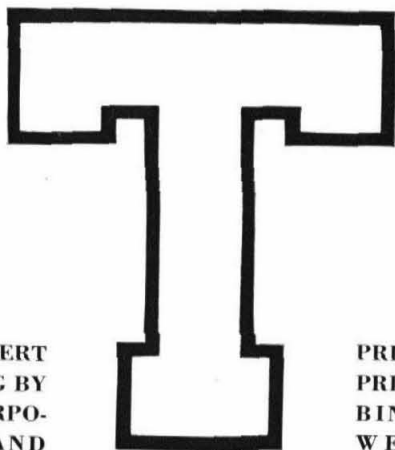




**VOLUME 27
OF THE BIG**

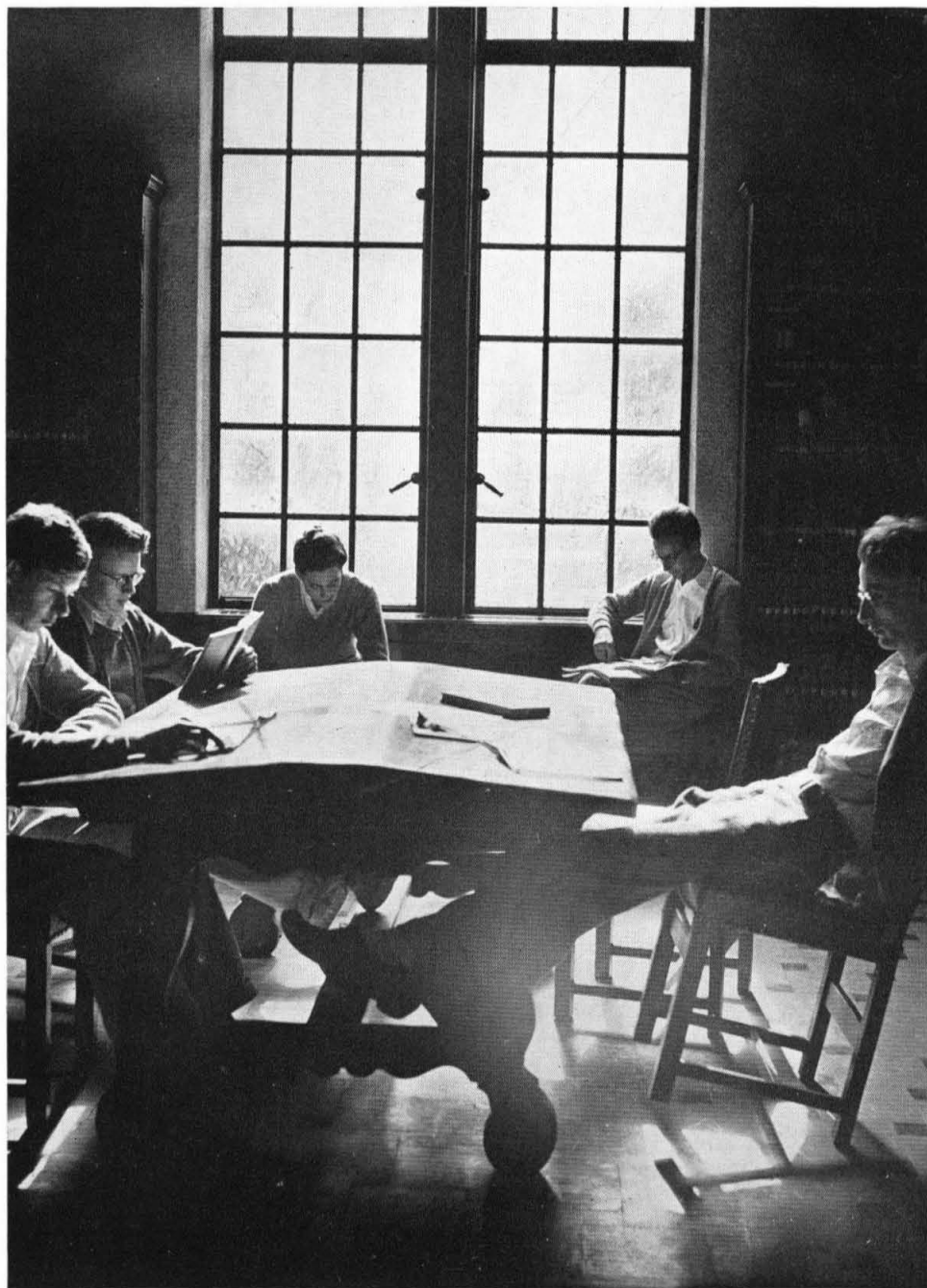


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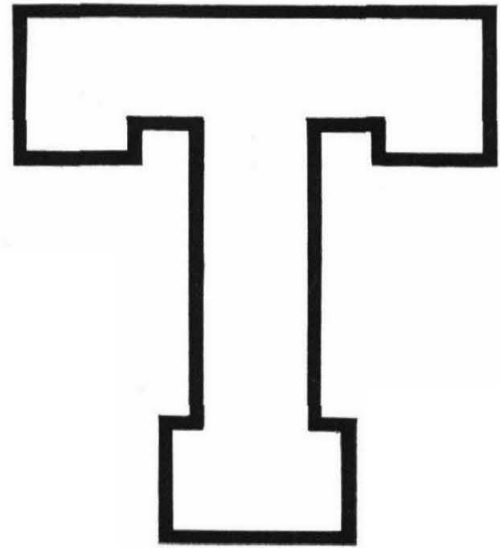
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Humanities Library—*Strelecki*



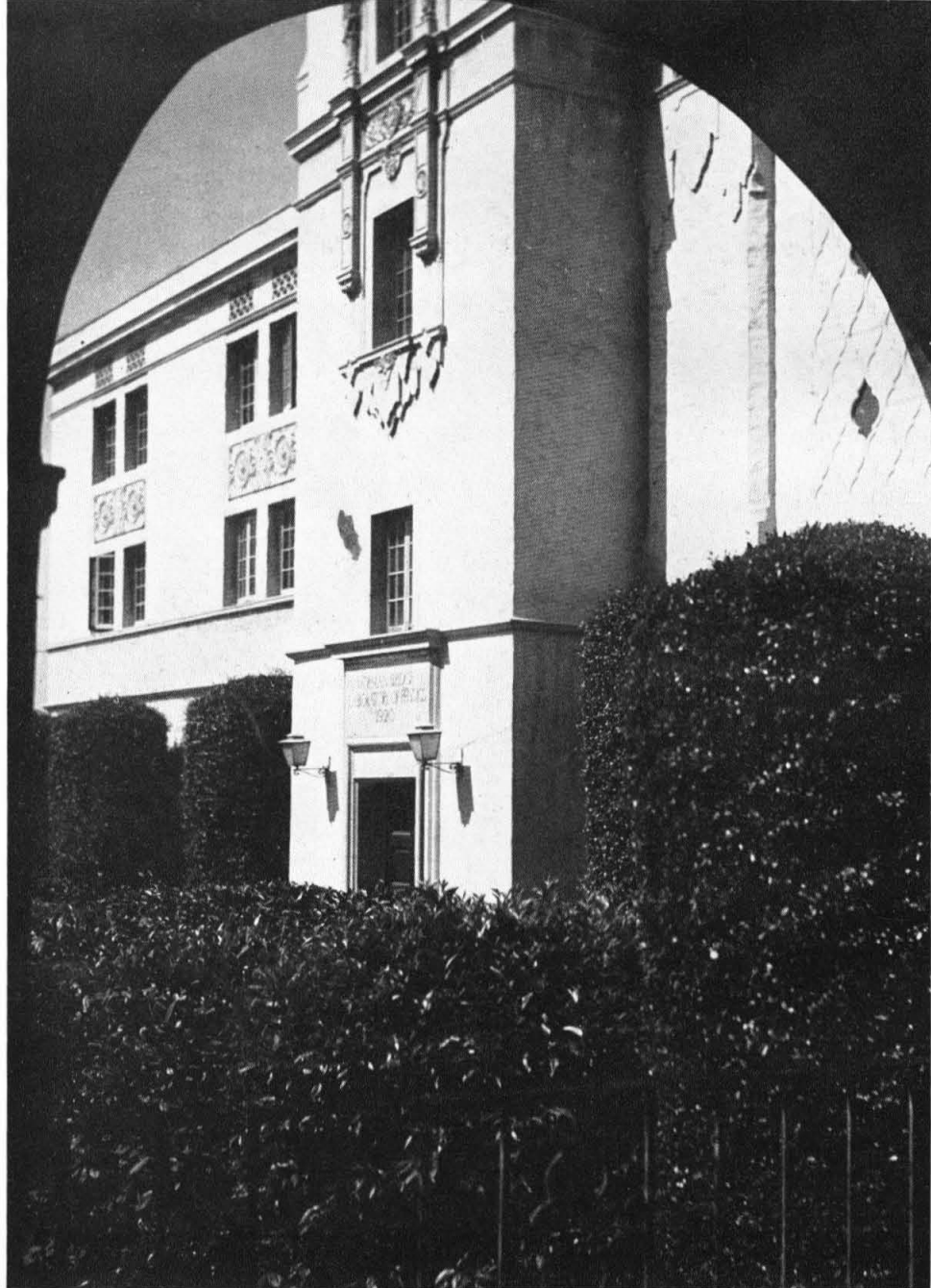
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**PUBLISHED BY
THE ASSOCIATED STUDENTS OF
THE CALIFORNIA INSTITUTE
OF TECHNOLOGY, INCORPORATED
PASADENA, CALIFORNIA**

Norman Bridge Laboratories—*Strelecki*



F O R E W O R D

It is the campus of a college which forms the center of that college's activities, whether they be classes, athletics, parties, frosh-soph fights, or original research. It is also the campus which portrays the college to the outsider; for it is the campus that makes up the tangible and physical impression of a college.

We may be particularly proud of our campus this year, as we see it brought nearer to its completed ideality through the addition of the four new buildings now in construction. Further, we note with pleasure the continuation of the much-needed landscaping, and hope that this beautification may be completed in the next few years. Finally, a very small fund has been started toward the building of a gymnasium for Tech, and we hope that this fund will grow rapidly in order that our campus may be complete.

Hence, in this year of expansion, this book has as its theme and dedicates itself to our campus—a growing and a living thing.

Dabney Treasure Room—*Strelecki*



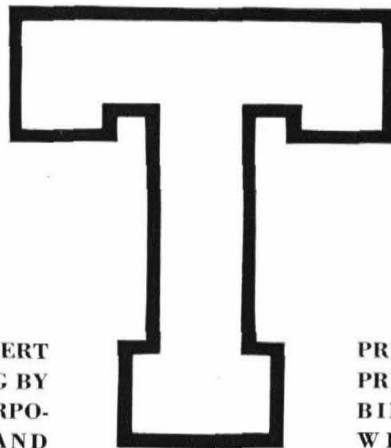
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**VOLUME 27
OF THE BIG**



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IN REMEMBRANCE

Dr. Arthur A. Noyes	Chairman of the Division of Chemistry and Chemical Engineering
Mr. Emerson W. Green	Member of the Class of 1935
Mr. Nathan L. Morse	Member of the Class of 1935
Mr. Francis F. Prentess	Institute Associate
Mr. Arthur Noble	Institute Associate
Mrs. Adeline M. Morrill	Administration

Caltech's Antecedents

The school from which the California Institute of Technology has grown was Throop University, established in 1891 by Amos G. Throop. In the following year it was "determined to make the manual training departments the leading feature of the institution," renamed the Throop Polytechnic Institute. Throop Polytechnic offered majors in science and the arts, was co-educational. Enrollment increased to 620 in 1907. The school was located on Chester Street, between Fair Oaks and Raymond, where some of the buildings still stand today.

In 1908, it was decided to revise and limit the curriculum to departments of Electrical, Mechanical, and Civil Engineering. In the following year the newly elected President, Dr. James A. B. Scherer, and Dr. George E. Hale toured America and Europe to gather the best educational precedent for the new conception of the Throop Polytechnic Institute.

The Institute was transferred to the present campus in 1910, with an enrollment of thirty-four men, utilizing the just dedicated Pasadena Hall, the building now known as Throop Hall.

A D M I N I S T R A T I O N

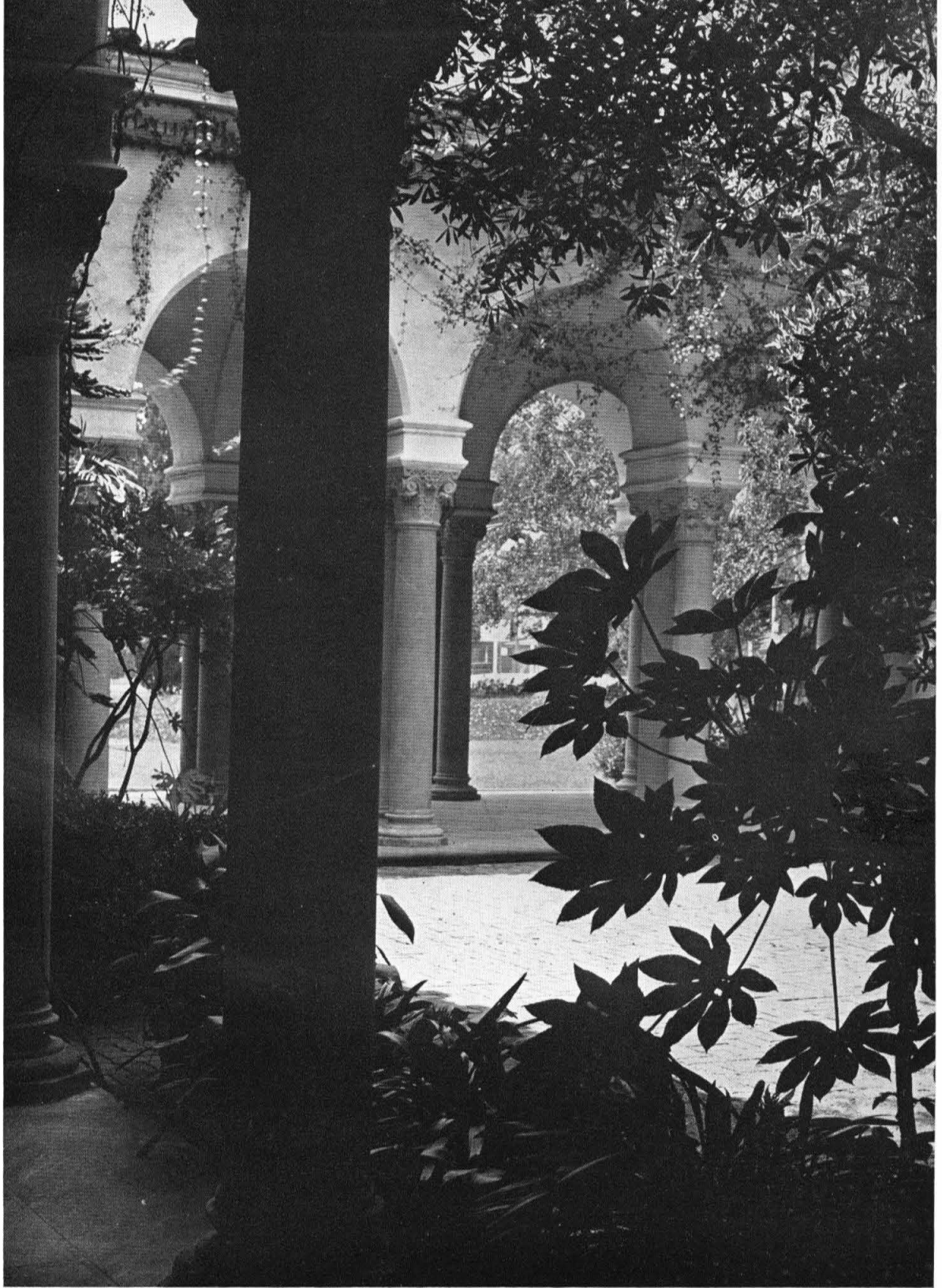


AD. 1910

Merriam

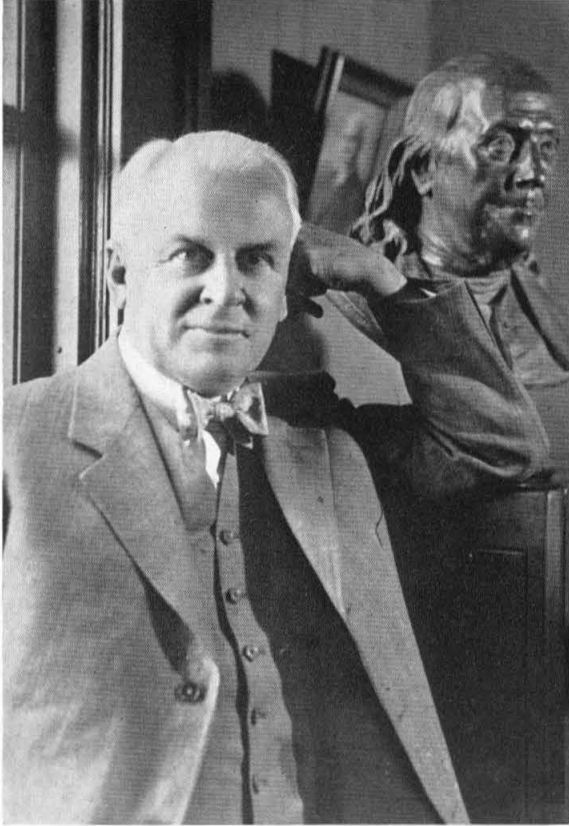
THROOP HALL (1910)

"PASADENA HALL (Rededicated THROOP HALL in 1920), erected thru the liberality of a score of citizens, and dedicated in June, 1910, is a majestic building comprising 800,000 feet of cubic contents, containing sixty-two rooms, and fitted with the most complete modern equipment."—BULLETIN OF THE THROOP POLYTECHNIC INSTITUTE, January, 1913.



Athenæum—Strelecki

FACULTY



Robert Andrew Millikan
*Chairman of the
 Executive Council*

Members:

Allan C. Balch	Harvey S. Mudd
George E. Hale	William B. Munro
Max Mason	Henry M. Robinson
Thomas H. Morgan	Richard C. Tolman
Edward C. Barrett, <i>Secretary</i>	

In the **Executive Council** rest the administrative policies of the Institute as related to internal affairs, such as the determination of educational policies. The Council is composed partly of members of the faculty, and partly of members of the Board of Trustees. In the Board of Trustees rests the management of the Institute's external affairs, particularly in the matter of finances. The Board is made up of prominent business men of Southern California. Both groups operating very effectively combine to form a management working toward the continued progress of the Institute.

The Board of Trustees deserves a great deal of credit for the growth of the Institute over the last twenty-five years. Its members have, for the most part, been on the Board a number of years and have all devoted their services to building up the Institute. The Institute as it stands today is the result of their fine work. Their policies in raising money for the purposes of expansion have been very successful, and the funds have been well utilized.

Through the guidance of the Executive Council the California Institute of Technology has been made a first-rank science and engineering school. Its educational policies are second to none and have brought Caltech much of its fame. This is particularly true of their wise provision in requiring study in the humanities of all students. Dr. Millikan as its Chairman is the head of the Institute.

Another group that deserves our mention and thanks is the California Institute Associates, "a group of public-spirited citizens interested in the advancement of learning . . . an organization for the purpose of promoting the interests of the California Institute of Technology." They have earned our sincere thanks.

In the **Administration** of the Institute there are vitally concerned, besides Executive Council Chairman Dr. Millikan, the following men:

The President of the Board of Trustees of the Institute is Mr. Allan C. Balch, who, with Mrs. Balch, gave the Athenæum to the Institute and has otherwise shown his interest and willingness to serve.

Dr. Richard Chace Tolman is the Dean of the graduate school and plays an important part in the work on the campus. He is also a member of the Executive Council and an outstanding man in the field of Physical Chemistry and Mathematical Physics.

Col. Frederic W. Hinrichs, Jr., is Dean of Upper Classmen and Professor of Mechanics. He is a graduate of West Point and known for his stern military ways. Though greeted by a loud "Come in!" the student who calls on him at his office knows that he will receive a generous amount of help and sympathetic advice.

The Freshman's friend is Dr. John R. Macarthur, the Dean of Freshmen and Professor of Languages. He knows the name of every Freshman at the end of the first two weeks of school. In giving the Freshmen history lectures, he keeps tired students awake by calling out their names frequently.

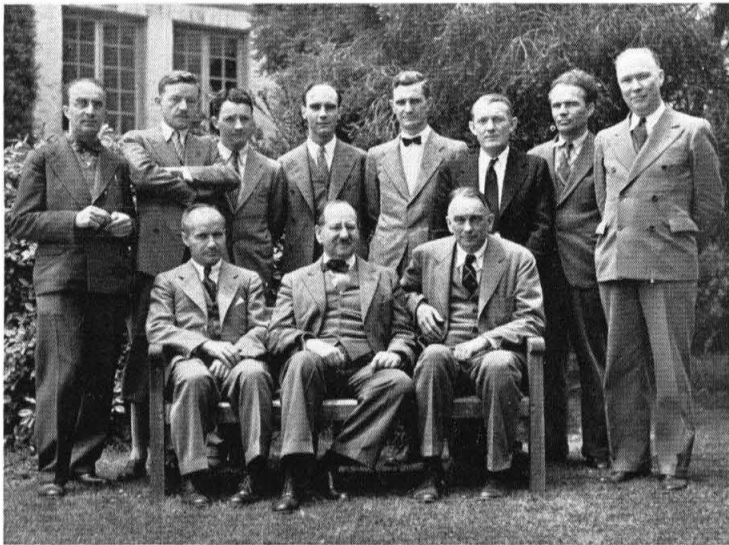
The finances of the Institute are managed by Mr. Edward C. Barrett, Comptroller. Due to his wise management and decisions, the Institute has managed to stay out of the red during the last few trying years. He has been here since 1911.

The difficult task of managing the Registrar's office belongs to Mr. Philip S. Fogg, Registrar and Assistant Professor of Economics. Mr. Fogg, graduate of the Harvard Business School, in the last two years has greatly increased the efficiency of the Registrar's office.



Richard C. Tolman
John R. Macarthur
Philip S. Fogg

Allan C. Balch
Frederic W. Hinrichs, Jr.
Edward C. Barrett



Physics Professors—**back row:** Keutner, Goetz, Neher, C. Anderson, Smythe, Lauritsen, Bowen, Houston; **front row:** Watson, Epstein, Tolman.

Both the **Physics** department and the Institute have been greatly honored by the presentation of the Nobel Prize to Dr. Carl Anderson this year. Winning the award for his discovery of the positron, Dr. Anderson duly confirms his position in the ranks of the famous men composing the personnel of the Physics department.

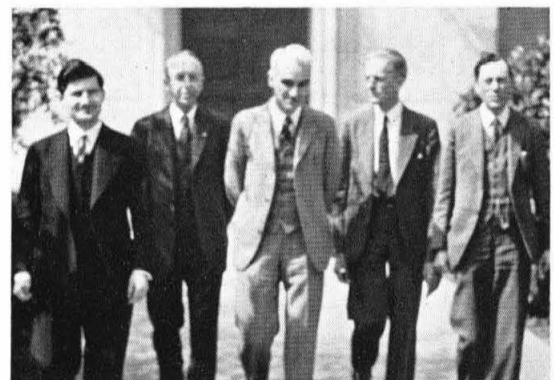
This group, headed by Dr. Millikan, includes such men as Drs. Tolman, Epstein, Goetz and Zwicky, as well as many prominent young scientists and visiting professors. By their fine work, these men have assisted greatly in focussing the eyes of the scientific world upon Caltech.

Dr. Millikan, Dr. Pickering, Dr. Neher and many others here have devoted much time to research on cosmic rays, which are interesting scientists the world over.

