth
Dorn, George W.	Mayer, Robert	Vander Schaaf, W. D.
Drukker, John J.	Meyer, Charles	Van Voorhies, Albert A.
Edwards, Laurence V.	Meyer, Robert M.	Weidig, Gustave R.
Elias, Michael J.	Monahan, Martin	Weinfeld, Sidney
Falconer, William	Morgenroth, Robert J.	Weinstein, Edward
Fausel, Charles A.	Moro, Alfred	Werner, Alfred
Fischer, Edgar Carl	Mueller, Andrew Jr.	Willhardt, Henry W.
Fishman, Solomon	Newton, Robert B.	Winans, Roswell R.
Forsythe, Charles	Opdyke, William	Wlosinski, Frank
Gorka, Leo	Orosz, Frank	Wolpert, Frederick S.
Gibbons, Ashton	Paret, F. Murray	

THE INQUIRING REPORTER REPORTS

By ISAAC TOWNES

Today, gentle readers, we are going up to the College of Engineering, and we are going to find out what they do on Friday afternoon. Not that we pick Friday, but with the investigation that we have been conducting on why firemen wear belts and not red suspenders, the author has been so pressed, even crushed, for time that he has had no earlier opportunity. Through the fact that the Sophs and the Freshmen were experimenting with the new deadly gas, Damitzite, the school was closed to visitors until four o'clock, when we were admitted, only to find the upper-class Co-ordination period about to disband. This was a distinct surprise, but as we found later, the discussion had been cut short that day because one of the seniors had received a letter telling of a fire that it was imperative for him to attend. From interviews with the various members as they left, we here present the program.

The class opened, we learn, with Mr. Cummings as Master of Ceremonies. By way of introduction he gave a short, but comprehensive discussion of the "Economic Disasters Caused by the Complex Variable." Immediately after the discussion, the class voted that the Complex Variable was a serious menace to traffic on the shore roads, and resolved to avoid it as best they could.

Following Mr. Cummings, Professor Peet rose, and said that he felt impelled to add a few words to the exhortations of the previous speaker. In his talk he stressed particularly the danger of climbing telegraph poles, especially during snow storms, as high static charges render the wires especially hazardous. In the discussion following, Mr. MacDonald added that it was not only bad to climb telegraph poles in the winter, but that at any time a motorist may be called on to avoid an Erie train, and that it was advisable to carry a pair of spare leg irons at all times. The class did not favor the suggestion, so the matter was dropped.

In a similar vein, Professor Stewart discussed taking samples in relation to the engineers' work in the coal yards. He was so well received that we understand he will soon repeat the talk to the Bank Clerks' Benevolent League, making

necessary modifications for the different professional audience.

At this point there was a slight interruption, as Davenport rose and offered a resolution to the effect that the class enter into its minutes the fact that a horse was an animal with hair growing on the southwest corner of its pelt. The acceptance was provisionally passed over Fischer's objection. The objection was later withdrawn when he found he had confused a horse with a Caesar's pony.

Mr. Krausnick in the mean time had dashed off a piece of poetry that he was persuaded to recite. In introducing his contribution, he said that he had hoped to read a paper on the whyness of what, but that he would oblige. At a great cost in effort, we have been able to print herewith the selection:

You may sing about the blunders that other men
may make,
Write an index of the dumb-bells you have
known,
Make a movie of the boners that you think would
take the cake,
And a scrap book of the simps that make you
groan,
But the dumbest of the hour, and the king of
all the dolts
Is the man who measures power with the current
coil on volts.

Morgenroth, visibly overpowered by the wealth of suggestion in the few lines was carried out on the six-foot slide rule, and quiet was again restored.

As Mr. Koshkarian was unable to read his paper on the Einstein Theory of Bond Manipulation the class rose and, as is its custom, sang to the tune of "It Sounds Like a Carpenter Sawing a Board":

Tho other places take a man,
And train him so he looks,
No longer like his native clan,
But a parasite of books,
Our Alma Mater sends us forth,
To serve in industry,
And like the Vikings of the north,
Full mighty men are we.

And then they went home.