The **Mathematics** faculty carries on numerous works besides the providing of adequate instruction in calculus and analytical geometry to Freshmen and Sophomores. Dr. E. T. Bell has just added to his long list of books published *The Handmaiden of the Sciences*, a book which has aroused great public interest in modern higher mathematics. Working hand in hand with other departments, numerous applications of mathematics in physical, electrical and aerodynamic problems have been made, often greatly facilitating the technical research work.

Kellogg **Radiation** Laboratory has been the scene of much important nuclear research leading to advanced refinement in the comprehension of atomic problems. Also, the million-volt X-ray tube has been used continually to investigate the therapeutic values of X-rays. The co-operation of local hospitals has made possible this latter work, which is under the direction of Drs. Mudd, Emery, Stewart-Harrison and Levi.

Mathematics Professors—Michal, Van Buskirk, E. Bell, Birchby, Bateman.

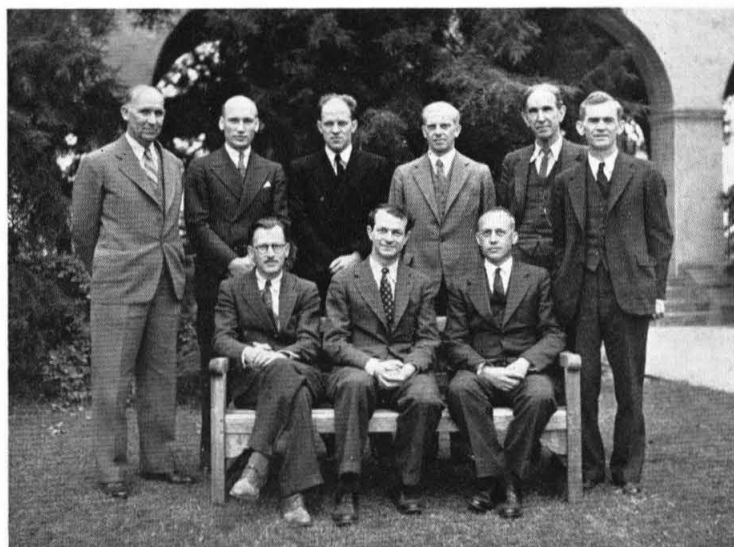
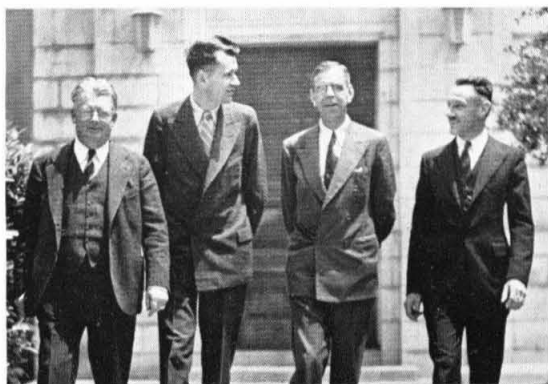


Electrical Engineering is booming—that is, if “booming” means jobs for all students.

Advanced men are finding it expedient to finish the work required for the master's and doctor's degrees as quickly as possible in order that the good positions going by can be grabbed before they get completely out of sight.

This situation to some extent has slowed down research work because of reduced personnel; but during the past year, several interesting papers have been presented by electrical engineering students, the most notable of which were papers by McRae, Pipes and Ramo. Some of the more important of the researches being conducted recently are those on the non-arcing sphere gap voltmeter, the cathode ray oscillograph, the more accurate measurement of surge voltages, short-wave radio communication, the theory and development of electric switches, and the study of arcs between contacts.

Electrical Engineering Professors—Sorensen, Lindvall, Mackeown, Maxstadt.



Chemistry Professors — **back row:** Lucas, Beckman, Sage, Bates, J. Bell, Yost; **front row:** Dickinson, Pauling, Lacey.

The C.I.T. **Chemistry** and Chemical Engineering Division suffered the loss by death, on June 3, 1936, of Professor Arthur Amos Noyes, its revered leader throughout a period of over twenty years. During the past year, the teaching and research activities of the department have been continued on the high level to which they were brought by Dr. Noyes.

Of the many researches under way, there may be mentioned the interesting series on the thermodynamic properties of hydrocarbons under the direction of Drs. Lacey and Sage, the study of plant hormones under Drs. Lucas, Koepfli and English, the photochemical and spectroscopic studies by Drs. Dickinson and Badger, the work of Dr. Yost in the field of inorganic chemistry, and the work of Dr. Pauling (new director of the laboratories) and others on the structure of the molecule. Facilities will be greatly increased by the new building.



Biology Professors—**standing**: Emerson, Bonner, Sturtevant, Wiersma, van Overbeek, van Harreveld, Morgan; **seated**: Borsook, Went, Huffman.

Growth of **Biology** division interests to include many branches of related investigation has been influenced greatly by Dr. Thomas Hunt Morgan, head of the department and one of the three Nobel Prize winners on the campus. Biologists can be quite proud of the active interest taken in teaching by the faculty of Kerckhoff, noted for having one of the most up-to-date courses of study at the Institute.

In the field of genetics, much work has been done under Dr. Morgan's direction. Drs. Sturtevant, Dobzhansky and Bridges have done outstanding work in this field. Dr. Borsook has done much in the realm of animal physiology.

The Marine Laboratory at Corona Del Mar houses other important work; and the new building will afford badly needed additional space on the campus.

Civil Engineering research problems were influenced in the

choosing by the needs of community and federal projects with which the division is co-operating. The work of these investigations is being done by graduate students or research fellows under the direction of various members of the faculty.

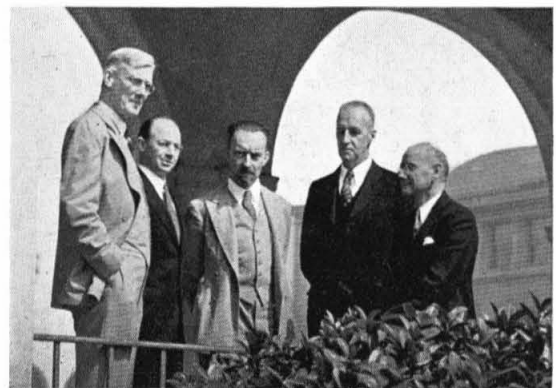
Professor Franklin Thomas, head of the Civil Engineering Department, is chairman of a special Metropolitan Water District committee; Professor Martel has undertaken an investigation on the analysis of earthquake forces as applied to buildings for the county Board of Supervisors; and Professor Michael has begun experimenting on types of foundations for pavements at the request of the county Road Department.

Professors Knapp and Von Karman direct studies for the Soil Conservation Service.

In the **Aeronautics** laboratory, staff members and graduate students are doing considerable original research in airplane design.

F. J. Malina is experimenting on gaseous

Civil Engineering Professors—Hinrichs, Converse, Martel, Michael, Thomas.



oxygen plus various hydrocarbons as rocket fuel; Lieutenants Alback and Miller, U.S.N., are using the Calcit power model to test stability and control in powered flight; and W. H. Bown is investigating boundary surfaces.

The work in meteorology, under Dr. Krick, now includes remarkably accurate nationwide weather forecasting and training of meteorologists for agencies.

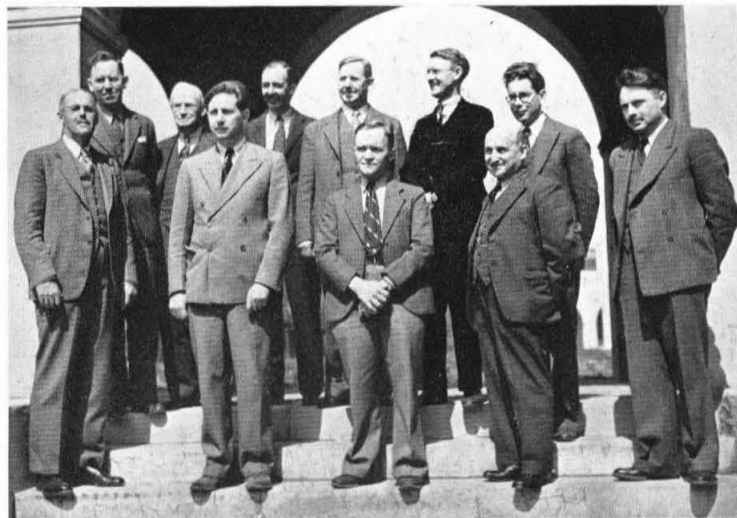
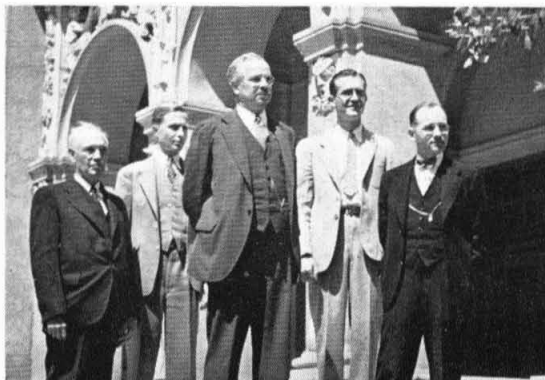
The radiometeorograph, developed last year, has been greatly improved and cheapened.

Mechanical Engineering

professors, besides their usual classroom work, made up several committees investigating industrial problems. Professor Clapp heads those studying fatigue failure of drill pipe for the American Petroleum Institute.

Dr. Donald S. Clark is investigating the structure of metals and alloys to determine the fundamental nature of the reaction to impact loading.

Mechanical Engineering Professors—Clapp, Sechler, Daugherty, Tyson, Clark.



Geology Professors—**back row:** Stock, Ridgway, Campbell, Furlong, G. Anderson, Richter; **front row:** Buwalda, Benioff, Popenoe, Gutenberg, Fraser.

Fields for **Geology** division researches are numerous, particularly in the southwestern part of the United States.

During the past year, the very oldest rocks in the bottom of the Grand Canyon have occupied Dr. Campbell's attention; while Dr. Buwalda, head of the department, has confined his studies to the local quadrangle. Crustaceous marine shells from the Sacramento Valley have been the object of Dr. Popenoe's study; and Dr. Fraser has improved microscopic technic.

At the Seismological Laboratory, Drs. Gutenberg and Richter have been investigating temblors originating five hundred miles below the crust of the earth; and Dr. Benioff has been designing and building more new types of earthquake recording instruments.

The **Astrophysics** department is particularly busy with preparing the largest telescope and observatory.

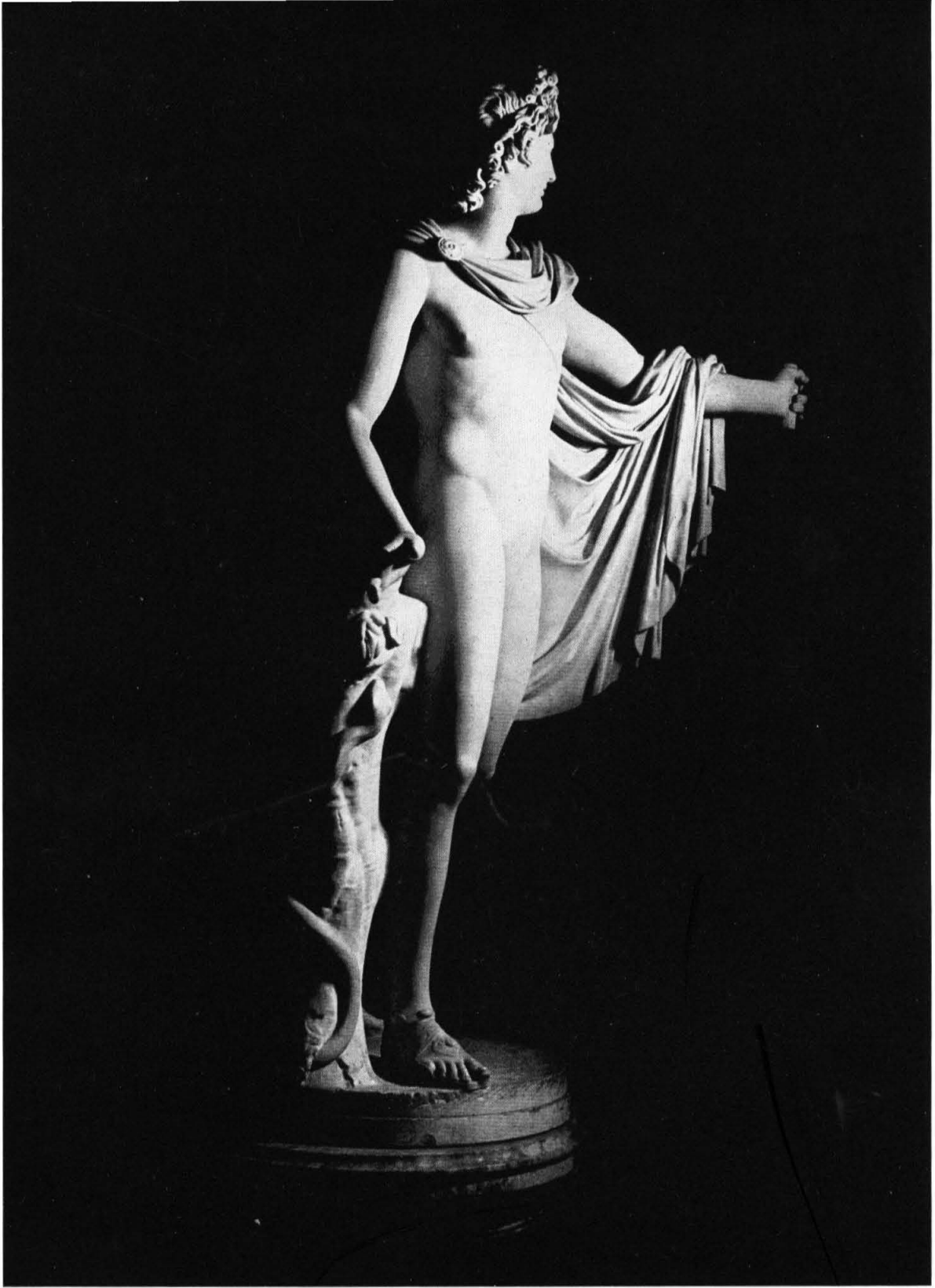
The grinding of the two-hundred-inch mirror is under the direction of Dr. John Anderson; the erection of the observatory is supervised by Captain Clyde McDowell, U.S.N.; and Byron Hill is the civil engineer in charge of construction.

The Division of **Humanities** is one of the distinctive features of the California Institute. Realizing the desirability of having greater emphasis placed upon the humanistic side of the curriculum than is common in most technical colleges, the administration has given over an ample portion of the various courses of study to this branch.

In addition to their regular teaching duties, the members of the department carried on numerous outside activities. The division sponsored a series of lectures by Gilles Guilbert of the Salzberg Mozarteum on history and philosophy of music and evolution of technique and form. In addition to this, a weekly series of non-technical lectures entitled "Outlooks in Philosophy" was delivered by a group of distinguished professors from local colleges. Such student activities as forensics and dramatics were supervised by members of the department.

Humanities Professors—**standing:** Jones, Untereiner, Judy, Laing; **seated:** Huse, Stanton, Soares, Kurtz, Macarthur, Eagleson, Fogg, Gilbert.





Apollo in Throop—Strelecki

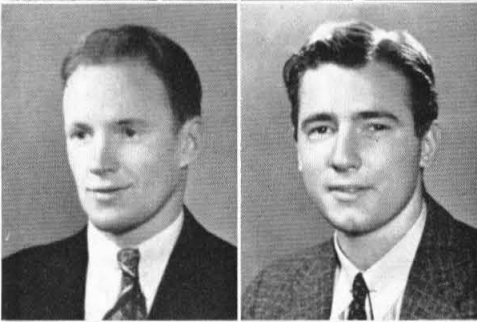
STUDENT BODY



Bussard
Evans



Jewett
Mahoney



McLean
Miller



Pabst
Webster



Wetmore

The **Board of Directors** members—how they got there and what they did:

Robert Mahoney, President . . . one of "The Big Three" . . . extra-curricular activity proponent with ideas . . . fulfilled unique seven-point constructive program, plus.

Frank Jewett, Vice-President . . . Olympic yachtsman . . . introduced modification in the Honor System.

Gordon Bussard, Treasurer . . . once Assistant Treasurer . . . put and kept finances in order.

John McLean, Secretary . . . Athlete and debater . . . did his job . . . new Student Body President.

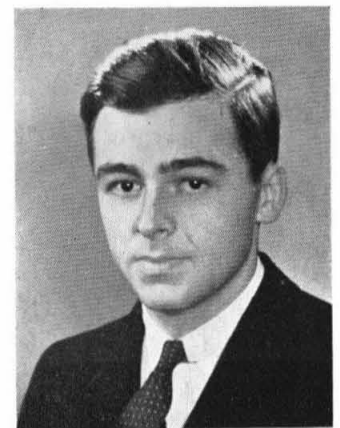
William Wetmore, Athletic Manager . . . Football Captain . . . improved football banquet . . . introduced impartial system of making athletic awards.

Martin Webster, Publicity Manager . . . debater, journalist, thespian, gentleman . . . indefatigable worker against publicity resistance.

Hank Evans, Rally Committee Chairman . . . dance orchestra leader . . . produced superfine Friday assemblies . . . elected next Student Body Treasurer.

Alton Pabst, Representative-at-Large . . . Throop Cluber . . . expeditious, maturely-thinking, industrious.

Charles Miller, Representative-at-Large . . . Sophomore . . . Socratic clarifier of Board of Directors procedure and policies.



Robert M. Mahoney
*President of the
Associated Students*

“The **Board of Control** exists to express the sentiment of the corporation in support of the sturdy qualities of character for which the California Institute of Technology stands.” So reads Article VI, Section 1 of the Constitution and By-Laws of the Associated Students.

With prevention as one of its watchwords, this Board of Control, ably led by Student Body Vice-President Frank Jewett, passed through a most successful year. One of the policies carried out by this year’s Board was the publishing of case briefs taken from past minutes. This was done with the idea of making the Student Body better acquainted with the functions of its Board of Control.

Members elected from the various classes were: Jack Edwards, William Ellery and Richard Ridgway, Seniors; Jack Baker, James Balsley and Roland Stone, Juniors; Jack Osborn and Duane Beck, Sophomores; and Charles Palmer, Freshman. Robert Mahoney, President of the Corporation, was also a member.

Acting in conjunction with the Board of Control is the Court of Traditions which “exists to deal justly with all cases involving Freshman rules and college traditions.” Those on this year’s Court were: Jack Edwards, Chairman; Roland Stone; Ralph Spotts; Charles Palmer; and Frank Jewett, ex officio.

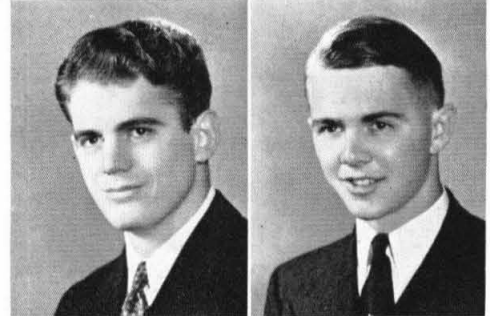
Baker
Balsley



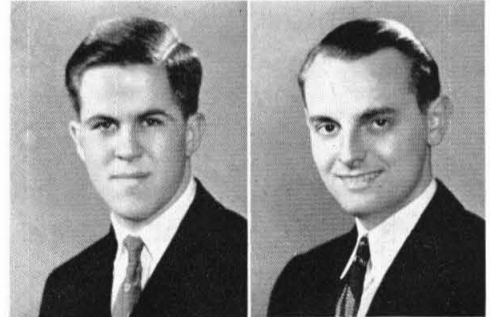
Beck
Edwards



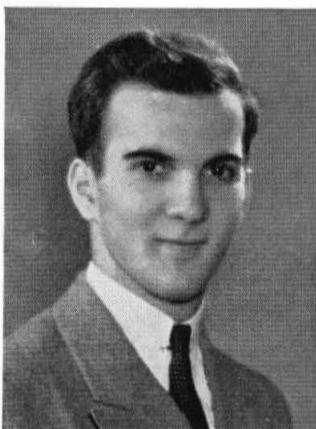
Ellery
Osborn



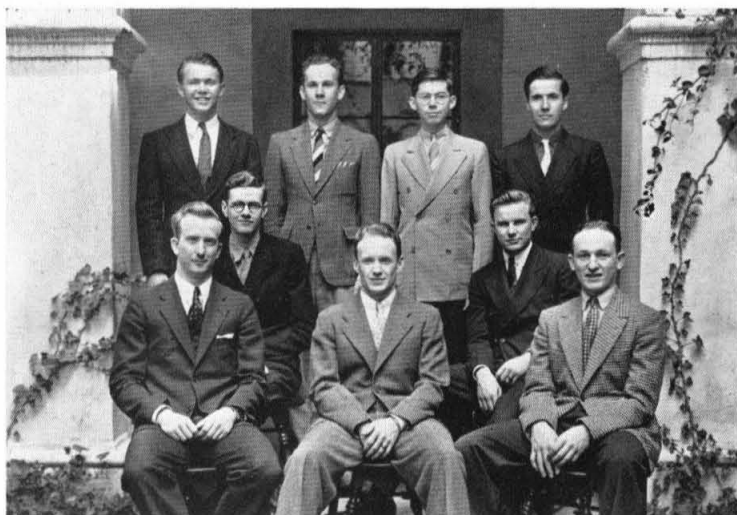
Palmer
Ridgway



Stone



Frank B. Jewett, Jr.
*Vice-President of the
Associated Students*



New Officers—**standing**: Osborn, Barry, Goodmanson, White; **seated**: Stone, Anderson, McLean, Johnson, Wolffberg.

The **New Officers**, elected to manage and direct campus activity for the ensuing year, are: Jack McLean, President; Roland Stone, Vice-President; Jack Baker, Secretary; Hank Evans, Treasurer; Stanley Wolfberg, Athletic Manager; Robert Barry, Publicity Manager; Evan Johnson, Rally Committee Chairman; Jack Osborn and Jack White, Representatives-at-Large; Keith Anderson, *California Tech* Editor; and Lloyd Goodmanson, Yell Leader. The Editor of the *Big T* and Managers of both publications were elected late in the third term.

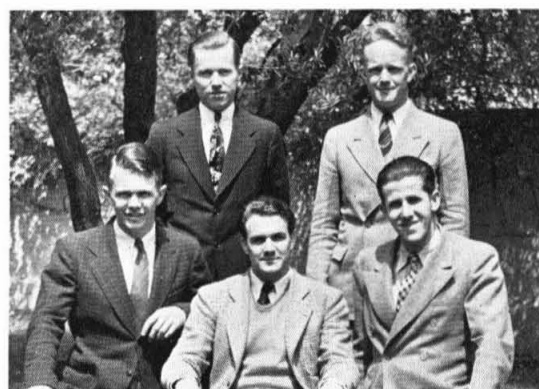
These elective officers, with the exception of the Editors, publication Managers and Yell Leader, make up the Board of Directors of the Corporation; and already they have sponsored the student-body formal at the Brentwood Country Club and have established a summer employment committee composed of representative students and Dr. Donald Clark.

As the **Publicity** Committee aims to inform an anxious public of the doings of Caltech's undergraduates, the past year has seen a veritable barrage of news releases pelting the press for miles around while the students themselves were being confronted by numerous bulletin boards located in propitiously selected spots about the campus. Thereby, this committee has kept the public, "foreign" and "native," aware of what Tech is doing.

Much credit is due the capable supervision of Publicity Manager Martin Webster, who received assistance from Evan Johnson, Bob Thomas and Dick Rosenzanz. Bob Barry has taken over the important position held by Webster.

Although **Election** Committee work is of great importance, it is often overlooked or taken for granted by many in the student body. Absolute fidelity is necessary; and with innumerable interested parties clamoring for results, the nervous tension becomes terrific. Through it all, the committee must be content with the feeling

Election Committeemen—**back row**: Hulbirt, Grobecker; **front row**: Osborn, Miller, Longfelder.



of their behind-the-scenes work well done, and to some extent, with the satisfaction of being "in the know." Chairman this year has been Wendell Miller.

The year's **Rally** Committee, under the expert guidance of Hank Evans, was able to provide many colorful programs for the student assemblies, acquiring professional entertainers on several occasions. Planning Freshman assemblies, decorating the Rose Bowl, and providing send-off rallies for the football team were some of the more routine duties carried out by the committee.

As a result of the cooperation of most of the student body, the enthusiasm during the Oxy-pajamarino reached a new high. A spectacular bonfire was followed by the traditional romp up and down Colorado Street topped off with a free show for all the pajama-clad.

Evan Johnson, junior member of the committee, succeeds Hank Evans.

Rally Committeemen—**back row:** Richards, Gates, Barber; **front row:** Larson, Evans, Johnson.



Interhouse Committeemen—**standing:** Dowd, Wetmore, Elliott, Davis, Stone, Belzer; **seated:** Pabst, Price, Bussard, Edwards, Ridgway.

This **Interhouse** Committee, under the capable leadership of Gordon Bussard, spent a busy year managing affairs of the student houses and ironing out difficulties of various natures. Many problems confronted the group, especially those of freshman placement and initiation; the present committee worked out the details of the placement system used this year and has devised another for next year which is expected to eliminate defects of past methods. The committee was composed of the Presidents and Vice-Presidents of the houses: Price and Stone, Blacker; Bussard and Wetmore, Dabney; Edwards and Dowd, Fleming; Ridgway and Elliott, Ricketts; Pabst and Davis, Throop; Belzer, of Fleming, acted as Secretary of the committee. Meetings are held every Wednesday noon at the Training Table in the basement of the Student Houses.

New men have taken over the offices now and are continuing the work.

The 1937 **Exhibit** Committee, under Chairman Elliott Bonham and Assistants Robert Thomas and Armand DuFresne, made the Annual Exhibit Days most entertaining to the record crowds, estimated at twenty thousand, which thronged the campus. The magnitude of the crowd and presence of six newsreel companies was due to the great public interest which was materially aided by the efforts of the new publicity committee.

As usual, the High Voltage demonstration led the field in popularity; but a newcomer, the television reception, and the grinding of the 200-inch telescope mirror were close rivals.

The Geology department and the Biology division featured lectures of common inter-

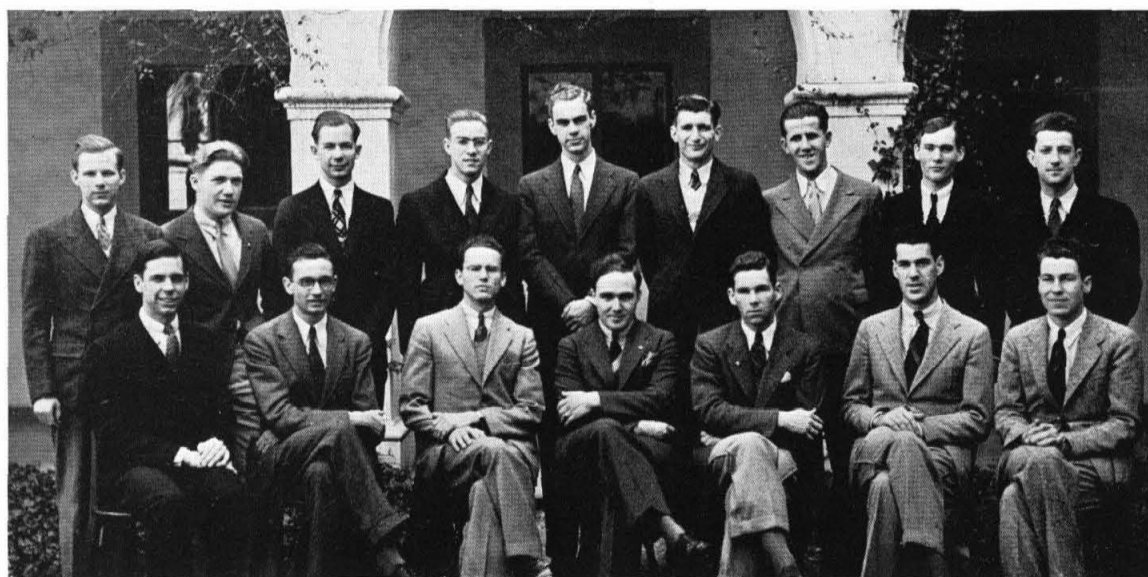
est to the visitors, earthquakes and vitamins being the topics of some of their respective presentations.

Chemical laboratories, besides their regular nose appeal, provided many of the most attractive demonstrations, giving two public lectures as well—one on photochemistry and one on household chemistry.

Exhibits of Dr. Millikan's cosmic ray apparatus and demonstration lectures on high-frequency phenomena and fidelity sound recording were featured by the Physics and Electrical Engineering departments.

The Civil and Mechanical Engineering divisions showed Colorado River Aqueduct movies and model oil well equipment respectively, besides their customary interesting displays.

Back row: Kimball, Wood, Merriam, Griffis, Warner, Zimmerman, Longfelder, Rudkin, Legge; **front row:** Dennis, Clark, DuFresne, Bonham, R. Thomas, Dunbar, Segelhorst; **not pictured:** Carrick, Park, N. Thomas.



Caltech's New Horizons

To denote exactly the scope of the institution, the Board of Trustees, by unanimous action on April 30, 1913, changed the name of Throop Polytechnic Institute to Throop College of Technology.

Significant to the growth of the College was the first association of Dr. Arthur A. Noyes as Director of Chemical Research and the construction of the first portion of Gates Chemical Laboratory in 1916.

And then came the World War. "The War Department, recognizing the important services which engineers and chemists must render in the prosecution of war, designated Throop College of Technology

as one of the institutions whose students may, if their work is of a satisfactory grade, be granted the privilege of enlisting in the Engineer Reserve Corps of the U. S. Army and of remaining in college for the completion of their courses."

On March 27, 1919, Mr. Arthur H. Fleming signified his intention to subscribe one million dollars to the College if an additional million was subscribed by other donors by the end of 1920. As a result of a quiet but effective financial campaign the institution faced the future with an endowment that not only enhanced but made possible its tremendous growth since.

C L A S S E S



A.D. 1916

Merriam

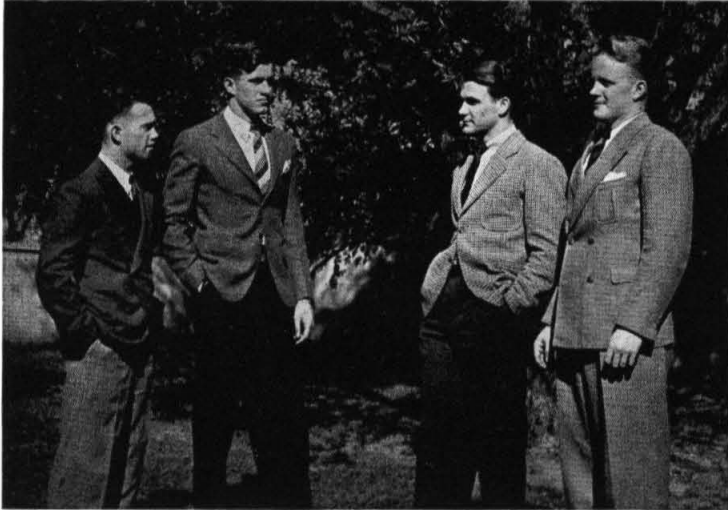
GATES CHEMICAL LABORATORY (1916)

“After the building of Throop Hall in 1910 . . . Mr. Gates was the first person to come forward, and with his brother make provision in 1916 for an adequate chemical laboratory commensurate with the ideals of the group of men who had by this time caught the vision of the development of a great institute of science and technology on the western coast.”—THE FUTURE OF THE CALIFORNIA INSTITUTE OF TECHNOLOGY, by Robert A. Millikan, 1936.



Dabney Gate—*Kimball*

SENIOR CLASS



Vice-President Edward Wileman, Secretary Warren Fenzi, President Wendell Miller, Treasurer Alan Grobecker.

Nearly four years ago (on a hot September day, of course), the class of 1937 (161 strong) registered at the California Institute of Technology and thus came into existence. Probably less than 80 of these men are planning to march across the Gates balcony on June 11 (probably less than one of these men will have the courage to jump over the railing on receiving his diploma). By the end of the first year, charter members of the class were pouring out via the back door; by the beginning of the second year, transfers were pouring in, but not so fast. Result: the class now has about 130 members. In spite of losses (one complete set of class officers will graduate from Stanford this year) and changes, the class has succeeded very well scholastically and in school activities and

will make its due contribution to industry, to engineering, to business, to science, and to the various schools of graduate study.

The first year of the class of 1937 was an active one and one worthy of any Freshman class. Wendell Miller was appointed Freshman Chairman and subsequently re-elected President unanimously. Other officers were for the first term: Don Drummond, Vice-President; Ralph Benton, Secretary; Victor Zezukevitch, Treasurer. The second term saw no change except that Richard Rosencranz took over the Vice-Presidency. The class put on a successful student body dance, inaugurating the custom of having them on registration day. The Rodeo dance was particularly successful, held at the Civic Auditorium, the last held off campus. The class also produced the only Freshman football team that ever beat both Pomona and Oxy. It not only produced a championship swimming team, but the only swimming team at Tech in a number of years. An outstanding class assembly was planned and arranged by Walton Wickett and enjoyed by everyone. Other activities of the class were also successful, and the men had a good start on the Sophomore year. Continued on page 48

On the Hour



Irving L. Ashkenas Honor Key, TβII
 Junior and Senior Intramural Athletic Manager . . . did much to further interhouse sports . . . member of the Glee Club . . . second-half-year President of the A.S.M.E., formerly its Vice-President and Secretary . . . lives in Los Angeles . . . Throop Club.

Alfred D. Auger
 A recent transfer to Tech . . . comes from Hollywood . . . is taking civil engineering and getting good grades at it . . . Program Chairman of the A.S.C.E. . . . interested in cooking and gardening as hobbies . . . a clever speaker.

John R. Austen Beavers
 John Austen has spent much of his time here providing entertainment for the students as Rally Committee Chairman and as Entertainment Chairman of Fleming House . . . he also uses his ready wit to advantage . . . a frosh swimmer . . . automobiles as a hobby.

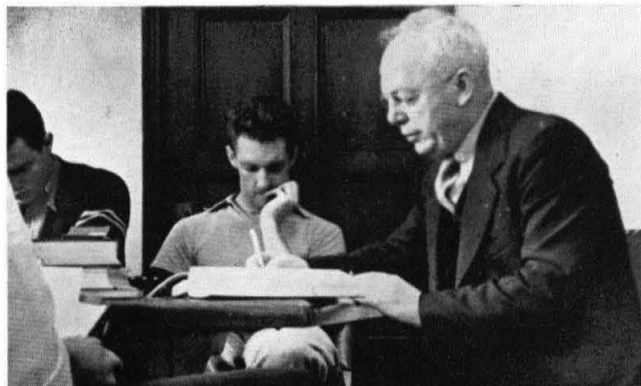
Hoyt Austin Varsity Club
 An athlete in heart and body . . . four years of track as a weight man . . . Senior Football Manager after three years' apprenticeship . . . first string golfer . . . also plays tennis and swims for Fleming . . . always on deck for what's happening.

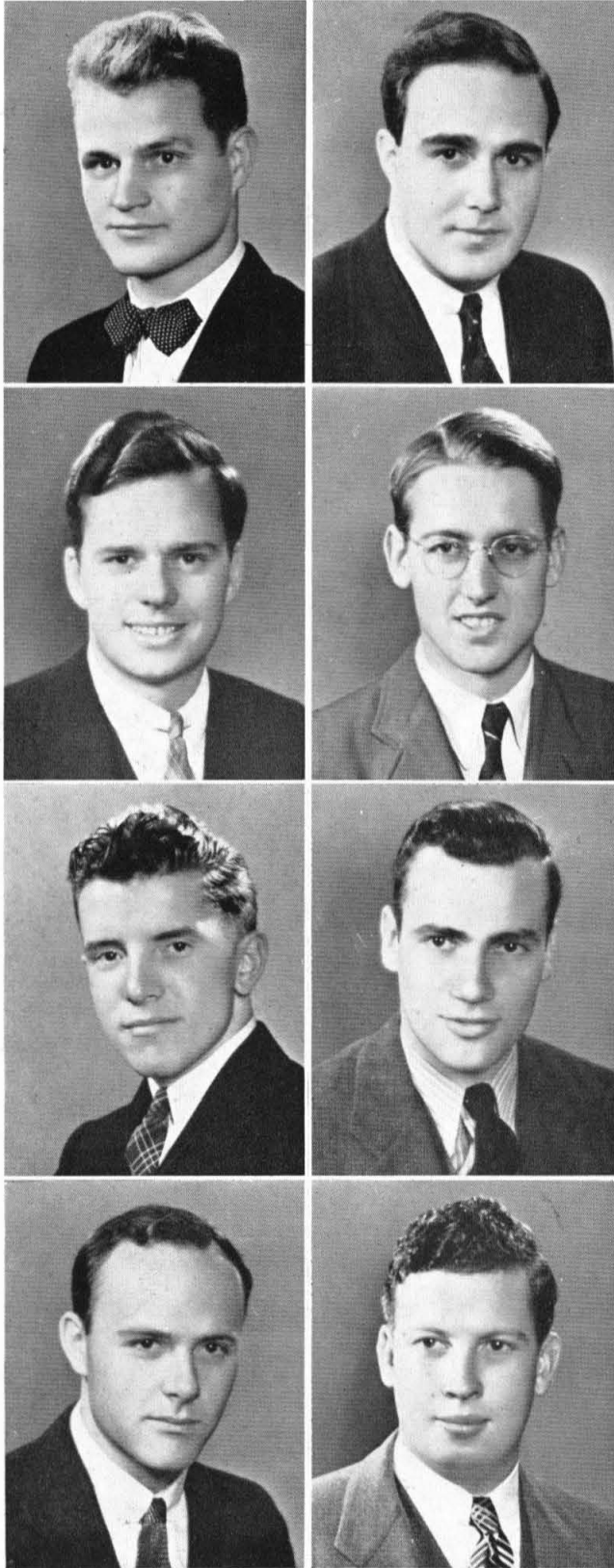
Joseph Axelrod
 One of the many average-raising chemists in the graduating class this year . . . member of the Chem Club . . . always quiet, but very pleasant . . . shows original and unconventional ideas in his chem lab work.

J. Richard Bailey
 A native of Spokane, Washington . . . lived in Fleming when a freshman . . . frosh numeral in track, two years on the varsity . . . a member of the Glee Club for three years . . . on the Junior-Senior Prom Committee . . . A.S.C.E. member.

Thomas R. Belzer
 One of the mainstays of Fleming House for four years . . . has been Secretary and Social Chairman of that house . . . wrestling coach and a good wrestler himself . . . head of Tech's members of the Marine Corps Reserve . . . plays a good game of bridge.

Ralph S. Benton, Jr. Honor Key, Varsity Club
 A muscle-builder's ideal . . . four years a letterman in track and three in football . . . injuries prevented the fourth . . . four years of decathlon competition . . . A.S.B. Athletic Manager in junior year . . . enjoys riding his motorcycle . . . Fleming House.





John Blue

Taking applied physics option . . . good student in that line . . . wrestles for the Throop Club in interhouse contests . . . usually seen smoking a pipe on the campus . . . always carries several pipes with him . . . lives in Alhambra.

Honor Key, Drama Club Key

Elliott H. Bonham

This year's Exhibit Day Chairman . . . put on the best show ever . . . responsible for many new innovations . . . stage crew head for dramatic production . . . editor of the *Blacker Blotter* . . . Assistant Social Committee Chairman of Blacker . . . "fire-chief."

Clark D. Bower

Transferred to Tech last year from P.J.C. . . . lives in San Luis Obispo, Calif. . . . has been out for track for two years and has participated in novice meets . . . member of the Glee Club . . . member of the A.S.M.E. . . Throop Club.

Stanford W. Briggs

A year as an exchange scholar in China and a day in a Japanese jail for asserted spying mark Briggs' interesting experiences . . . he has served four years in the Tech Glee Club, one season on the debate team, one year as Blacker's Treasurer.

Gordon L. Bussard

Honor Key, Beavers, Varsity Club

"Dube's" done everything . . . Student Body Treasurer . . . President of Dabney . . . Interhouse Committee Chairman . . . four tennis letters . . . house sports, twice Dabney's Athletic Manager . . . *Tech* and *Big "T"* staffs . . . Secretary-Treasurer of the Beavers.

Varsity Club

Robert S. Campbell

An electrical engineer and member of the A.I.E.E. . . . one of Dabney's strong silent men . . . good to have around . . . won his frosh numerals in swimming and baseball . . . has played baseball all four years . . . Chairman of the Senior ring committee.

Harry H. Carrick

T β II

Harry transferred here last year as a junior . . . soon distinguished himself as a top-ranking student . . . has pursued the civil engineering course and has been active in the affairs of the A.S.C.E. . . . Throop Club.

George E. Carroll

Once Treasurer of Dabney House and Secretary of the inter-house committee for a term . . . quiet, but jovial and cooperating . . . four years on the staff of the *California Tech* . . . rooms with Clark Wiget . . . plays bridge (13 card) . . . civil engineer.



Carroll F. Chatham

One of San Francisco's gifts to Tech . . . a chemist . . . noted for his unusual abilities along certain lines . . . an experienced hand-writing analyst . . . also good at certain sleight-of-hand tricks . . . interested in psychology . . . Ricketts House.

Ellsworth W. Cornwall

Assistant Social Committee Chairman of Blacker . . . Spends much time in arranging and decorating for dances . . . interested in photography and the activities of the Photo Club . . . member of the A.S.M.E. . . . Head Waiter in Blacker . . . known for his hearty laugh.

Thomas V Davis

Honor Key, Beavers, Press Club

"T. V." is best known as editor of this book . . . transferred last year from P. J. C. . . . Vice-President of the Throop Club . . . Secretary of the Press Club . . . two years in the Glee Club . . . practically every interhouse sport . . . still hopes to graduate.

ΣΞ

Don Charles DeVault

Perhaps the class's most brilliant student . . . has done extensive research work in Chemistry . . . is the only member of the class to publish a paper on his work . . . member of the Chem Club . . . likes machine shop and carpentry work.

Frederic E. Dion

Vice-President of the A.S.M.E. . . . interested in music, having played three years in the orchestra and four in the band . . . also likes riding and hunting . . . Dabney Upperclass Committeeman . . . usually seen smoking pipe . . . has faith in Fords.

Varsity Club

George M. Dorwart

Best known as a baseball star . . . four-year letterman and this year's Captain . . . won the Rawlings Trophy last year . . . won frosh numerals in four major sports . . . Librarian of the Glee Club . . . Treasurer of the A.S.C.E. . . . Throop Clubber.

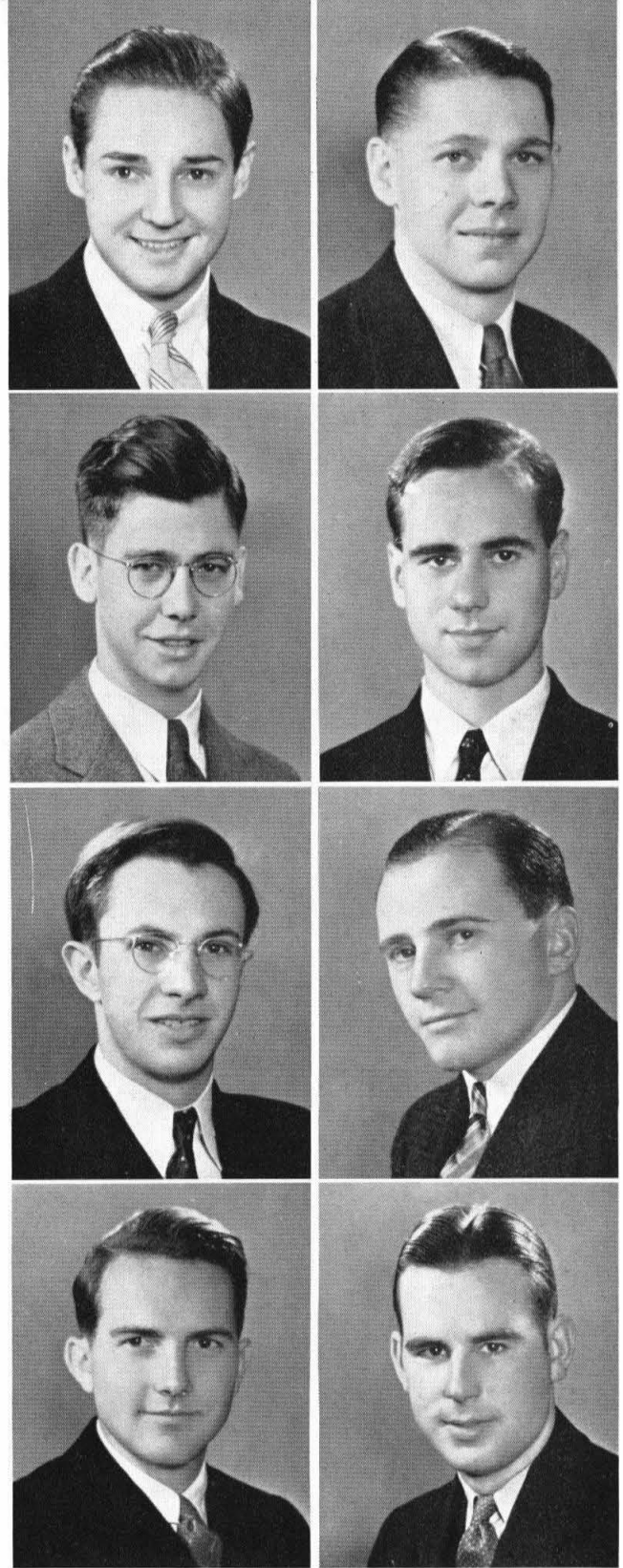
Munson W. Dowd

Beavers, TβII, Varsity Club

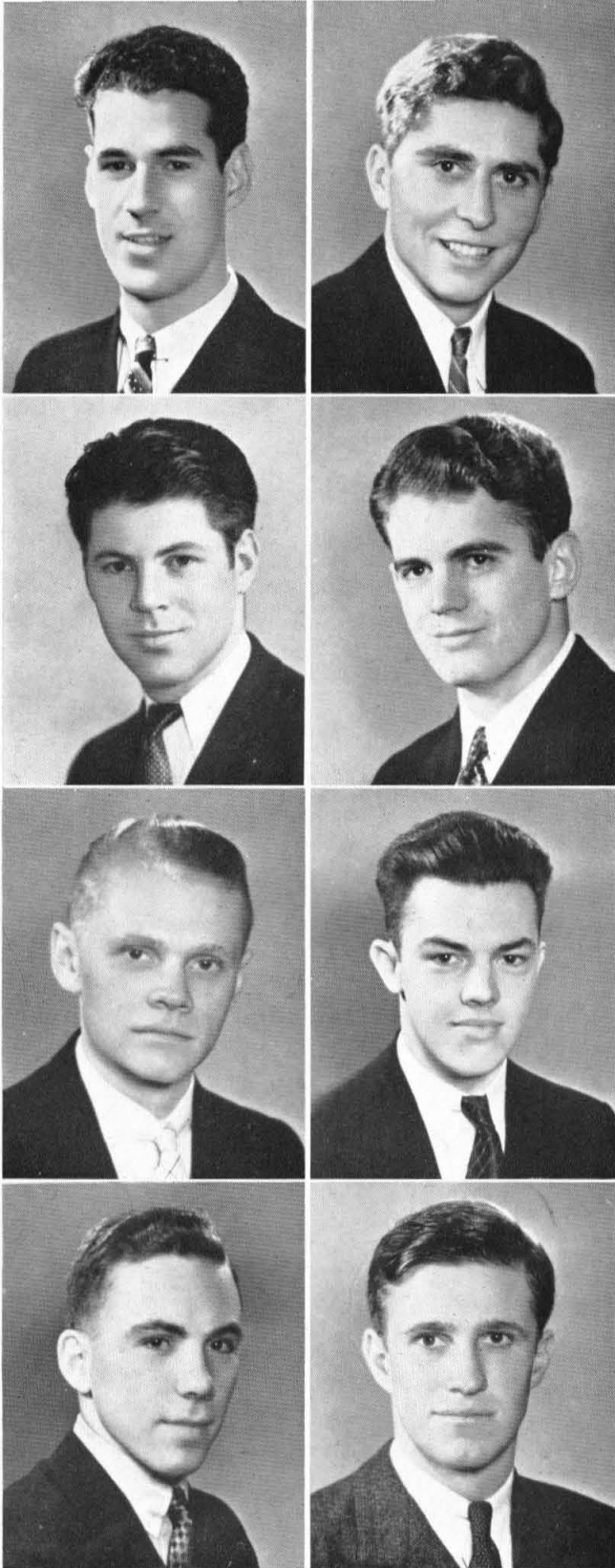
President of Tau Beta Pi, but no snake . . . four years on the tennis team . . . Vice-President of Fleming House . . . on the Tech staff . . . "Mun" plans to return next year to finish a Civil Engineering course retarded by three years as a Physicist.