YE COLLEGE DIARY

- Sept. 22 The lambs arrive for slaughter.
- Sept. 25 Convocation. Dean Cullimore tells the Freshies what's what. Sophs distribute Freshman Rules.
- Sept. 26 White sox and green ties again disturb the landscape.
- Sept. 29 Four sock-less Freshmen today—the Sophs seem to mean business. The Freshmen are topped off with their caps for the first time.
- Sept. 30 One of the lambs is shorn.
- Oct. 1 Professor Koshkarian lectures on High School Mathematics Teachers.
- Oct. 2 Preparations for the Soph-Frosh Football Match completed.
- Oct. 3 Sophs trounce Freshmen at the game today. "The Assyrians came down like a wolf on the fold."
The Smoker offers the Freshmen the opportunity of introducing themselves and gorging on cider and doughnuts not to mention the Camels and Stud Tobacco.
- Oct. 8 Life's little jokes: The Juniors looking serious.
- Oct. 9 Dean Cullimore advises the Sophs to learn some new tricks.
- Oct. 12 Columbus forgets to "press-agent" the anniversary of his great discovery.
- Oct. 16 Willhardt is advised against wrestling.
- Oct. 18 Davenport arrives in a white flivver racer.
- Oct. 19 Petition is drawn up to provide more parking space for autos.
- Oct. 20 Frank Borman comes to school with his hair mussed.
- Oct. 21 Patton appears with a brand new black eye.
- Oct. 24 Basketball Season launched with two Soph victories.
- Oct. 27 Ripley and Runyon found discussing the League of Nations.
- Oct. 31 Varsity Basketball Candidates appear.
- Nov. 3 The long draught—it is deemed advisable to stop singing "It ain't gonna——"
- Nov. 15 Professors send in mid-term scholastic records.
- Nov. 17 Freshman Class still with us. What brutes for punishment!
- Nov. 26 Parent's Day. Sophs come out on top again in athletic activities.
- Dec. 5 Interclass Basketball comes to a finish.
- Dec. 9 We understand that the Sophs have become prominent in East Orange Society. Who is she, Jenkins?
- Dec. 10 Davenport's flivver missing (no, not only one cylinder, the whole four and the body).
- Dec. 11 Davy empties his vest pocket and finds the flivver behind his watch.
- Dec. 13 Upsala trimmed in good style.
- Dec. 15 Frank Borman burns out a coil on his Pancake Special. It took two electrical, two mechanical, and one chemical student to get it ticking again.
- Dec. 23 *Last meeting of the Sophomore Kemical Klub before Christmas. Professor Bradley officiating as usual.*
- Dec. 24 Joe Posner gives annual feed to boys today. The meeting was attended by all and sundry, including brownie and the pup.
- Jan. 5 Only two more days in which to exchange Christmas Ties. Freshmen appear in civilian garb again.
- Jan. 8 The big snow.
- Jan. 12 Stevens wins the Basketball Game.
- Jan. 17 The school again in a turmoil. Morgenroth has returned.
- Jan. 22 All set for the mid-years. Bring on the raw meat.
- Feb. 8 MacDonald freezes his radiator.

- Feb. 21 Ditsch brings his hatchet to school. The slippery elm is saved thru the kindly efforts of the other Juniors. Junior Prom tonight. Darn these string ties.
- Mar. 2 Explosion in the Electrical Laboratory. Professor Krausnick proposes to classify wattmeters as dangerous fire risks.
- Mar. 10 H. C. Hesse patents his folding wash-board.
- Mar. 24 Charlie Beyer finds a new way of taking his shirt off.
- Apr. 3 "I want the one without the hat." For information see one of the Seniors.
- Apr. 10 Bad case of spring fever today.
- Apr. 14 Fausel buys first pack of fags this year.
- Apr. 18 MacDonald announces the arrival of another of the clan.
- Apr. 20 E. Laurence Burnett has returned from Philadelphia.
- May 6 The Dean and Mrs. Cullimore's reception. Fred Damitz helps make it a success. Ask Fred Reamer.
- May 8 Senior Ball. Our correspondent reports that Davenport is some necker.
- May 10 Charlie Beyer in the hospital with appendicitis.
- May 11 Ken, Marshall has pleurisy. Good luck and a speedy recovery, boys.
- May 14 Cobb has finally lost that lean and hungry look. The KEM-LEC-MEK has gone to press.



CROSS WORD PUZZLE

HORIZONTAL

2. A famous lodge (Best People on Earth).
5. Lolly Pop's first name.
6. "You're kidding" in Afghanistan.
7. An organization or combination.
10. A sphere.
12. "Railroad" short-circuited.
14. Title granted to Tech Night School graduates.
16. One who finds errors in printing.
17. Sinful, but we all have it.
18. See Note 1.
19. Makes independent.
20. Girl's name.
25. A Math. Teacher.
28. Rhode Island.
29. A magneto maker.
30. A bibulous sheik.
31. To force.
32. German "Coming."
36. Notre-Dame.
39. Negative.
40. English Decoration.
41. Roman "and."
42. Naval Reserve.
43. Suffix.
44. Upon.
45. American Author.
47. Remark made when at a loss.
48. Preceding the Christian Era.
49. Comparisons.
50. See Note 2.
52. A portion.
53. A girl's name.
54. See 42.
56. A much desired degree.
57. What the dog says.
58. Indefinite article.
60. State of being.
61. Like.