Clarence R. Drake

One of the original members of the class entering in 1933 . . . has played in both the orchestra and the band of the Institute during this time . . . one of the numerous chemical engineers . . . lives in Los Angeles.



Studyin'



Bruce W. Dunbar

President of the Chem Club, formerly its Secretary . . . acted as Chairman of the chemistry division for exhibit day . . . said to be a smooth talker and a slayer of women . . . had his choice of several jobs . . . Throop Club.

Beavers, TβII

John S. Edwards, Jr.

President of Fleming House, a really difficult job . . . Treasurer of Tau Beta Pi . . . formerly Treasurer of Fleming . . . two years on the Board of Control . . . the call of the business world is taking him to Harvard Business School next year.

William Elconin

Honor Key, Beavers, Varsity Club

Press Club . . . Editor of the *California Tech* . . . likes to write his regular liberal column for the paper . . . on the basketball and baseball teams . . . basketball Captain last year . . . works at the Griffith Observatory and is interested in Astronomy.

Varsity Club

William P. Ellery

Three years on the track team as Tech's best javelin-heaver . . . a senior member of the Board of Control . . . member and leader of a popular dance band . . . spends his spare time trying to perfect a P.A. contraption for it . . . Ricketts House.

Virgil Erickson

One of the disciples of Dr. Romeo Martel . . . waits at the Athenæum . . . often wanted in card games by those who like to win . . . always seen hurrying somewhere . . . the fairer sex makes up his chief topic of conversation . . . known for his blonde hair . . . Dabney House.

Varsity Club

Ted Fahrner

As Athletic Manager, "Ted" guided Fleming to its third successive interhouse trophy last year . . . on the varsity baseball team this year . . . member of the Newman Club . . . plays the violin for the orchestra . . . works at the "Club" fountain.

Willard Farnham

Press Club

"Pork" has held down the difficult but lucrative job of Business Manager of the *California Tech* this year . . . won his numeral on the last frosh swimming team Tech had . . . also President of the Aero Club last year . . . Fleming House.

Beavers

Warren Emanuele Fenzi

A man with a smooth disposition . . . half-miler on the track team . . . frosh tennis . . . debate team . . . Treasurer of Ricketts House . . . Junior Class Treasurer, Senior Class Secretary . . . spent one vacation as a lifeguard at Santa Barbara, his home town.

Rodeo Day



Lawrence Fleming Drama Club, Press Club
 Wrote the music column for the *California Tech* each week . . . also interested in radio . . . wants to work as a technician in a radio station . . . Secretary of the Drama Club when a sophomore . . . stayed out of school two years . . . quiet, but witty . . . Ricketts House.

Holloway H. Frost
 Varsity Club
 An outfielder on the baseball team, has won his numerals and two varsity letters in that sport . . . member of the A.I.E.E. . . . an amateur radio bug in a big way . . . has a wall of his room covered with call cards . . . Ricketts House.

Charles F. Gates Honor Key, Beavers, TβII
 Varsity Club . . . As Head Yell Leader for two years, Gates has become known to all of Tech . . . also captained the cross country team this year in a successful season . . . Treasurer of Dabney . . . participant in numerous athletic activities.

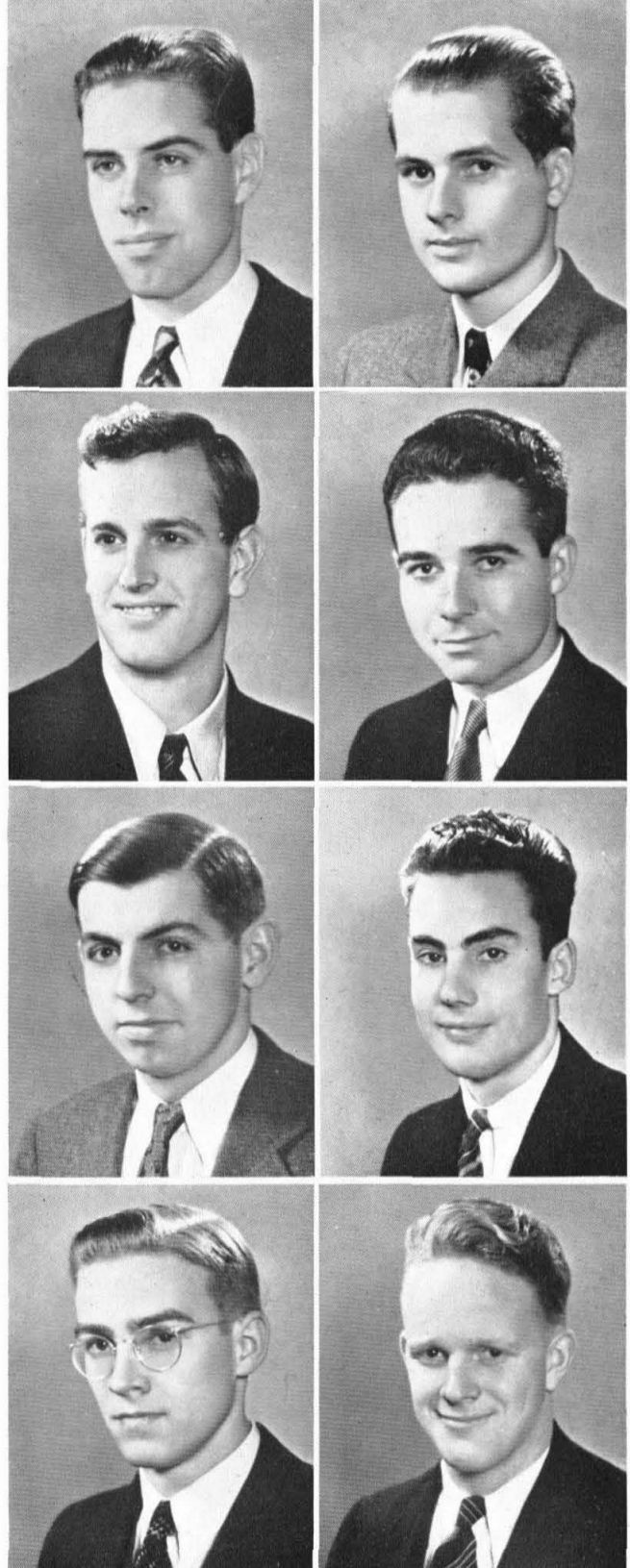
John W. George
 Comes from Santa Barbara . . . spent a year working in Colorado after his junior year here . . . roommate of John Van Fleet in Ricketts . . . election committee one year . . . known as a "one-nighter" due to his inability to attend movies several successive nights.

Daniel L. Gerlough Honor Key, Varsity Club
 Senior Baseball Manager . . . E.E. chairman for exhibit day . . . member of senior finance committee . . . A.I.E.E. member . . . a man who knows nearly everybody on the campus . . . always willing to do someone else a favor . . . comes from Palo Alto . . . Fleming House.

Richard R. Goodell
 One of two or three theoretical physicists who plans to continue in that field . . . intends to go to Berkeley next year for further study . . . counts Puente as home, but also spends much of his vacations near Porterville . . . Blacker House.

LeVan Griffis TβII
 The class's most successful credit-getter . . . really works for them . . . one of the top rank handball players, usually responsible for Dabney's victories . . . Recording Secretary of Tau Beta Pi and of the A.S.C.E. . . . Upperclass Committeeman and reformer.

Alan J. Grobecker Honor Key, TβII, Drama Club
 "Grobey" always shows up with a pleasant smile . . . amused all with his laugh in "The Taming of the Shrew" . . . Treasurer of the Senior class . . . reporter and news editor of the paper . . . took care of the general library at night . . . Blacker House.





Charles F. Hadley

The inventor and manufacturer of his own record-changer for a phonograph . . . a radio bug . . . Secretary-Treasurer of the A.I.E.E. . . . has played interhouse basketball and indoor baseball . . . entered as a sophomore from Redlands . . . Blacker House.

Honor Key, Beavers, TβII

Thomas S. Harper

Varsity Club . . . Caltech's star tennis player, this year's Captain, three times winner of the Scott Trophy . . . also a three-year Letterman in basketball . . . Cataloguer of Tau Beta Pi . . . known for his easygoing ways . . . interhouse sports for Dabney.

Russell E. Hayward

"Russ" wrote movie reviews for the *Tech* this year . . . won Frosh numerals in football . . . usually found in bridge and poker sessions . . . worked under the guiding system of Dr. Eagleson for a year or more . . . roommate of Boyd Hopkins in Blacker.

Honor Key, Drama Club Key

Boyd R. Hopkins

Press Club . . . Editor of the *California Tech*, known for his war on the athletic department . . . "Slime" . . . former *Tech* play reviewer . . . property manager for plays . . . Press Club Vice-President . . . Drama Club Secretary-Treasurer . . . expert time-waster.

Edward J. Horkey

Honor Key, TβII, Beavers

Varsity Club . . . "Eejay" is one of the men-about-Ricketts always at hand . . . member of the basketball team . . . hurdler on the track team . . . President of the Aero Club . . . the "La Canada kid" is a human person who knows the value of horseplay.

George H. Horne, Jr.

A chem engineer . . . has been a member of the Chem Club for his four years here . . . is its Secretary this year . . . a member of the Photo Club this year . . . often found about the Throop Club lounge at lunch hour playing bridge with friends.

Leon Horovitz

Press Club

Feature editor and book reviewer of the *California Tech* . . . member of the Anaxamandrian Society . . . wishes to extend his biology into the field of psychology . . . reads lots of books . . . frosh swimming numeral . . . exhibit day biology chairman and lecturer.

Carl B. Johnson

Like many others he comes to Tech from Hollywood . . . transferred here last year from another school . . . a civil engineer, he is active member of the American Society of Civil Engineers . . . gets good grades . . . interested in music.



Robert C. Jones

TβII, ΣΞ

President of the Glee Club, Librarian last year . . . handles the difficult job of Corresponding Secretary for Tau Beta Pi . . . a piano player of great ability . . . also leads the way in bridge playing . . . will continue Chemistry on a fellowship at Harvard . . . Dabney.

Vincent K. Jones, Jr.

"V. K." came to Tech two years ago after two years at the Colorado School of Mines . . . was a member of Beta Theta Pi there . . . has been very active in Blacker's affairs here . . . member of the A.S.C.E. . . . seen quite regularly with a certain young lady.

Dorr Kimball

Drama Club Key

Chairman of the Photo Club . . . very much interested in all sorts of photography . . . an expert photographer himself . . . works on lighting for dramatic productions . . . also a good make-up artist . . . member of the A.I.E.E. . . . Fleming House.

Drama Club

John C. Kinley

Social Committee Chairman of Blacker . . . has put on a good social program there . . . Chairman of the A.S.M.E. . . . helped promote the engineering societies' dance . . . active in Tech dramatics, reaching a high point in "Taming of the Shrew" lead.

Dalimil Kybal

"Dali" entered last year as a transfer and is carrying on the ambitious task of taking two majors, electrical and aeronautical engineering . . . comes from Prague and thrills his friends with many romantic stories of European customs and women . . . Blacker House.

Beavers, Varsity Club, Press Club

Carl E. Larson

Iron man on the football team with four years of competition . . . known for his aggressiveness . . . Athletic Manager and Secretary of the Throop Club . . . senior member of the Rally Committee . . . frosh debate . . . *Big T* and the *California Tech*.

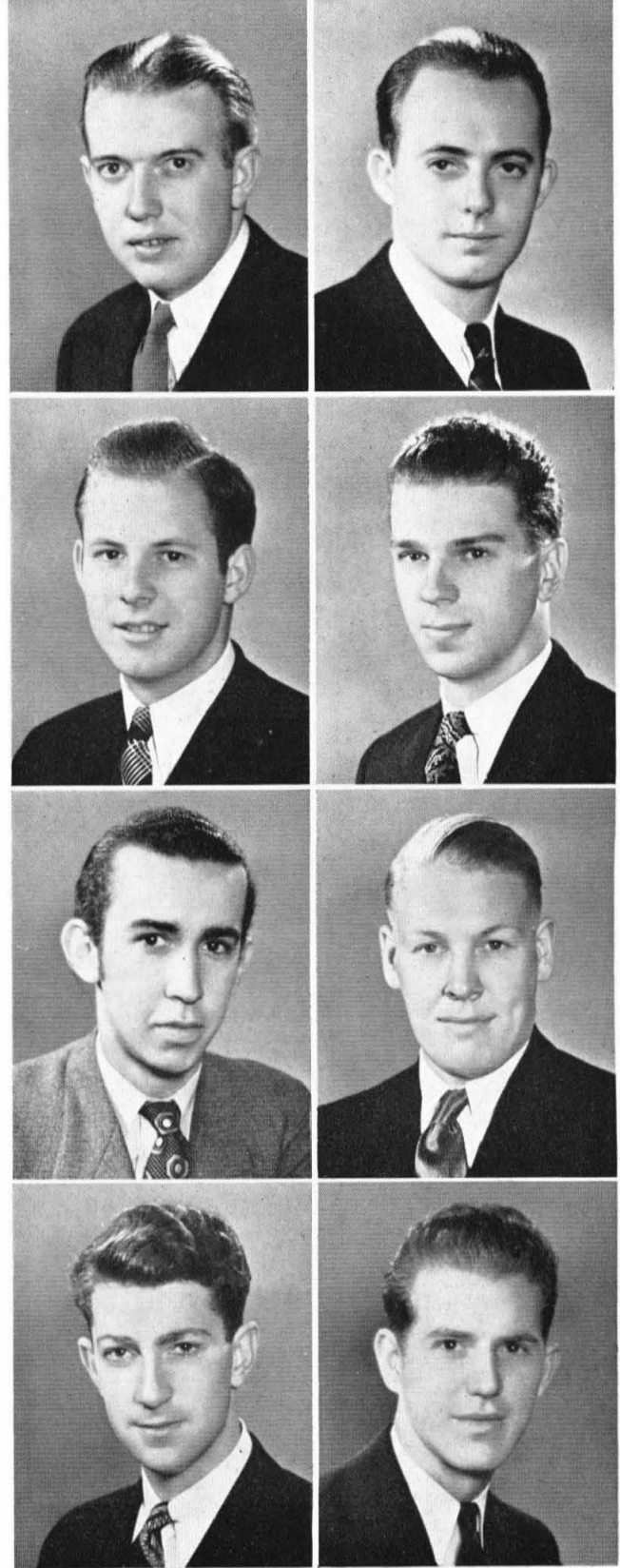
John A. Legge, Jr.

TβII, ΣΞ

One of the geophysics enthusiasts . . . has a fellowship to Arizona for next year . . . two years as track manager and one in cross country . . . played football for Dabney . . . also Upperclass Committeeman . . . in charge of geology exhibit day program.

J. Ridgley Leggett

Transferred to Tech last year from U.C.L.A. . . . lives in Los Angeles . . . is taking the electrical engineering course . . . always appears well-dressed . . . is a member of the American Institute of Electrical Engineers . . . Throop Club.



Football



Yuan-Chuen Li

Transferred to Tech last year as a junior . . . lived for a year in Blacker House . . . his home is extremely distant, as it is in Chengtu, China . . . he is studying aeronautical engineering.

ΣΞ, TβII

Robert B. Lockwood

One of the ambitious geophysicists who tackled Dr. Smythe's course . . . a high-ranking student . . . won his numerals in frosh basketball . . . active in Throop Club functions . . . often seen at dances . . . plays bridge for recreation.

Eustace A. Lycett

One of the Tech men who come from far away . . . his home town is Stoke-on-Trent, England . . . frosh numeral in cross country . . . member of the rugby team . . . reporter for the *California Tech*, also worked on the business staff . . . A.S.M.E. member . . . Fleming.

Ethan S. MacMichael

"Hammer" came here as that "big red-headed Texan" and the youngest member of the class . . . a super-colossal buller . . . has served as Social Chairman of Dabney House . . . also on the rugby team . . . an electrical engineer interested in radio.

Robert M. Mahoney

Two Honor Keys, Beavers, IIKΔ

Press Club . . . President of the Student Body . . . has stood out in everything he has entered . . . President of Pi Kappa Delta, the Press Club, the Newman Club . . . Conger Peace prize winner . . . Handbook Editor . . . Frosh Debate Coach . . . Board of Control . . . etc. . . . Ricketts House.

Honor Key, Beavers, Varsity Club

George E. Mann, Jr.

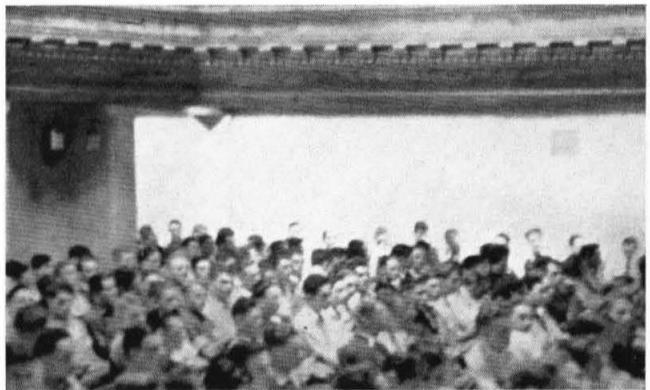
One of the mainstays in the line of the football team for the last two years . . . worked on the *California Tech* in the circulation department . . . member of the Aero Club . . . known among those who know him as a good sport . . . Fleming House.

Winthrop G. McSparran

Transferred to Tech last year from P.J.C. . . . lives in Pasadena . . . on the varsity track team . . . also played interhouse tennis for Fleming this year . . . a member of the American Society of Civil Engineers.

John L. Merriam

Transferred last year from San Bernardino J. C. . . . very active with the Y.M.C.A. . . . sponsored this year's peace day assembly . . . exhibit day Chairman in the humanities division for two years . . . Upperclass Committeeman in Ricketts . . . member of the A.S.C.E.



Monday Assembly

Harry H. Miller

Harry hails from Bend, Oregon . . . has been Social Chairman of Fleming House this year . . . put on a good social program for them . . . has also been Chairman of the Episcopalian Group on the campus . . . on the golf team when a Sophomore . . . a biologist.

Four Honor Keys, Beavers, ΠΚΔ

Varsity Club . . . outstanding from the first . . . only man ever to win four honor keys . . . President and one organizer of the Beavers . . . President of Frosh and Senior Classes . . . football, track, and debating teams . . . A.S.B. Representative-at-Large and Vice-President . . . Handbook Business Manager . . . Dabney House.

Charles Smyth Milliken

A member of the Caltech band . . . lives right here in Pasadena . . . worked around campus during the summer . . . is taking the course in electrical engineering. Quite interested in amateur radio.

Ernest Moncrief

Usually seen with Swain . . . comes from Orosi, California . . . is a member of the American Society of Mechanical Engineers . . . has participated in various house athletics for Ricketts . . . a quiet, easy-going fellow.

Walter L. Moore

TβII

President of the A.S.C.E. . . has led that group in an active year . . . member of the Glee Club . . . frosh numeral in cross country . . . also participates in handball, boxing, swimming . . . known for being pleasant and easy to get along with . . . Throop Club.

TβII, Varsity Club

Bruce F. Morgan

Bruce came to Tech after a year at Pomona . . . has been on the baseball team for three years . . . played regularly in the orchestra . . . worked at the Griffith Observatory a year . . . member of the A.I.E.E. . . spent time this year on research . . . Blacker House.

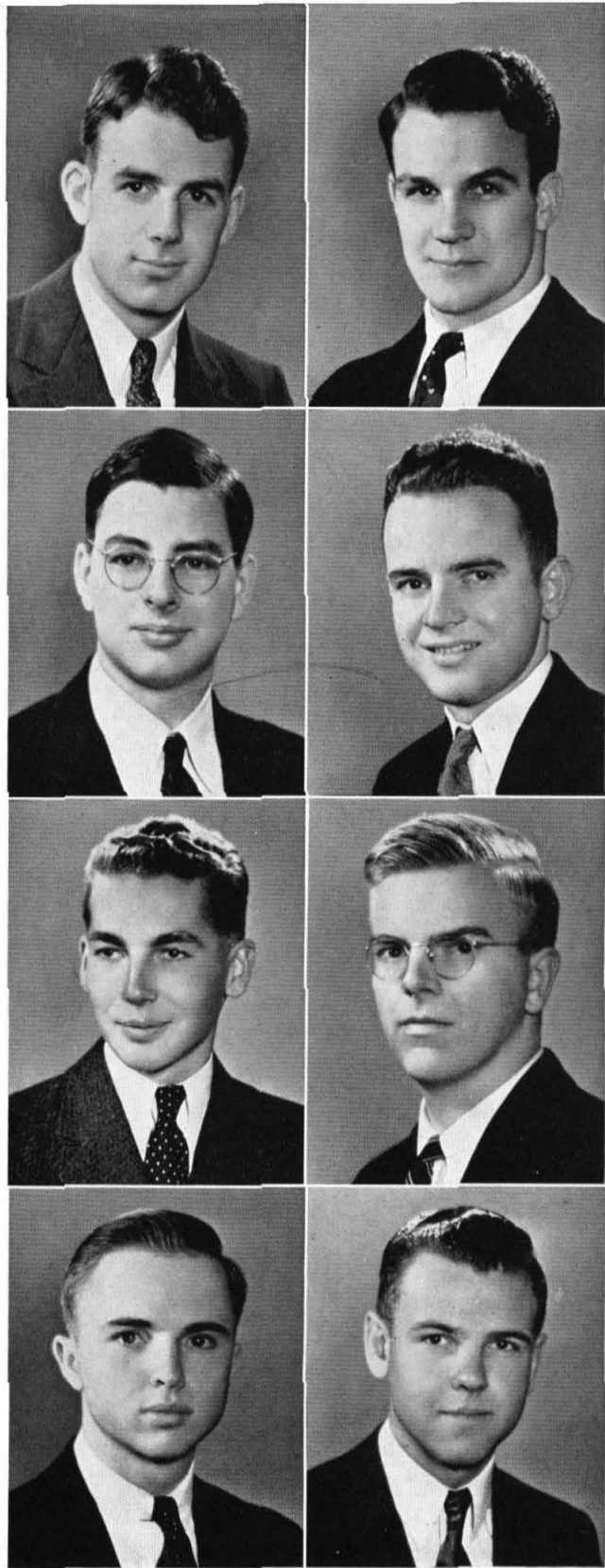
William F. Nash

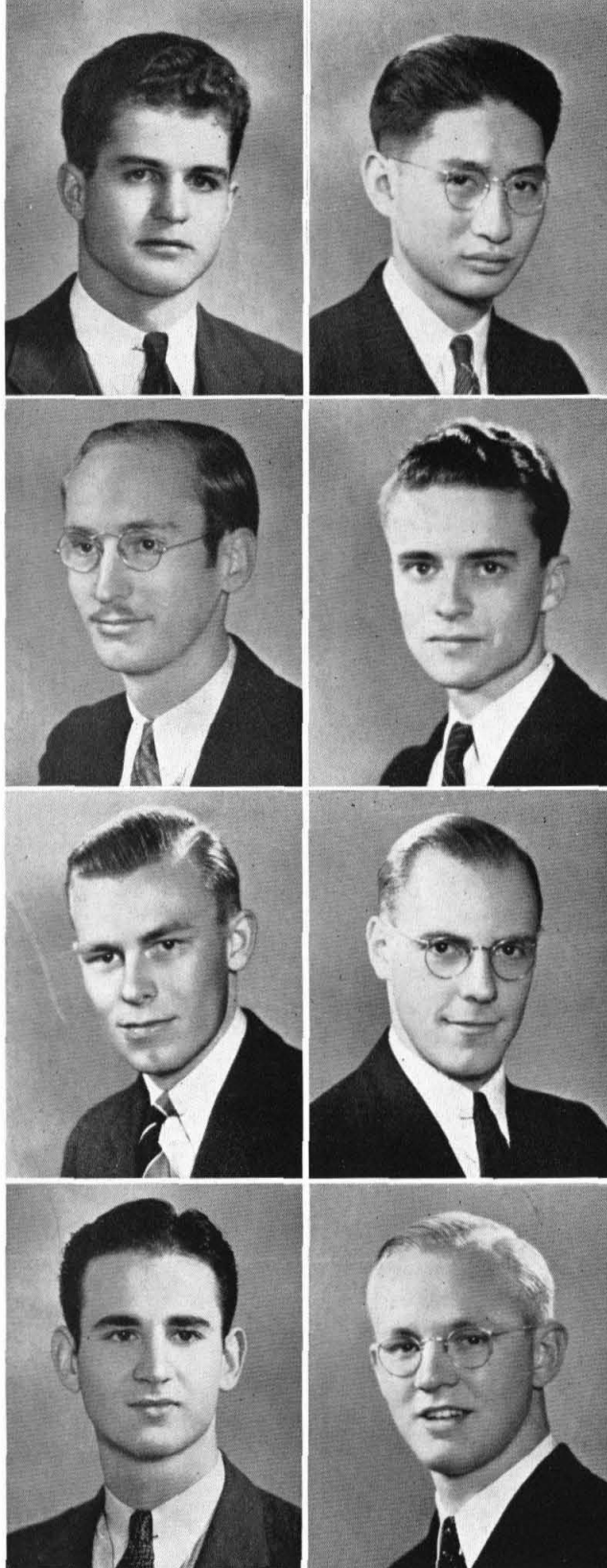
Transferred last year from San Diego State . . . served as Athletic Manager of Ricketts House . . . kept them right up in the running for the interhouse trophy . . . on the debate squad . . . plans to come back next year to finish his course.

TβW, Varsity Club

Donald C. Nellis

Active in athletic activities . . . two years of varsity cross country . . . also on the track team as hurdler . . . assistant chem department manager for exhibit day . . . has been awarded American Petroleum Institute Fellowship here next year . . . Throop Club.





Dean Nichols

Lives in Yellowstone Park . . . a member of the Anaxamandrian Society . . . formerly Chairman of the Episcopalian Group . . . also formerly Social Chairman of Ricketts . . . won numerals in frosh tennis . . . enjoys good entertainment . . . an individualist.

Noble Nojima

On the track team his first three years . . . used to run the distances . . . always showed pluck in the long race . . . member of the A.S.M.E. and the Aero Club . . . active in interhouse athletics . . . "Noji" has also been a member of a number of queer Ricketts clubs.

Claude B. Nolte

One of the Geology department's highlights . . . frequently seen about the campus with a mustache . . . just as frequently seen without a mustache . . . wrote for the *Tech* . . . guardian of the treasure room evenings . . . also interested in photography . . . Throop Club.

Richard E. Offeman

One of the class's many applied chemists . . . has stood well up in the class scholastically . . . comes to Tech from Hollywood . . . won a house letter in wrestling in one of the lightweights . . . has also participated in Fleming's famous inter-alley contests.

Noel L. Owen, Jr.

One of the bridge-builders of the civil engineering department at Tech . . . comes from Los Angeles . . . quiet, but friendly . . . often seen in the company of Stackhouse . . . member of the American Society of Civil Engineers.

Drama Club

Noel R. Park

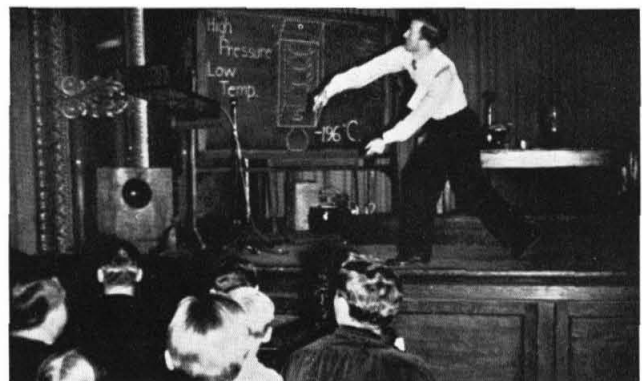
Has played parts in no less than six of the plays put on in the last four years . . . won frosh baseball numeral . . . plays baseball for Blacker . . . is interested in stamp collecting and chess . . . plans to continue his work in geology at Berkeley next year.

William L. Penn

Comes to Tech from an extremely long distance . . . lives in Manila in the Philippines . . . won frosh numerals in basketball and swimming . . . good at pitching horseshoes and at playing bridge . . . rooms with Belzer in Fleming . . . electrical engineer.

Joseph J. Peterson

Mexico's representative in the class . . . comes from Pachuca, Hgo. . . spends most of his spare time making repairs and alterations on his pride and joy, an old Cord car . . . Treasurer of the A.S.M.E. . . . interhouse football and wrestling for Fleming.



Martin J. Poggi

Honor Key, HKΔ
Always a good man for an argument, on any subject . . . frosh and varsity debate teams . . . President of the Band . . . active with the Y. M. C. A. . . . considerable work on various exhibit days . . . politician and campaign manager . . . Ricketts House.

Edwin J. Porter

A mechanical engineer . . . belongs to the A.S.M.E. and the Throop Club . . . lives in Whittier . . . frequently visits girls in a neighboring town with Clark Bower.

David Pressman

TβII, ΣΞ

A chemist with a vengeance . . . has his own chem lab at home . . . member of the Chem Club . . . its Second Vice-President last year . . . did research here one summer . . . organic lecture assistant this year . . . a tireless worker . . . plays handball.

Three Honor Keys, Beavers, TβII

Edward T. Price, Jr.

HKΔ, Press Club, Drama Club . . . President of Blacker House, formerly Vice-President and Secretary . . . Vice-President of Tau Beta Pi and Pi Kappa Delta . . . Editor of *Little "T"* . . . debating and extemp. . . Junior Class Secretary . . . *Tech* and *Big "T"* . . . frosh baseball numerals.

Fremont F. Radcliffe

Varsity Club

An industrial and industrious chemist . . . member of the Chem Club . . . Basketball Manager three years, Senior Manager this year . . . on the *Tech* staff when a freshman . . . a native of Morro Bay, California . . . always calm and collected . . . Throop Club.

Press Club

Frank A. Rechif

Known for voluminous articles and letters to the editor in the *Tech* . . . presented many new ideas . . . played in the orchestra . . . took part in exhibit day . . . member of A.I.E.E. . . . interested in collecting stamps . . . comes from Tucson, Arizona . . . Blacker House.

Richard L. Ridgway

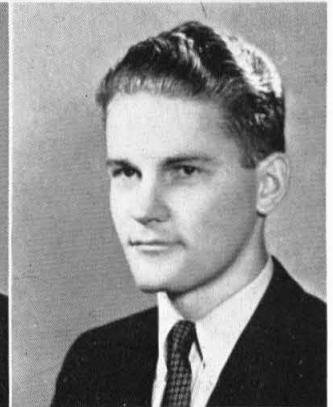
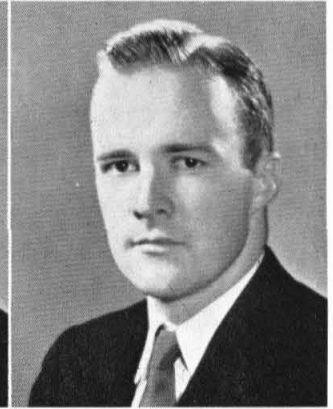
Two Honor Keys, Beavers, TKΔ

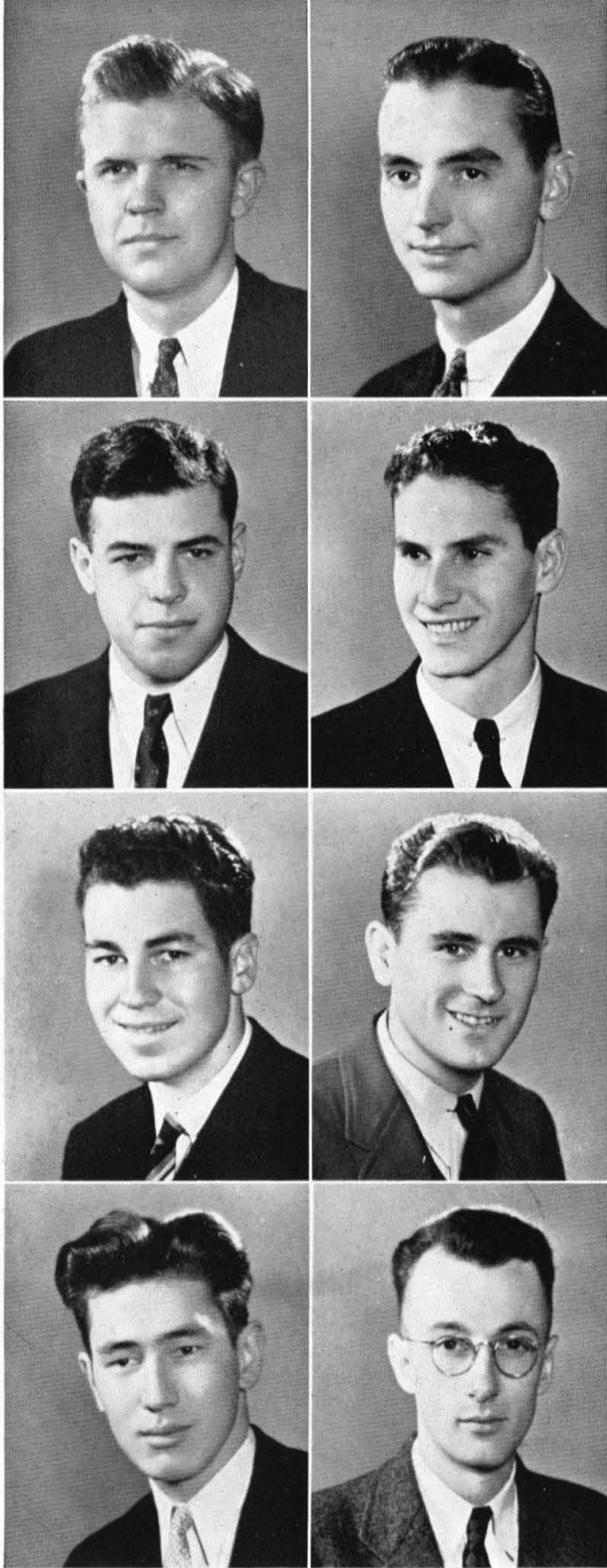
Varsity Club . . . President of Ricketts House . . . also spent two years as Treasurer of the house . . . a year of varsity debate . . . three years on the varsity baseball squad . . . two years on the Board of Control . . . Debate Manager . . . interested in sailing.

Drama Club Key

Douglas K. Rollow

"Doug" is the mainstay of *Tech* dramatic productions as far as the acting is concerned . . . has had the lead in several plays . . . Drama Club President . . . has been editor of the *Ricketts Rag* and on *Tech* staff . . . a member of *Tech's* famous band.





1 9

T. Robert Sandberg

TβII

Won his numerals in frosh baseball in the class of 1936 . . . stayed out his second year . . . active in interhouse athletics . . . interested in music . . . plans to work for Proctor & Gamble next year in his home town, Long Beach . . . Ricketts House.

Beavers, Drama Club

Paul C. Schaffner

President of Blacker House last year . . . has been known as the only living ex-President . . . one of the Walter Winchells of the *Tech* staff with his current social write-ups . . . portrayed beautiful flappers in some of the plays . . . plays the piano.

Leonard F. Schombel

Varsity Club

A lover of the great outdoors . . . two-year letterman in baseball . . . taking the course in geology . . . likes fishing and hiking and spends much time on them . . . plays tennis and poker a lot . . . likes to listen to Jack Benny.

Varsity Club

Daniel Schuman

Came here from San Diego . . . one of Tech's prides in athletics . . . four years star in basketball, famous for his long shots . . . one of the baseball team's pitchers . . . terrified opposing batters in inter-house indoor . . . probably Tech's best handball player . . . Dabney.

August V. Segelhorst

"Gus" came to Tech last year as a junior transfer . . . settled in Blacker House and quickly entered into its life . . . has been Vice-Chairman of the A.S.M.E. . . . also took care of exhibit day for the mechanical engineers . . . Blacker Upperclass Committeeman.

John P. Selberg

A real ladies' man and proud of it . . . has kept the rest of the school educated concerning women . . . member of the A.S.C.E. . . . has earned much of his own tuition with outside work about the campus . . . home town: Portland, Oregon . . . Blacker House.

Thomas N. Shaw

"Tom" came here three years ago as a transfer from the University of Hawaii . . . he is a native of Honolulu . . . his scholastic ranking has been at the very top . . . he also has done some research in his field of biology.

Charles W. Sheppard

A man who likes to argue with his teachers . . . asks obscure questions about P. Chem and philosophy . . . doesn't like Spengler . . . comes to Tech all the way from Coldwater, Ontario, Canada . . . an accomplished piano player . . . Throop Club.



Herbert R. Sheppard

Varsity Club
Has been out for baseball since he was a freshman . . . won letters in junior and senior years . . . member of the A.S.C.E. . . . always has his work done and receives good grades in return . . . something of a prankster.

Varsity Club

Harold L. Smith

Captain of the basketball team this year, a two-year letterman in that sport . . . Secretary of Dabney House for two years . . . one of the more socially polished Tech men . . . a civil engineer interested in flying . . . usually quiet except on Saturday night.

Joe M. Smith

TβII

Always seen wearing a broad smile about the campus . . . a member of the Chem Club . . . took some advanced work in chem engineering and landed a good job for next year . . . a left-handed member of the frosh tennis team.

TβII, Varsity Club

Wilbur Fisher Snelling

Captain of the Tech track team this year . . . member of last year's championship relay team . . . acted as freshman drawing instructor this year . . . has a fellowship in Aeronautics for next year . . . comes from Penryn, Calif. . . . Fleming House.

William V. Stackhouse

Comes from the nearby town of Arcadia . . . member of the American Society of Mechanical Engineers . . . studying aeronautical engineering here at Tech . . . member of the Aero Club . . . very much interested in flying and gliding . . . also likes swimming.

John Sullwold

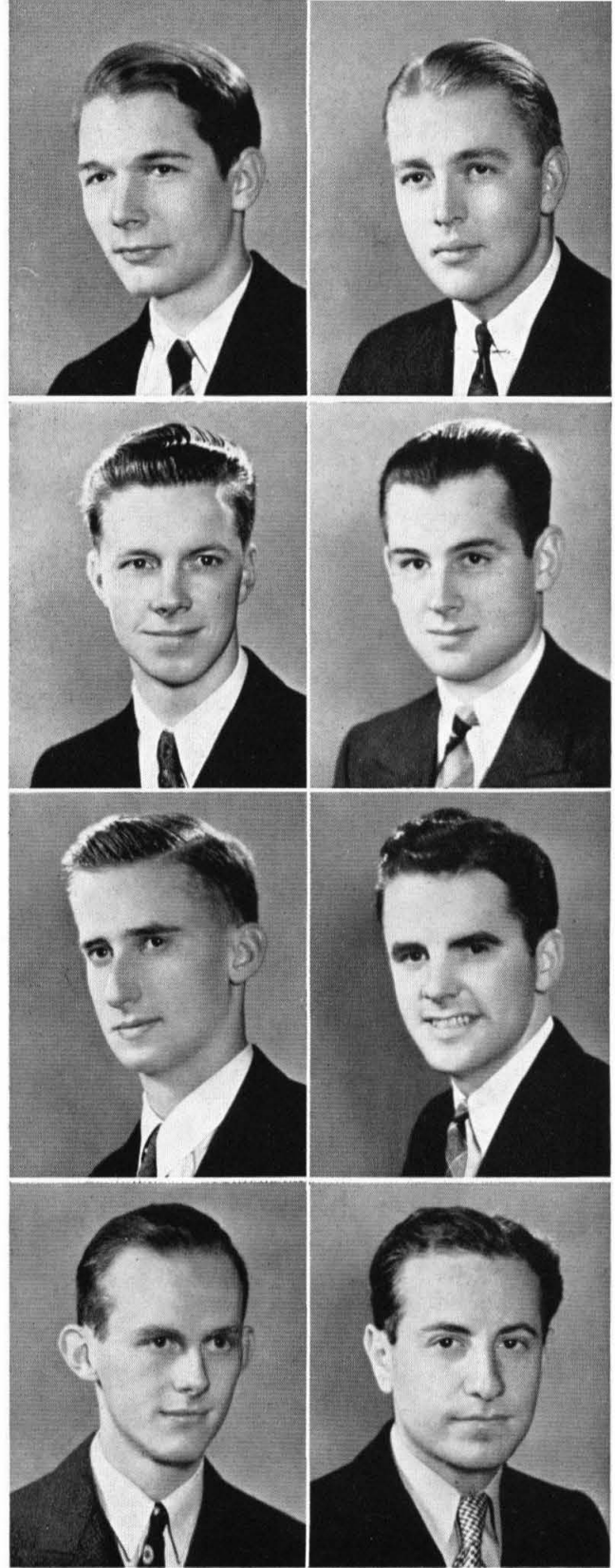
A three-year letterman in tennis . . . one of the mainstays in that sport . . . finishing a course in mechanical engineering after a time out of school following his third year . . . lives in Pacific Palisades . . . member of the A.S.M.E.

Donald S. Teague

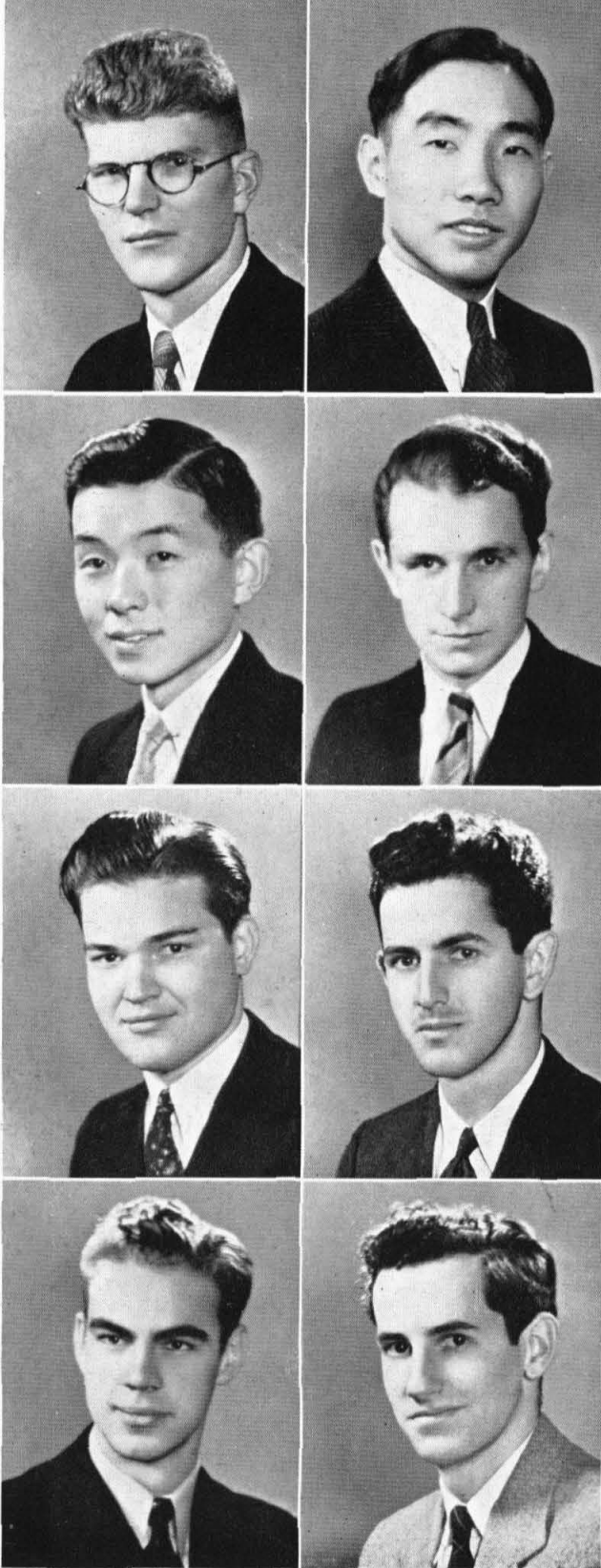
One of the many electrical engineers interested in amateur radio . . . a member of the A.I.E.E. . . . plans to return to Tech for more work next year in engineering . . . hails from the town of Santa Paula . . . usually seen in the company of Hal Frost . . . Dabney House.

Meyer Joseph Test

Entered last year as a transfer . . . comes from Kansas City . . . soon got into the spirit of Tech . . . has been studying theoretical physics but is not satisfied with this and plans to return next year and take up chemistry . . . Blacker House.



Garden Party



Robert D. Townsend, Jr. Varsity Club Senior Track Manager . . . two years on the varsity football squad . . . a year of varsity track . . . member of the A.S.M.E. . . last year changed from physics to mechanical engineering and plans to graduate . . . holds class record for credits in one term . . . Fleming.

Chi-Cheng Tsao Comes to Tech from the other side of the world . . . lives, when at home, in Yang Chow, Kiangsu, China . . . is studying aeronautical engineering . . . a member of the American Society of Mechanical Engineers.

George Yoshio Tsubota TβII An aeronautical engineer . . . member of the Aero Club and of the A.S.M.E. . . shows the way to most of us scholastically . . . often found around the Throop Club . . . likes to play tennis and ping pong . . . also good at bridge and poker . . . always smiling.

Vsevolod Tulagin Lives in Hollywood, California . . . a native of Russia . . . pursuing the course of chemistry . . . is an outstanding student . . . participated in debating his first two years . . . always appears with new and original ideas.

Jay Van Der Werff A mechanical engineer . . . lives in Pasadena . . . an active member of the Throop Club . . . a member of the American Society of Mechanical Engineers . . . active with the Y.M.C.A. here.

TβII, Varsity Club **Bernard Walley** Returned this year to complete his course after some time out of school . . . two-year letterman in basketball . . . member of the A.I.E.E. . . has done a lot of reading in his spare time . . . comes from Los Angeles . . . Fleming House.