VERTICAL

1. Army Officer.
2. Obstructive group.
3. International sport.
4. Pipe joints.
8. One of Al. Jolson's songs.
9. Governor Smith.
10. Head of Mechanical Department.
11. English way of saying "half."
13. Fruit.
14. More fruit.
15. Unit of electric pressure.
18. Rear.
21. Metal as mined.
22. Petroleum products.
23. Poem.
24. Chemical symbol for iron.
26. Conjunction.
27. Italian "Yes."
29. One who calls.
30. Romans.
31. Small bed.
32. Kipling's name for python.
33. About to occur.
34. Fifth note of scale.
35. Seen.
37. A creator.
38. Theological precept.
46. Boccaccio's best known work.
48. Referring to newly-married.
51. Associated Press.
55. Simple machines.
56. "I" personified.
59. Tallest professor in the College.
60. Said professor's initials.

Note 1. "AOLILE." Anyone defining this word will receive a bent peanut as a reward.

Note 2. "IMO." This should be something else but it ain't.

LOVE-LIFE OF AN ENGINEERING STUDENT

Fools may sing of hearts and love
And eyes and cheeks and hair—
Write sonnets to a woman's glove
And swear her wondrous fair.

Bah! She's an artificial thing:
All powder, paint, and lipstick—
But hearken to the song *I* sing,
And hail *my* love, the slipstick!

Women are babbling all the time
Of dates and drinks and dresses,
Which wouldn't help at all when I'm
Computing torques and stresses.

It conquers without fear or doubt
Whole hosts of sines and surds,
And helps me work in peace without
An avalanche of words.

Slide-rules are always accurate,
And women never so;
And while they're not affectionate,
They never answer "No!"

So hence with women's wanton ways,
With eyebrows, lips, and curls:
My little log-log polyphase
Is worth a dozen girls!

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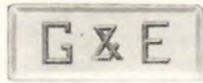
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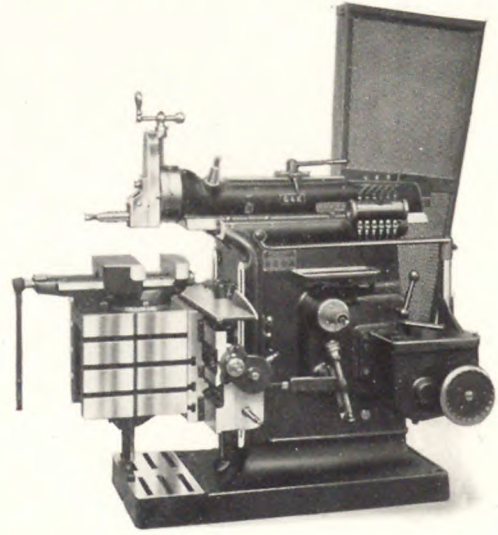


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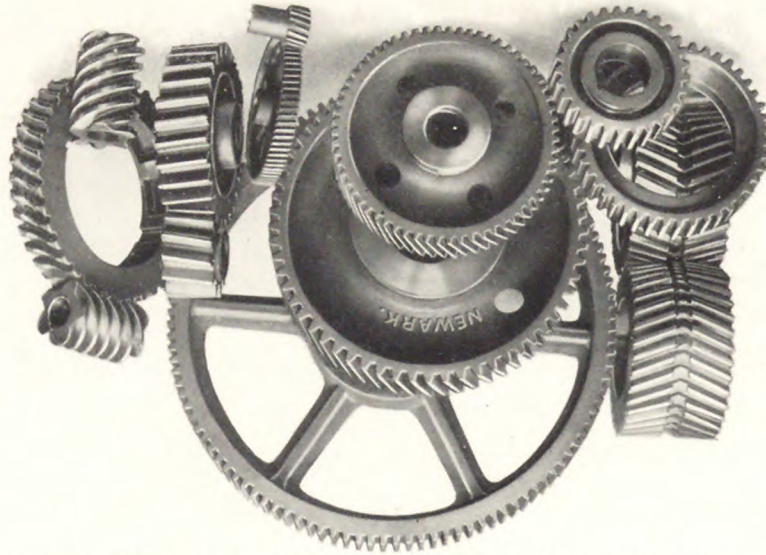
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