Hugh F. Warner Drama Club Possessor of a well-rounded extra-curricular record . . . has acted in dramatic productions . . . member of the tennis team and frosh numeral winner . . . Aeronautics division exhibit day chairman . . . likes to swim and is a member of the Jiu-Jitsu class . . . Dabney.

Two Honor Keys, Beavers, ΠΚΔ **Martin H. Webster** Press Club, Drama Club . . . Publicity Manager of the Student Body . . . persuaded local newspapermen to print Tech news . . . Editor of this year's *Little "T"* . . . played title role in "Tom Thumb the Great" . . . varsity debate . . . *Tech* and *Big "T"* . . . Press Club Treasurer . . . Blacker House.



William O. Wetmore Honor Key, Beavers, Varsity Club
 Captain of the football team and two winning rugby teams . . .
 Athletic Manager of the Student Body . . . Vice-President of the
 Varsity Club . . . Such is "Willie's" contribution to Tech athletics
 . . . also Treasurer and Vice-President of Dabney.

Walter G. Wheeler
 Pursuing the course of mechanical engineering . . . member of the
 American Society of Mechanical Engineers . . . Track Manager for
 two years . . . said to be an excellent draughtsman . . . comes from
 Van Nuys, California.

Edward E. Wileman Varsity Club
 "Ebby" has been one of Tech's leading athletes in spite of his light
 weight . . . he won his numerals and two letters in football as a flashy
 back . . . injuries kept him from coming out this year . . . also vaults
 and broad jumps on the track team . . . Fleming House.

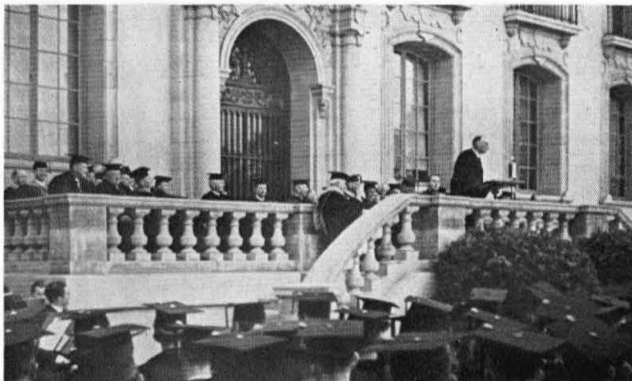
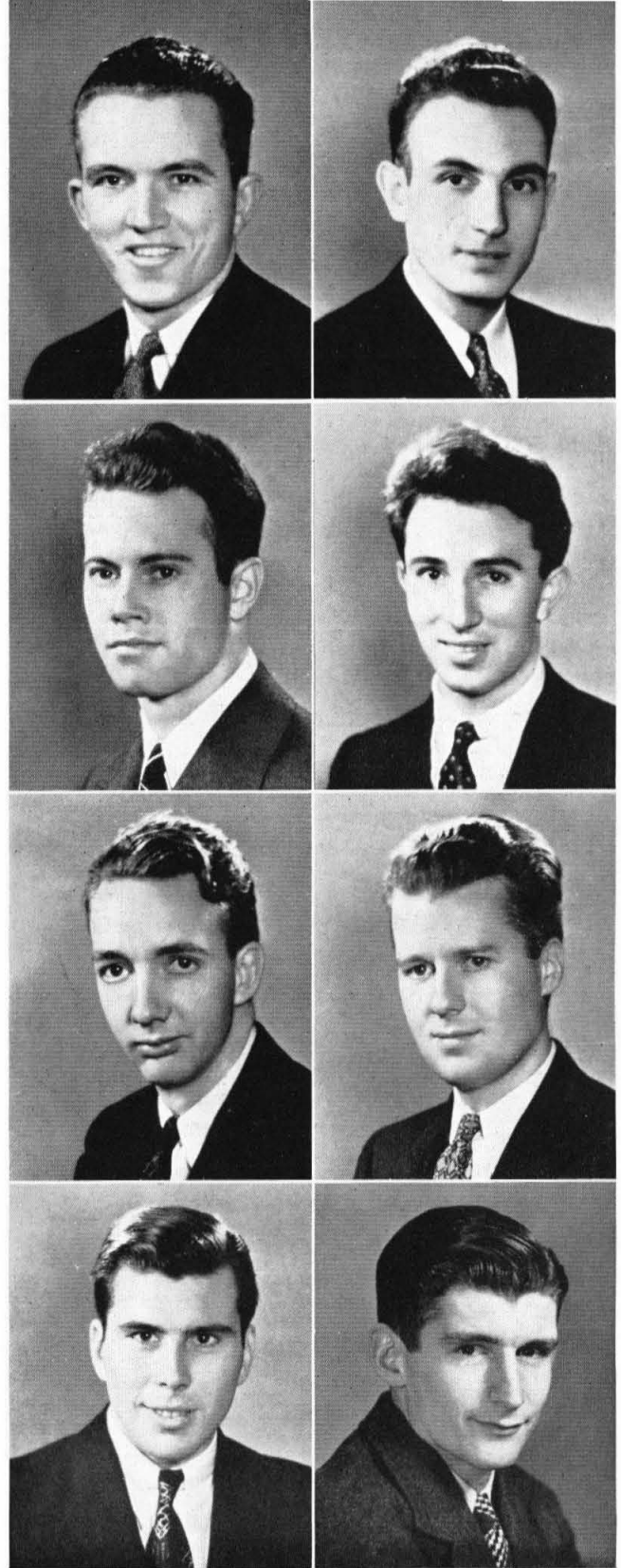
Charles C. Woolsey
 A transfer to this California Institute of Technology . . . taking
 applied chemistry . . . a member of the Chem Club . . . often play-
 ing bridge around the Throop Club lounge . . . is interested in
 photography.

Eldon E. Wright
 Eldon is pursuing the course at Tech which would be indicated by
 his first two initials . . . yes, it is electrical engineering . . . he is a
 member of the American Institute of Electrical Engineers . . .
 Pasadena is his home town.

W. Gordon Wylie
 Lives in Whittier, but comes to Tech to study aeronautical engi-
 neering . . . member of the American Society of Mechanical
 Engineers . . . interested in flying and photography . . . washes
 bottles in Kerckhoff for outside work.

William D. Yale
 Vice-President of the Chem Club . . . winner of a La Verne Noyes
 scholarship . . . has participated in many interhouse sports . . . is
 interested in racing pigeons . . . comes from Burbank . . . often
 found playing bridge in the Throop lounge.

Honor Key, Beavers, Varsity Club **Albert H. Zimmerman**
 President of the Varsity Club, formerly Secretary . . . has done much
 to promote athletics at Tech . . . three letters in football and frosh
 numerals in football and track . . . worked exhibit day lighting last
 year . . . fond of bowling, bridge, beer, bulling' . . . Fleming House.



(Continued from Page 32)

At the beginning of the Sophomore year Richard Rosencranz was selected to head the group; Ralph Benton was chosen Vice-President; Walton Wickett, Secretary, and Victor Zezukevitch, Treasurer. The class won the Rodeo from the Freshmen after a hard fight in the steam tunnels for an afternoon. The Sophomore Student Body Dance was put on at the Annandale Country Club and was a big success. The members of the class began the very active part they have played in campus activities of all lines. Over half the football lettermen that year were Sophomores. The class assembly put on by Walton Wickett during the third term was one of the best in history and won the \$10 prize for the best assembly.

For the Junior year Paul Edwards was elected President, but left for Stanford and was succeeded by Harold Sharp; Vice-President was Richard Rosencranz; Secretary, Edward Price; Treasurer, Victor Zezukevitch, and later Warren Fenzi. Another successful year was enjoyed with the usual activities.

Senior class officers were Wendell Miller, President; Ebby Wileman, Vice-President; Warren Fenzi, Secretary; Alan Grobecker, Treasurer. The Seniors, headed by the officers, have been very active this year. Numerous committees were appointed to take care of the many little matters that confront the graduating men.

The two big parties, the Prom and the Garden Party, were very well planned and quite successful. The Seniors showed their superiority and had a last good time together on their annual ditch day. A new and better class day has been planned which includes a lunch and a tour of the campus, a tea, and the traditional baseball game with the faculty. When this book comes out the Tech days of the class of 1937 will be almost over and only memories will remain.



Lunch Hour—*Martin*

LOWER CLASSES



This **Junior Class**, as many another, had as its first duty the management of the Frosh-Soph Rodeo which was expanded from a mere pushball contest to a field day of four events, a tug of war, a pushball contest, a cane spree, and a tire race. The results were amusing and successful.

The administration of the class was very efficient, and all the dues were collected. The class rings were bought this year instead of waiting until the Senior year as has been done before. The social committees of the class played their full part in arranging and planning the Junior-Senior Prom and Garden Party. Both affairs were very carefully planned and were acclaimed successes.

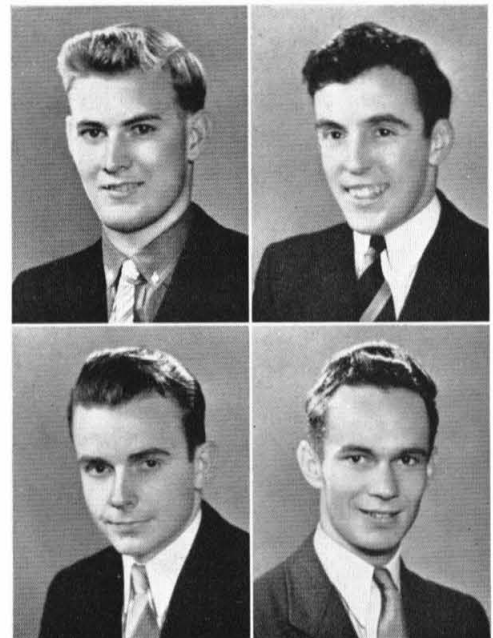
The class set a new record politically by electing eight men to the Board of Directors.

An assembly was put on one Friday morning during the third term which displayed some of the members' many talents. On the program were some magic tricks by Dick Allen, piano-playing by Hank Evans, a trumpet quartet, and some of the inimitable humor of Wolfberg and Davidson in an original pantomime.

Back row: Brenner, Piro, Parker, Moore, Downing, Custer, Lentz, Sinclair, Folkins, Manley, Carlson, Van Fleet, Boller, Hudson, Kelly, Thomas, Lilly, Rowell; **fifth row:** Forward, Graybeal, Frisius, Wald, Beavon, Wood, Mason, McGraw, Van Horn, Rudkin, Scully, Saurenman, Lavender, Velazquez; **fourth row:** Brown, Bauer, Voorhees, Sidler, Twiss, Tilker, Grainger, Nagamatsu, Page, R. Jones, Clarke, Goff, Johnson; **third row:** Keller, Blake, Windsor, Watson, Nash, Sherwood, Gregory, Levin, Carr, Wilkinson, Balsley, Rynearson; **second row:** Ivanoff, Allen, Weinberger, Evvard, Barry, Friend, Siechert, Harris, Wilson, C. Smith, Hulbirt; **first row:** Jewett, Baker, Althouse, D. Davidson, Farneman, Browne, Dixon, Luckenbill, Wolfberg, Osborn.

Donald Davidson
President
Charles Clarke
Secretary

William Ropp
Vice-President
Bruce Elliott
Treasurer





Back row: G. Brown, Gassaway, Bradshaw, Younger, Bragg, Degnan, Hagen, C. Anderson, White, P. Smith, Thomas, Gerhart, Levet, Osborn; **fifth row:** Springer, P. Brown, Nicholson, Parker, Cooper, Berg, Morikawa, Oakley, Paul, Snyder, N. Anderson, Carter, Hoff, Moran; **fourth row:** Gombotz, Asakawa, Bowers, Kyte, McKinlay, Sullivan, Kimball, Winchell, Carstarphen, Ohlsson, Richards, Flint; **third row:** M. Mills, James, Devirian, Rothman, Veenhuyzen, Hiatt, Craft, Caldwell, Reppert, Hance, Davis, Beck, Guillou; **second row:** Regan, Strong, House, Rainwater, W. Brown, Lonfelder, Umeda, Hoiles, Lawson, Hall; **front row:** Matthew, Braithwaite, Black, McClung, Clark, Schneider, Zukerman, Tangren, Root, Pettingall.

The **Sophomore Class**, under the capable leadership of Robert White, has made its place on the Caltech campus this year. The members of the class have participated in all phases of student activity: sports, music, forensics, and journalism.

The first big event for the class was the Rodeo which, as usual, the Sophomores won. The Freshman defeat was attributable to the surprising organization of the Sophomores. As a result of the victory, the Sophomores were entertained by the Freshmen at the annual Rodeo dance held in Dabney lounge.

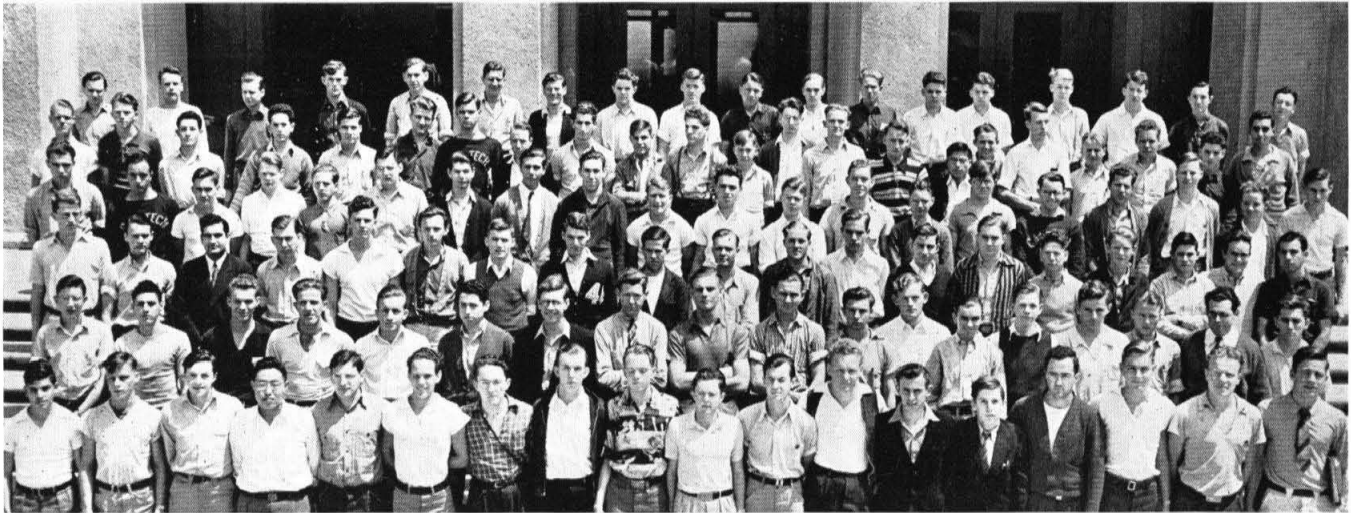
One of the year's outstanding social events was the semi-formal dance given by the Sophomores for the student body. The attending couples enjoyed the pleasant atmosphere of the Oakmont Country Club and the music of Herb Adkins' Orchestra. The success of the dance was largely due to the efforts of William Frampton.

The assembly put on by the Sophomore Class during the third term took the form of a shadow play, which appealed to those members of the student body with low and distorted senses of humor.

Robert White
President
William Frampton
Secretary

Carl Paul
Vice-President
Neal Thomas
Treasurer





The **Freshman Class**, after some frantic days of registering and taking physical examinations late in September, embarked for a three-day orientation and "get-acquainted" camp in the San Bernardino mountains. Thus prepared, the neophytes, erstwhile "Roaring Forties," returned to Pasadena to start on the first lap of a four-year grind of studying and illusion-losing.

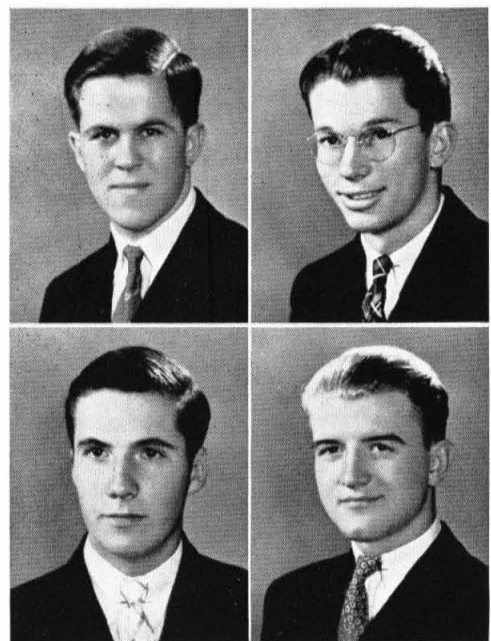
The first catastrophe took place at the end of the first month when the Sophomores easily won the traditional Rodeo from the younger men handicapped by many forced absences. A turning of the tables is planned by the class for this event next year.

The Freshman class, however, regained its honor at the end of Christmas vacation by putting on a very enjoyable dance for the student body at the Pasadena Civic Auditorium. Sports have been very well supported by the class, and the frequent excursions to the Physics pond as well as section beach trips indicate that the class of 1940 will be able to hold up its end of the game in the future.

Back row: Spalding, Harper, Cutler, Biddison, Mackay, Vetter, Marriott, D. Staatz, Partch, Sweningson, Scarborough, Billheimer, D. Whittlesey, J. Whittlesey, Day, France, Merryfield, Weaver; **fifth row:** Spielberger, Longwell, Davis, Levitt, White, Foster, Hayes, Wayman, Green, Thiele, Stein, Lolmaugh, Gillings, Loeffler, Harlan, Nakada, Sattler, Harris, Oldson, Meyer, Stevens, Kohl; **fourth row:** Hines, Manildi, Mayer, Varnes, Abbey, Hardenbergh, Beller, Hankey, Barber, Wilbur, Nicholson, Alcock, Payne, Kluge, M. Staatz, Baker, Daams, Brose, Tuttle, Adams; **third row:** Widenmann, Connell, Wood, Keyser, Larson, Skaling, Campbell, Grigg, C. Palmer, Olson, Maleev, Steinmetz, Cannon, Lynn, Cleveland, Wald, A. Brewer, Van Dyke, Held; **second row:** Sandiford, Maker, Kemp, Hofmann, Christensen, R. Walker, Anderson, Sullivan, Oakes, Skalecky, Palmer, Thompson, Weir, Watkins, Oder, German, Love, Nagle; **front row:** Fleming, Deniston, L. Brewer, Tomiyasu, Dickerson, Crane, Russell, Daly, Kupfer, Mickle, Reynolds, D. Walter, Tielrooy, Ellis, Stone, Brunner, Carey, Brumfield.

Charles Palmer
President
Jack White
Secretary

Frank Bergmann
Vice-President
Gerald Foster
Treasurer



Caltech's Metamorphosis

"The Trustees of this Institution at their annual meeting on February 10, 1920, by unanimous vote changed the name 'Throop College of Technology' to 'The California Institute of Technology,' and the name of Pasadena Hall to Throop Hall.

"The Trustees felt impelled to change the name of the institution in order to denote and signalize its altered scope, recent developments having transformed it from a college of primarily local significance into a scientific school of national importance.

"On September 10, 1920, after twelve years of energetic and effective service, Dr.

James A. B. Scherer resigned the presidency of the Institute because of ill health. The Board of Trustees immediately entered into negotiations with Dr. Robert A. Millikan to come to the Institute on a full-time basis, and on August 1, 1921, they were able to announce his appointment as director of the Norman Bridge Laboratory of Physics and Chairman of the Executive Council of the Institute."

Thus with its greater scope defined, its potentialities backed by comparable endowment, and headed by an executive-scientist, the California Institute moved into its third phase of development.

ORGANIZATIONS



A.D. 1915

Merriam

OLD DORMITORY (1915)

"The College has provided on the campus a modern dormitory, of California bungalow type, two stories in height, with large, airy, and well-lighted rooms for about sixty students—several of the rooms having sleeping porches—and with attractive dining-room, living-room, and recreation rooms."—BULLETIN OF THE THROOP COLLEGE OF TECHNOLOGY, January, 1916.



"Snake Dance"—*Martin*

HONORARIES



Ashkenas
Carrick
Ellis
Griffis
Horkey

Balsley
Dowd
Gates
Grobecker
Jones

Cardwell
Edwards
Graybeal
Harper
Kazan

The California **Beta Chapter** of the honorary engineering fraternity, Tau Beta Pi, is one of three in California and seventy in the United States. The membership is made up of those men who are in the upper one-eighth of the Junior Class or the upper one-fourth of the Senior Class, and who are considered to have had many and varying outside interests and activities. This outstanding fraternity strives to obtain balanced men, and not those who have only recommendations of high scholarship. With a total membership of almost 30,000, the Tau Beta Pi plays a very important role in the social and business lives of engineers all over the country.

Each year the California Beta Chapter puts on three important social functions. They are two initiation banquets and a formal prom which usually comes in the early spring. This year, eleven men were initiated before the first banquet in December, and ten were instated during the spring initiations. Both banquets took place in the Athenæum following the formal initiation in Culbertson Hall. At the first banquet, Mr. Hines of the Metropolitan Water District spoke on the "Acqueduct," and at the second, General Beach, former Chief of Engineers, U. S. Army, discussed the "Mississippi and Ohio Flood Situation." A very interesting feature of each banquet was a short twenty-minute playlet put on by the new members. These skits provided much entertainment even if they

The student body **Honor Keys** are given in recognition of distinguished and valuable service rendered to the school; and their bestowal is the highest tribute a Tech man can receive from the student body. This year, as the culmination of a growing tendency toward participation in activities, a new record number of keys was awarded.

For the first time, a man received his fourth Honor Key—Wendell Miller completed his active four years and was so honored this year. Edward Price won his third consecutive key; and Robert Mahoney, Richard Ridgway, Martin Webster and

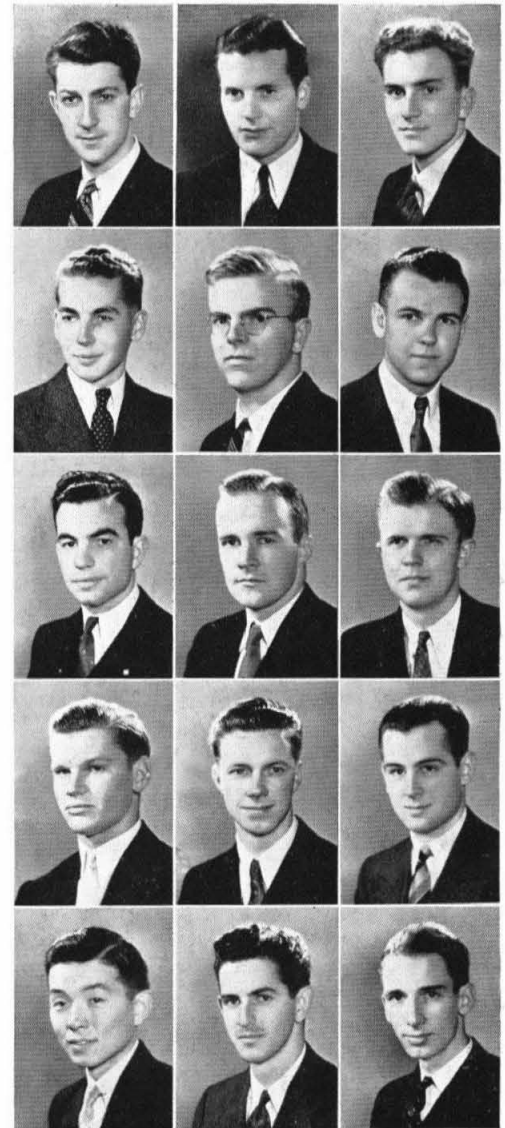
were booed. The **Tau Beta Pi** formal dance this year was declared, by all who attended, the outstanding event of the season. Soft lights, sweet music, and palms were the order of the evening. The music was provided by Bob Mohr's orchestra.

The Advisory Board of the chapter consists of four members of the faculty whose duty it is to settle certain questions which always arise, and act as contacts between the students of the chapter and the faculty. The board for this year consisted of Professor Franklin Thomas, Chairman, and Professors S. Stuart Mackeown, Carl Anderson and Frederic Hinrichs. The officers of the chapter were: Munson Dowd, President; Edward Price, Vice-President; Robert C. Jones, Corresponding Secretary; LeVan Griffis, Recording Secretary; John S. Edwards, Treasurer; and Thomas Harper, Cataloger. Those for next year are: James Balsley, President; Harrison Lavender, Vice-President; David Sherwood, Corresponding Secretary; Orin Graybeal, Recording Secretary; William Cardwell, Treasurer; and Herbert Ellis, Cataloger.

A very active period is expected next year, beginning with the fall initiation when some Seniors and not more than three Juniors will be admitted to the organization.

Other members of the chapter whose pictures do not appear on these pages are Lavender and Wood.

John McLean earned **Honor Keys** for a second time. Others who won keys are Irving Ashkenas, Elliot Bonham, Gordon Bussard, Thomas Davis, Charles Gates, Daniel Gerlough, Alan Grobecker, Thomas Harper, Edward Horkey, Boyd Hopkins, George Mann, William Wetmore, Albert Zimmerman, Richard Allen, John Baker, James Balsley, Bruce Elliott, Herbert Ellis, Lowell Hulbirt, Frank Jewett, Evan Johnson, David Luckenbill, Alton Pabst, William Ropp, Richard Rowell, Paul Siechert, Roland Stone, Bob Thomas, Stan Wolfberg, Delos Flint, Duane Beck, Jack Osborn, Ray Richards and Neal Thomas.



Legge
Moore
Pressman
Sherwood
Tsubota

Lentz
Morgan
Price
Smith
Walley

Lockwood
Nellis
Sandberg
Snelling
Wimpress



Back row: Rowell, Van Fleet, Baker, Schaffner, McLean, Horkey, Brown, Page, Barry, Johnson, Davis, Wolfberg, Wetmore, Sharp, Stone, Webster; **second row:** Lawson, Sullivan, Harper, Elliott, Edwards, Evans, Ridgway, W. Miller, Pabst, Bussard, Zimmerman, Balsley, Jewett, Beck, Osborn, Flint; **front row:** Althouse, Fenzi, C. Miller, Mahoney, Engelder, Ropp, Allen, Price, Smith, Dowd, Gates, Luckenbill; **not pictured:** K. Anderson, Austen, D. Davidson, Elconin, H. Ellis, Goodmanson, Kemp, C. Larson, Lavender, Llewellyn, M. Mills, Nash, C. Palmer, C. Paul, Richards, R. Thomas, J. White, R. White, Wilson.

Caltech's **Beavers**, an honorary service organization, has completed its second successful year on the campus. Although it does not publicize its actions, the Beaver Club is a group of fifty men active and interested in doing all within its power for the good of the Caltech student body.

Those who attended any football or basketball games may have noticed that the Engineers' attendance was always high. This in large part was due to the Beavers, who made posters, supported Student Assembly rallies, and personally promoted interest in athletics. The big activity of the year was the Oxy bonfire-pajamarino, arranged in conjunction with the rally committee. This event consisted of a barbecue in Tournament Park, rally at the bonfire with songs and yells, pajama parade through

Pasadena, and a free show. The idea was very popular and will be continued.

The officers were: Wendell Miller, President; Al Pabst, Vice-President; and Dick Ridgway, Secretary-Treasurer. They have endeavored to build the Beavers into an organization that can really give the student body some material returns in the way of an increased school spirit. Promoting friendly relations with other colleges, and seeing to it that all possible courtesies are extended to visitors are still other functions of the club.

Building the Pyre





Back row: Wolfberg, Harper, Jewett, Zimmerman, Keller, Ellery, Wallace, Frost, Snelling, Downing, Schuman, H. Smith; **second row:** Balsley, Hudbirt, Wetmore, Sharp, Miller, Bussard, Brown, Dorwart, Wilson, Dowd; **front row:** Engelder, Rowell, Austin, C. Smith, Baker, Wileman, Horkey, Mann, Benton; **not pictured:** Griffiths, Griswold, Larson, McLean, Nellis, Osborn, Rosencranz, Rudkin, Rynearson, Swain, Townsend, Van Horn, Voorhees.

The year 1936-1937 will always stand out as one of the most influential periods in the annals of the Varsity Club. Seventeen years ago, this was probably the most important organization on the campus. Its functions included handling all Tech pins, belt buckles and other jewelry, awarding letters and sweaters, and determining the school's athletic policy. Since time has placed all this in other hands, this year found the group investigating the reason for its existence. As a result, a new constitution was adopted which presents

the **Varsity Club** answer to its own questionings—the aim set forth in that document is to form a closely knit group which offers to men of athletic ability and interest an opportunity to meet socially, and which pledges itself to further athletics at Tech by arousing general student interest.

The highlight of the year was the annual snow trip. This trip served not only as an outing but as an ideal opportunity to initiate the new members. In the spring, athletic events such as boxing and wrestling were attended *en masse* frequently. From all appearances, the Varsity Club is regaining much of its former importance.

The officers for the year were: Albert Zimmerman, President; William Wetmore, Vice-President; and Jack Baker, Secretary-Treasurer.

Between Halves





Allen
Bonham
Fleming



Grobecker
Hopkins
Jones



Kimball
Kinley
Lavatelli



Miller
Page
Park



Price
Richards
Rollow



Schaffner
F. Smith
P. Smith



Webster

Set by the **Drama Club** as its chief purpose is the annual production of the spring play. This year, directors Harvey Eagleson and Roger Stanton selected "Doctor Faustus"—the most difficult and entertaining play yet attempted at Caltech. The production was splendidly done and well received at each of the four performances.

Proceeds from the annual play are used to increase the quantity and quality of equipment available for productions in the future. This year, the money from "Doctor Faustus" helped pay for a commercial type of dimmer for house lights which the members of the club had constructed.

Membership in the Drama Club is extended only to men on the campus who have distinguished themselves in some form of dramatic activity. Actors, stage-hands and electricians comprise the bulk of its number. Drs. Eagleson and Stanton are active members; and Professor and Mrs. Graham Laing hold honorary memberships.

Abandoning a long established precedent, the Drama Club plans to forego its annual banquet in order to attend some commercial theatre. Following the play, honorary keys will be presented to a select few; new officers will be elected; and possible new members will be considered.

Those who led the group in official capacities during the year were: Douglas Rollow, President; Jack Kinley, Vice-President; and Boyd R. Hopkins, Secretary-Treasurer.



"Doctor Faustus"

Taken into **Press Club** membership are those men who have distinguished themselves in the field of journalism. Due to the limited number of members, twenty, the group has been able to maintain its reputation as one of the outstanding honorary organizations on the campus. Members are chosen from the staffs of the *California Tech*, the *Big T*, and the *Handbook*.

The second term of every year sees the traditional "Hot Rivet" edition of the *Tech* breaking over the campus like a storm. This year, the sheet was a burlesque of a popular current topics magazine. "Slime" carried the customary infamous articles in an easily recognizable new style; and received even greater plaudits than have past Press Club editions.

The usual two pledge weeks were held, during each of which the neophytes wore visors, pencils and a large red replica of the Press Club key, and were forced to pay dues in half-dollars minted in successive years.

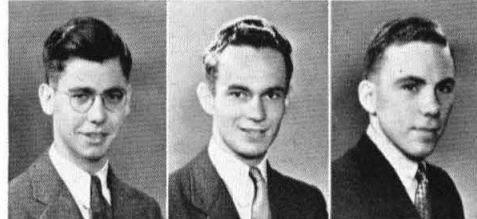
Following the second initiation, the annual "binge" featured such Main Street spots as the Burbank, King Edward's Cellar, the Paradise and a thoroughly respectable chop suey joint.

Officiating during the past year were: Richard Rosencranz, President, succeeded by Robert Mahoney; Boyd Hopkins, Vice-President, after Mahoney was advanced; Thomas V Davis, Secretary; and Martin Webster, Treasurer.

Anderson
Beck
Davidson



Davis
Elliott
Farnham



Fleming
Hopkins
Horovitz



Larson
Luckenbill
Mahoney



McClung
Price
Rechif



Siechert
Smith
Van Fleet



Webster



So-called "Hot Rivet"

Each year, **Pi Kappa Delta** admits to its membership a select group of men participating in forensics. The local branch is the California Gamma Chapter, and has honorary members in Dr. Stanton, Dr. Eagleson, Dr. Untereiner, and Dean Macarthur, former National President.

Annually, in the Fall term, Pi Kappa Delta sponsors a classical play. This year the play presented, "The Persian," by Plautus, was an outstanding success. The proceeds will be used next year to send delegates to the twelfth biennial convention of Pi Kappa Delta.

New members, selected in the middle of the third term, were subjected to a rigorous initiation week. Each pledge wore a red carnation as well as a pledge pin, made a ten-minute soap box oration in the Los Angeles Plaza before at least fifty people, and carefully kept a notebook in which his sins against the chapter and its members were recorded. A formal induction ceremony concluded the week.

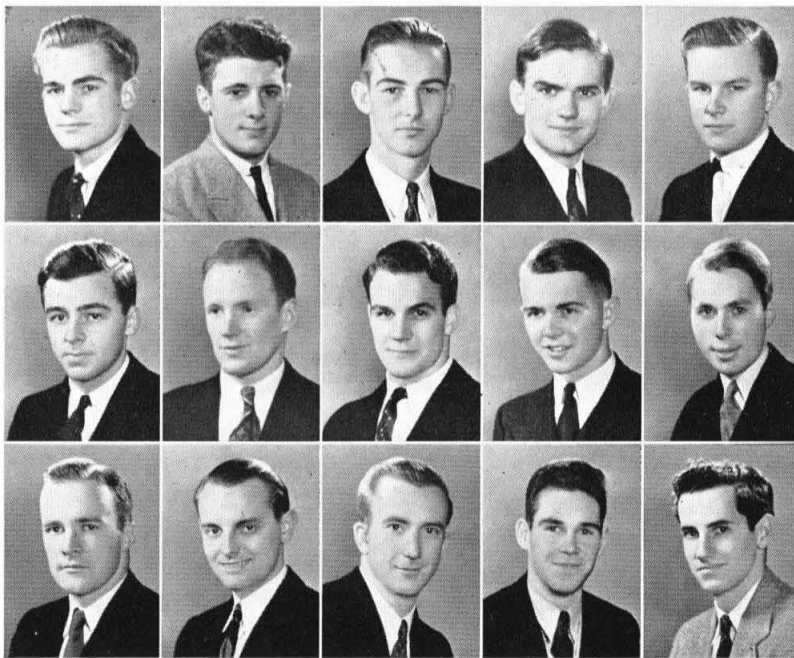
Allen
Mahoney
Price

Balsley
McLean
Ridgway

Beavon
Miller
Stone

Flint
Osborn
Thomas

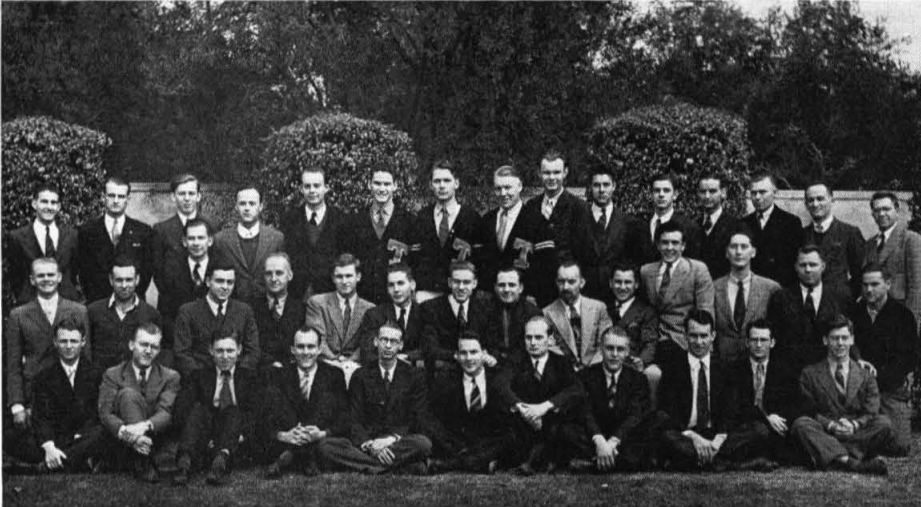
Johnson
Poggi
Webster





Across the Soil Erosion Yard—*Martin*

PROFESSIONALS and OTHERS



Back row: Johnson, Milburn, Alwart, Carrick, V. Jones, Schuman, Sheppard, Larson, Folkins, Jensen, Tilker, Schaffner, Owen, Bailey, Wagner; **second row:** Erickson, Lowe, Merriam, Mahoney, Michael, Fenzi, Moore, Griffis, Dorwart, Martel, Selberg, Ropp, Boothe, Walseth, Frisius; **front row:** Harker, Carlson, W. Jones, Auger, McSparran, Dowd, Ellison, Smith, Van Fleet, Buxton, Davis; **not pictured:** Carroll, Goodwin, Keller, Lipson, Minasian, Osborn, Servet.

The local **A.S.C.E.** Student Chapter was given an excellent start on its year's program at the first meeting, when Professor W. W. Michael outlined the benefits of the society. The subsequent work of the membership committee netted a record enlistment of forty-four members, or ninety per cent of the number eligible.

During the year, Mr. A. W. Rawn presented an illustrated lecture which concerned the drilling connected with the County outfall sewer; and Mr. Pheley spoke on the problems of extremely precise measurements.

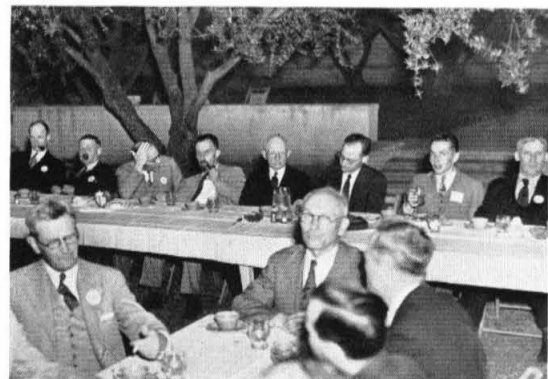
Several field trips were conducted, including a three-day tour of the Metropolitan Water District Project early in the spring vacation.

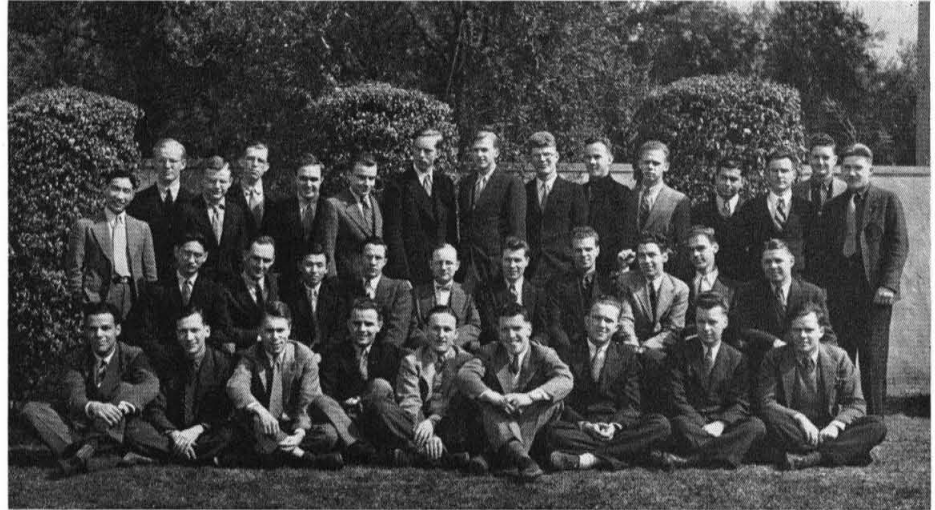
In the frigid weather of January, the more hardy members of the society enjoyed a day's fun in the snow at Lake Arrowhead.

Later, the A.S.C.E. co-operated with the A.S.M.E. and the A.I.E.E. in a dance in Dabney Hall, which proved a great success. Social interest was combined with technical when a group of the fellows brought girl friends with them on an inspection tour of Los Angeles Harbor by boat. The final meeting was held in May, when the Caltech Student Chapter acted as host to the Los Angeles Chapter at a dinner in Dabney Garden.

The officers for the year were: Walter Moore, President; Warren Fenzi, Vice-President; LeVan Griffis, Secretary, and George Dorwart, Treasurer.

Dinner Meeting





Back row: Tsao, Peterson, Carr, Porter, Bonham, Clarke, Dike, Ellis, Townsend, Barry, Friend, Velazquez, Voorhees, Forward, Wood; **second row:** Nojima, Grainger, Tsubota, Dion, Clark, Ashkenas, Kinley, Segelhorst, Warner, Cornwall; **front row:** Hotz, Jones, Poggi, Moncrief, Wolfberg, Bussard, Wetmore, Wylie, Bower; **not pictured:** Althouse, Ambroff, Austin, Benton, Budenholzer, Cheng, Downing, Feuer, Fleming, Johnson, Kelly, Lawson, Lycett, Sharp, Sullwold, Van Der Werff, Wheeler, Wiget, Wilkinson.

The growing interest of student mechanical engineers in their technical society is shown by a membership increase of one-quarter over last year. Leading the group during the first part of the year were: John Kinley, Chairman; August Segelhorst, Vice-Chairman; Irving Ashkenas, Secretary; and Joseph Peterson, Treasurer.

The first term program included several field trips and speeches of interest, the first of the latter being delivered by the National President of A.S.M.E. after luncheon in the Athenæum. The following term was largely given to preparing for

the annual **A. S. M. E.** convention contest; however, the society was able to take a big part in the Three-Societies dance. Also, elections were held; and the old officers gave way to Irving Ashkenas, Frederic Dion, Charles Clarke and Stanley Wolfberg in the order previously named.

The crowning achievement came in the third term with Ralph Jones' winning the competition in the presentation of technical papers at the national convention. This marks the third successive triumph for the Institute in this event. Several field trips, including a preview of the Golden Gate Bridge, were greatly enjoyed by the delegates.

The last main feature of the year was the highly publicized talk given by Mr. C. E. Davies, National Secretary of the A.S.M.E. His talk dealt chiefly with the steps necessary for the raising of engineering to a true profession.

Inspection Trip





Back row: Sorensen, Maxstadt, Wyckoff, Harrison, Lindvall, Teague, Rechif, Walley, Wilson, Barnett, Tejada; **second row:** Borgeson, Brenner, Frost, Du Fresne, Jones, Nunan, Müller, Francis, Gerlough, Morgan, Baldwin; **front row:** Nestler, Llewellyn, Pullen, Farneman, Hadley, Gates, Holmes, Fahrner; **not pictured:** Van Horn, Kimball, Leggett, MacMichael, Penn, Ridgway, Atkinson, Hand, Simmons, Rader, Elser.

First in **A. I. E. E.** activities should be placed the national convention which was held at the Huntington Hotel June 22 through 26. Although this meeting was staged during the summer vacation, quite a number of students attended and took part in the activities which consisted of technical papers, inspection trips, and a social program. This was the first time for the national convention to be held on the Pacific Coast.

Altogether this was a very full year for the students. The inspection trips taken by members during the year included visits to Sterling Electric Motors Company, McGregor and Sollie Sound Studios, American Record Company, Southern California Telephone Company, Southern California Edison and Miller Coil Companies, and Radio Station KFI.

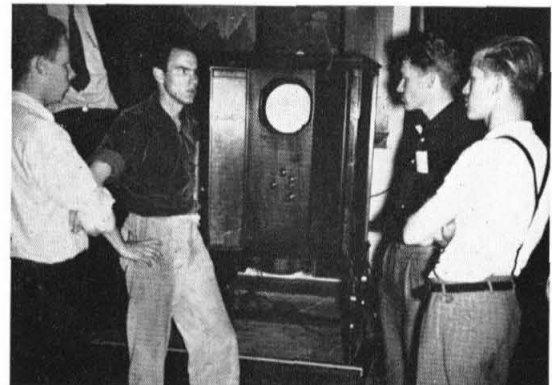
Outside speakers were obtained in Lloyd Hunt of the Edison Company and Mr.

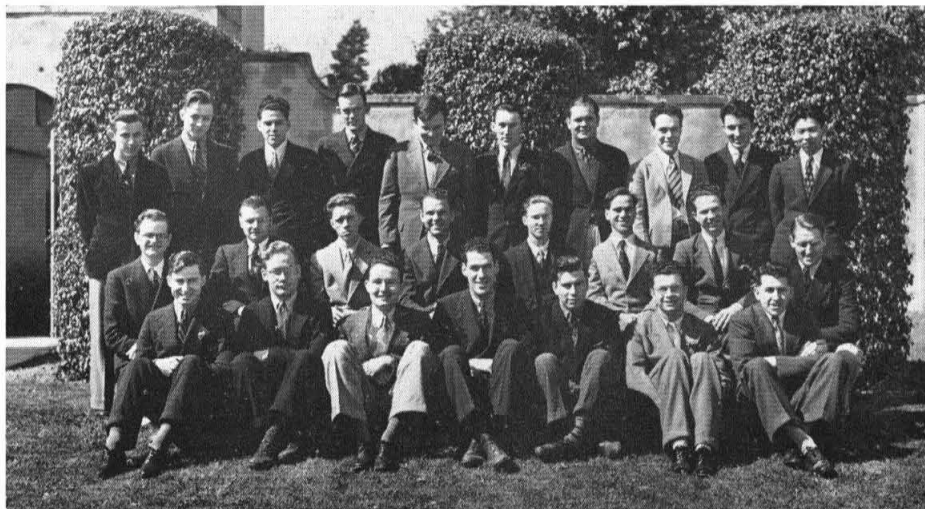
Gilbert of Pasadena Utilities. Professors Gilbert and Sorensen, and Allan Bate also spoke.

On April 13, the annual joint meeting of the Los Angeles section with the U.S.C. and C.I.T. student branches was held in the Athenæum, with Bruce Morgan, Dan Gerlough and E. E. Simmons representing Tech by the presentation of papers.

The officers of the A.I.E.E. for the past school year were: Wasson W. Nestler, Chairman; Conrad R. Müller, Vice-Chairman; and Charles F. Hadley, Secretary-Treasurer.

Television Exhibit





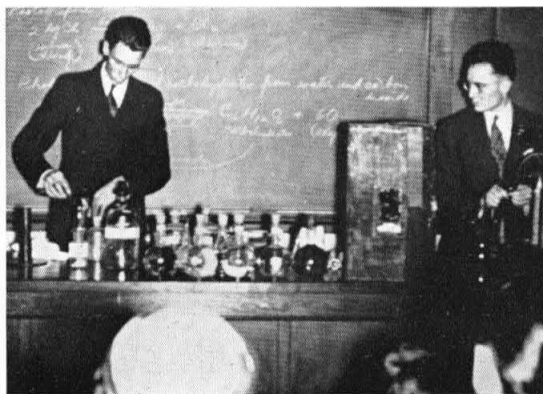
Back row: Tielrooy, Youngs, Axelrod, Kyte, Weinberger, Merrick, Conant, Walker, Woolsey, Asakawa; **second row:** Parker, Radovich, J. Smith, Nellis, Williamson, De Vault, Horine, Briggs; **front row:** P. Smith, Horne, Custer, Dunbar, Yale, Anderson, Gombotz; **not pictured:** Hatcher, Jones, Pressman, Sharples, Waugh, Wimpres.

A varied program of meetings and inspection trips made this year's Chemistry Club program of widespread interest and value to its members.

The regular Friday meetings have been addressed by men from various industries as well as from the Institute. Twice during the year, the club was able to present motion pictures of chemical projects. Other meetings of general interest included a demonstration of glass blowing technique, and a talk about "Patents" by Mr. A. W. Knight of the class of '24.

At the annual dinner meeting given by

Photochemistry Exhibit

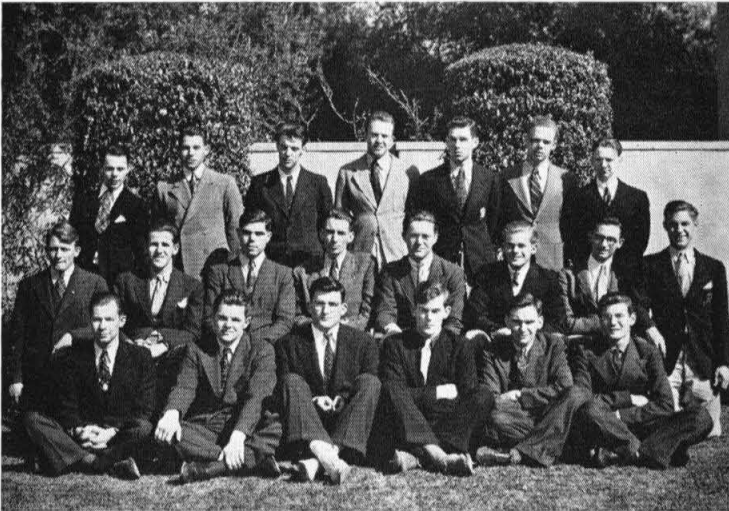


the **Chemistry Club**, Dr. C. G. Church of the Department of Agriculture spoke on the government's activities in the field of food chemistry.

With the industrial chemistry class, club members made an overnight inspection trip to Trona to examine the potash and borax plant for which the town is famous. Other industrial projects visited this year include plants for refining sugar, hydrogenating oils, recovering waste paper, and refining petroleum.

The chemistry division of the exhibit day program was organized and directed by the Chem Club. Lectures and demonstrations in all departments were both instructive and interesting to the general public.

Contributing much to the success of the year's program were: Bruce Dunbar, President; William Yale and Robert Custer, Vice-Presidents; George Horne, Secretary; and Noah Anderson, Treasurer.



Y. M. C. A. Cabinet—**Back row:** Davies, N. Thomas, Shisler, Freede, R. Thomas, Friend, Kluge; **second row:** Wilbur, Longfelder, Sullivan, Wimpres, Page, Allen, Clark, Smith; **front row:** Merriam, D. Staatz, Bailey, Biddison, Mayer, Marriott; **not pictured:** Cooper, Ellis, Minasian, Poggi, Rowell, Abbey, Billheimer, Christie, Connell, Dessel, Goodmanson, Harlan, Hiron, Kemp, Loeffler, Nakado, Palmer, Ray, Sandiford, Spalding, D. Thomas, Todd, Van Dyke.

The Tech **Y. M. C. A.** closes its year with a definite feeling of accomplishment; for, in addition to considerable expansion of its services, the year was capped with the announcement that John Price, a Yale Divinity School student, was to become full-time secretary of the campus "Y."

At the beginning of this year, the "Y" introduced 140 Freshmen to the traditions and opportunities of Caltech at the two-day Frosh camp session in the San Bernardino Mountains.

Services rendered during the year included a used-book exchange, an employment committee, a small loan fund, and forum luncheons for all interested. Dr. Mendenhall, of Whittier College, spoke on a peace theme; and Dr. Popenoe, noted authority, gave talks on social hygiene.

Officers for the year were: Franklin Page, President, who has been re-elected;

Richard Allen, Vice-President; Edwin Sullivan, Secretary; and Stephen Clark and Norman Wimpres, Treasurers.

In addition to those already mentioned there are numerous organizations on the campus which go toward making Tech the complex whole that it is.

Among these the **Newman Club** has been very active. This is a group of Catholic students who hold meetings occasionally for discussions with outside speakers. The members have profited greatly by these meetings.

The **Episcopalian Group** also brings together the members of a church on the campus. Its activities are quite similar to those of the Newman Club.

A **Chess Club** holds frequent meetings in the form of chess games between its members. Several members of the faculty play excellent games.

The **Geo-Paleo Club** meets once a week for the discussion of new finds in that field by the students majoring in the geology courses.

The **Aero Club's** chief activity is the flying of a glider which the group possesses. This gives the future aeronautical engineers some practical experience.

Caltech's Educational Policies . . .

The educational policies of the California Institute of Technology were well synthesised in 1922 as follows: "It is the express policy of the Trustees and the Faculty, while providing for extensive scientific researches of the greatest importance, to continue thorough courses in engineering and pure science; basing the work of these courses on exceptionally strong instruction in the fundamental sciences of Mathematics, Physics, and Chemistry; broadening and enriching the curriculum by a liberal amount of instruction in such general subjects as English, History, and Economics; and vitalizing all the work of the Institute by the infusion in generous measure of the spirit of research."

It was in 1908 that Dr. George E. Hale, of the Board of Trustees, in discussing the educational policies of Throop College, spoke as follows: "No great work, whether in engineering or art, in literature or science, has ever been the work of a man devoid of the imaginative faculty. In seeking to develop this school, therefore, let us not forget that our prime object should be to graduate men capable of conceiving vast projects, not less men whose abilities are limited to the power of executing them."

The educational policies of the California Institute of Technology stand today, in their excellence, genuine tributes to the farseeing vision of their moulders of yesteryear.

A T H L E T I C S



AD 1920-24-29-7

Merriam

ATHLETES' FIELD HOUSE (1920, 1924, 1929)

“Through the adaptation of some of the barracks erected for the Students' Army Training Corps, fairly adequate locker and shower rooms have been provided on the campus, and in cooperation with the city of Pasadena an excellent athletic field with adequate dressing room facilities is available in Tournament Park; but there is still one outstanding need in connection with the physical training programme—namely the facilities of a gymnasium.”—REPORT OF THE ADMINISTRATIVE COMMITTEE OF THE FACULTY, February, 1921.

Concerning P.E. . . .

This squib is an elucidation of the terms P. E., and Athletics. As an introduction, I will cite the following occurrence: A student came into my office near the close of the term and said he had done no P. E. because his parents objected to his going into athletics. I explained to him that P. E. has nothing to do with Athletics and that he had just six days left to get busy and do thirty hours of P. E.—Walk around the table ten times before he sat down to eat, pull weeds for the N.Y.A., turn off and on the faucets in the hydraulics “lab”—do something, but do it quick.

Now by way of elucidation—P. E. has a higher rating than Athletics, being required for graduation, but not high enough to get a grade to help the student graduate. With P. E. a student can graduate *cum laude non compos mentis*. But with Athletics, a student may not graduate at all.

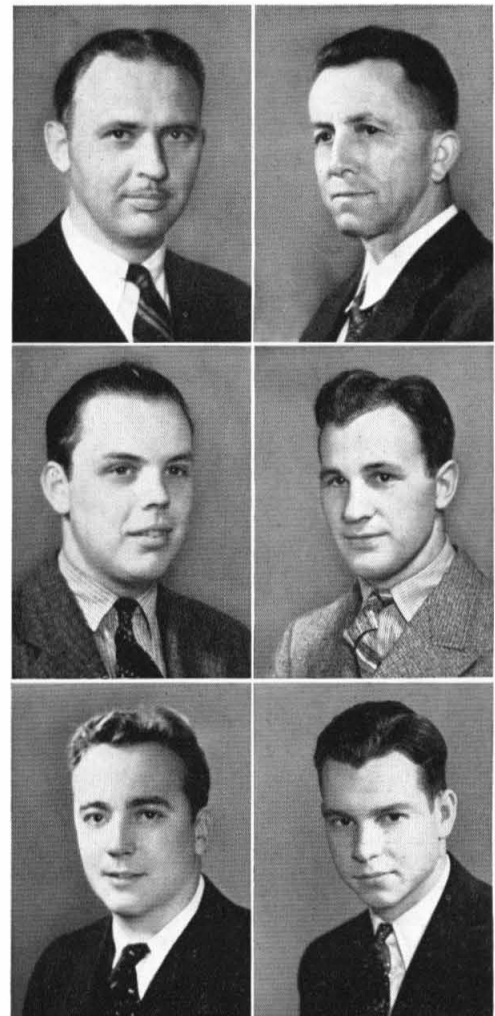
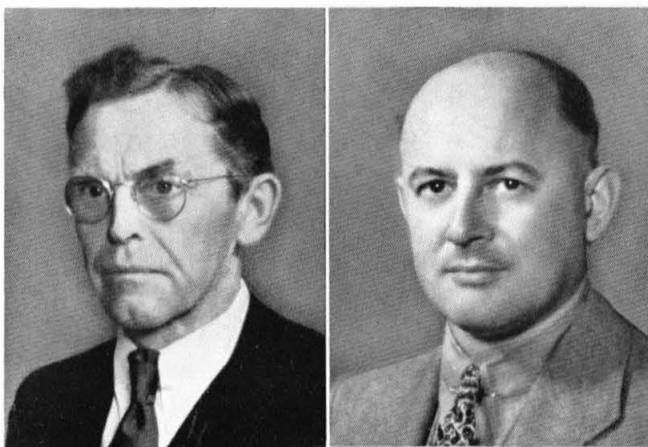
P. E. has the official approval of the faculty but Athletics has the offensive approval of the coaches.

Students, in deciding whether to jeopardize their future by choosing Athletics or to play safe with P. E., should make their decision by use of the scientific method.

W. L. STANTON,
Director of Physical Education.

William L. Stanton
Physical Director

Harold Z. Musselman
Assistant Director



Coaches

Stuart L. Seymour	Edward B. Doll
Thomas R. Belzer	Edgar H. Kienholz
George R. Mellinger	Holley B. Dickinson

and

Physical Trainer
Floyd L. Hanes

Caltech's coaching **S t a f f**, while not as large as that of many neighboring colleges, always turns out the best possible teams from the limited material available.

Coach "Fox" Stanton, Physical Director, trains the varsity footballers and the two track squads. Again this year, all of his productions gave creditable performances.

Harold Z. Musselman runs the athletic office as Assistant Director, and still finds time to coach the scrub football team and the varsity baseball men. Edward Doll handles the frosh horsehiders.

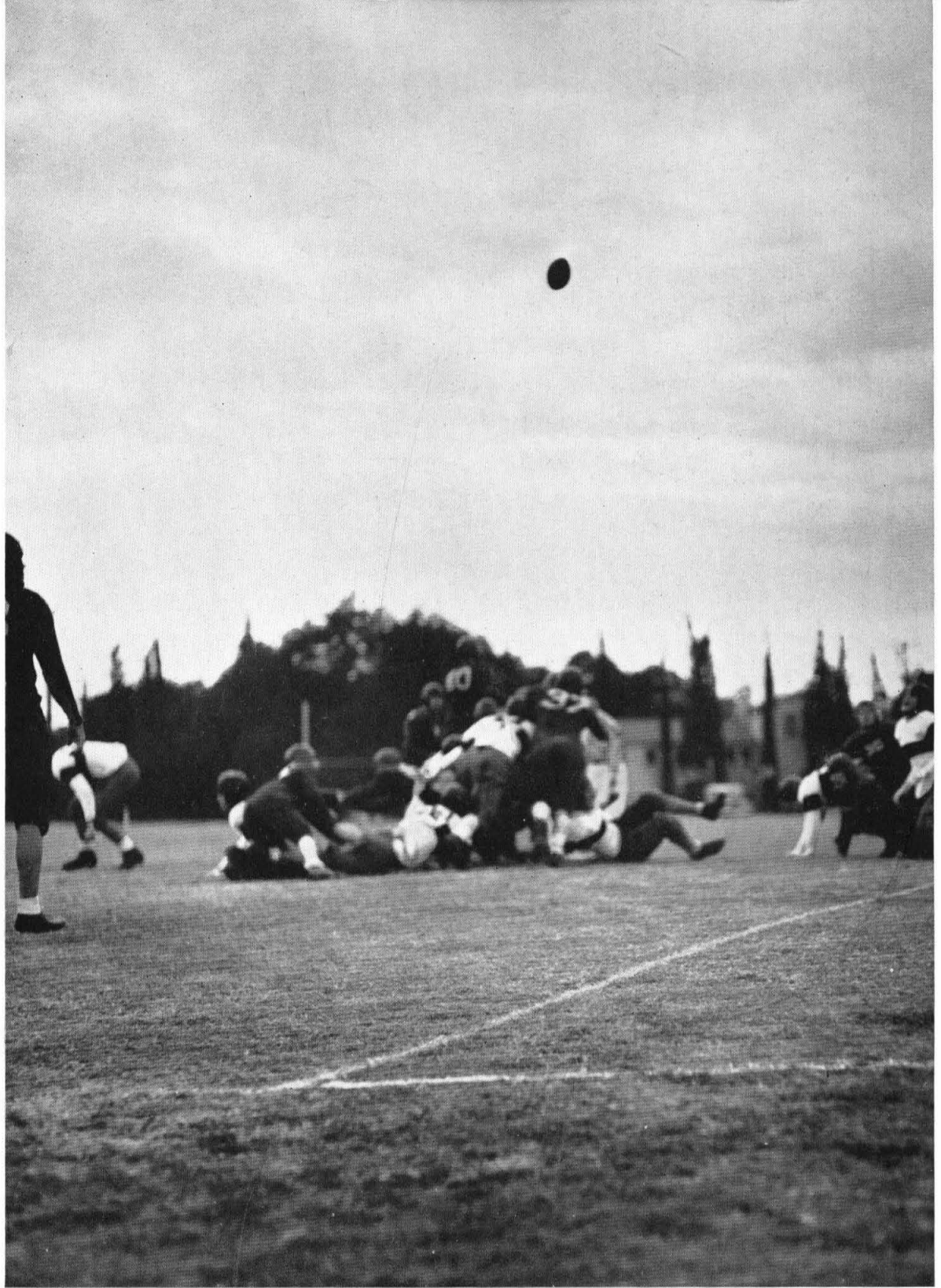
Floyd L. Hanes, "Doc" to the athletes, is the trainer for all squads, and has coached both cross-country units into championship form this year.

Coach Edgar Kienholz handles the varsity basketball team on the neighboring court used by both Tech teams. This year, George Mellinger had charge of the frosh casaba squad and the freshman football outfit as well.

Stuart Seymour worked as assistant coach in varsity football, handling the linemen. Holley Dickinson taught boxing; while Tom Belzer tutored the wrestlers.

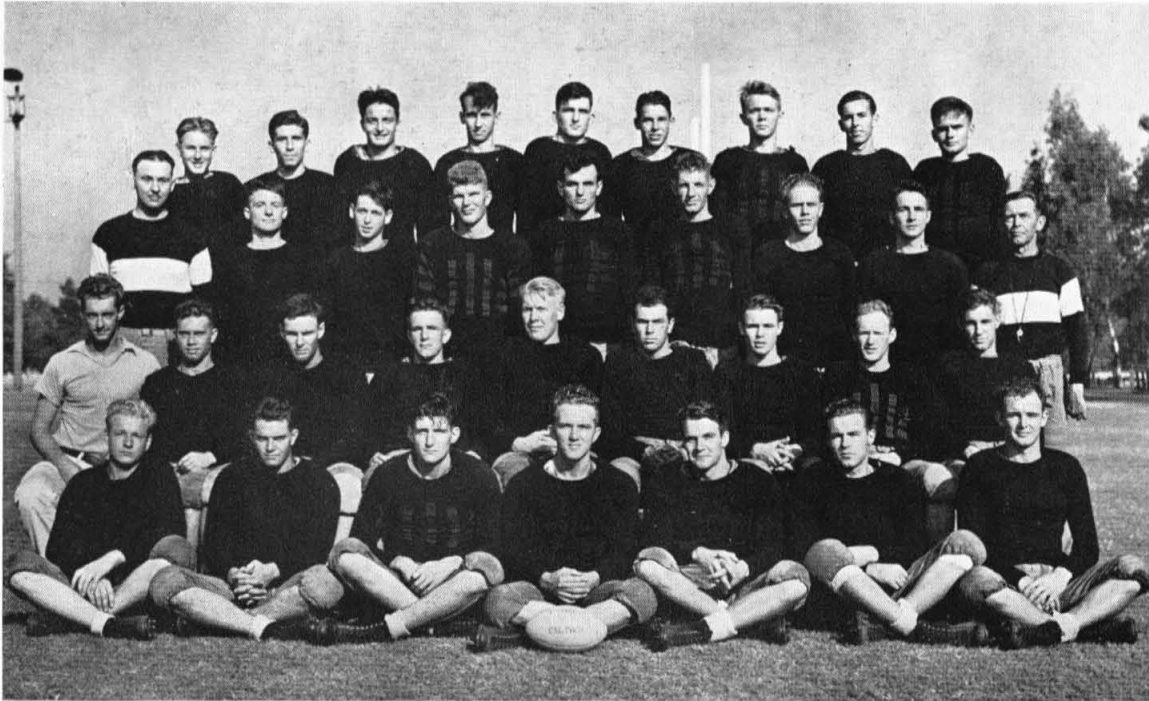
Head Yell Leader Charles Gates, Assistant Yell Leader Charles Payne





Place-kick—*Martin*

FOOTBALL



Back row: Beck, Wallace, Rosencranz, Van Fleet, Bailey, Thomas, Osborn, Goodin, Flint; **third row:** Seymour, Balsley, Griffiths, Townsend, Rosanoff, Horkey, Althouse, Mann, Stanton; **second row:** Austin, Wileman, Benton, Van Horn, Larson, Rowell, Baker, McLean, Smith; **front row:** Cooper, Sharp, Zimmerman, Wetmore, Miller, Brown, Lawson.

The nearest the Caltech varsity came to victory this year was a 7-7 tie with Oxy, however, not because they failed to display the fight, determination and sportsmanship that have characterized Tech teams of the past.

The season opened ten days before registration into classes; and the Beavers had little time for preparation before meeting a powerful grid machine from **Loyola** University.

Although they scored the first touchdown, the Engineers, suffering from a lack of reserves, went down to a 26 to 6 defeat. The wide open style of play used by the Techmen kept the Loyolans guessing throughout the contest.

The following weekend, the Tech team

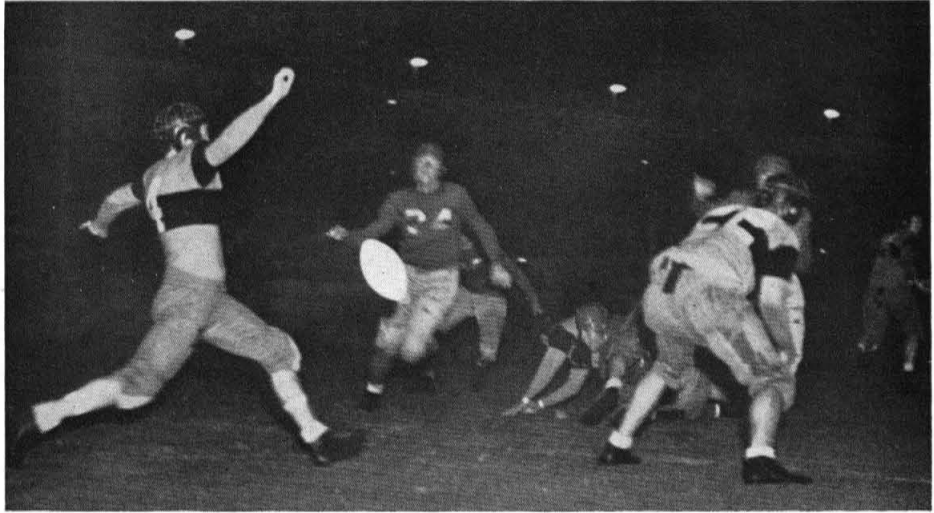
took on the **Santa Barbara State** squad at the Channel City. Demoralized by a fumble which led to a State touchdown in the opening minutes of play, Caltech could not rally enough to stave off a 37 to 6 downing.

The second quarter saw the Beavers showing flashes of offensive strength; still, one touchdown was all their driving could gain.

On the next Saturday, the squad lined up against the **Arizona State** aggregation at Tempe, Arizona. Unable to stop the scintillating passing attack of the Bulldogs, the Beavers were found nursing a 26-0 loss at the close of the fray.

Tech's only chance to score vanished when she lost the ball on a fumble near the Arizona goal, after two 45-yard runs.

Getting It Away



Brighter than this near goal was the bulwark put up by the Engineers, holding the Bulldogs for downs on their own two-yard line.

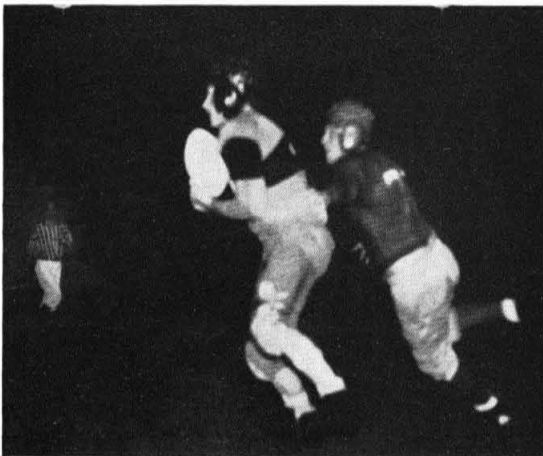
An encounter with the **Pomona Sagehens**, first of a series of two, was held the following week in the Rose Bowl. Playing a brilliant game in a steady rain, the locals held the lead until nearly the close of the game; however, a fumble play executed by Pomona caught the Beavers off their toes; and the resulting score turned sure victory into a 13 to 9 defeat.

Late in the first period, a lateral from McLean to Smith resulted in the first tally; and later, Jack Osborn's brilliant field goal

from the thirty-yard stripe, in a steady downpour, put the Beavers in a 3 point lead. Both of the Sagehen touchdowns were spectacular long runs, each from working the fumble play already mentioned for its deadliness.

After the heart-breaking defeat by Pomona, the Engineers suffered a letdown; and the **San Diego Marines** took them into camp by a 26 to 0 score. The superior man-power of the Marines gave them a definite edge which increased as the game wore on and the Stantonmen wore out. Every man on the squad saw action before the final gun.

After returning from the San Diego encounter, the Techmen spent two weeks in preparation for the **Occidental** set-to. Although outweighed twenty pounds to the man, the Techsters were favored by the "jinx" of the odd and even year victories. Past performances during the season



Interception



Bucking the
Oxy Line

seemed to place the two teams on about even terms for the big game.

However, the 7 to 7 tie in which the struggle ended does not bespeak the local squad's constant domination of the encounter—the first draw match in the forty-one years of hostility between the two schools, and the first game since 1925 in which the California Institute has not emerged victorious on an even year.

Caltech's chance to score came in the second period when an Oxy fumble gave the Beavers the ball on their opponent's fifteen-yard stripe. Soon a lateral pass, Smith to McLean, carried the ball across the line; and Osborn kicked goal to give the Engineers a 7-0 lead. Occidental's marker came in the third quarter, when

Groves fired a 32-yard pass to Cresse for a touchdown.

The fourth quarter found Tech again in Oxy territory, hammering hard for another score; however, the Bengal line stiffened, and resisted all attempts of the Beavers to take the edge again.

The closing game of the season was a rematch game with **Pomona** on the foothill gridiron.

Leading their opponents 14-6 at the end of the first half, the downtrodden Beavers seemed destined to victory; but sheer power and sustained driving gave the Sagehens three scores which could not be overcome by the Engineers.

At the end of the game, the totals stood

Completed!



Plunging the
Pomona Goal



26 to 14 in favor of the powerful eleven from Pomona. The first touchdown by Tech was secured on a lateral pass, Smith to McLean; and the second score came a short time later, when Jack McLean intercepted a pass and then smashed over tackle to tally on the next play.

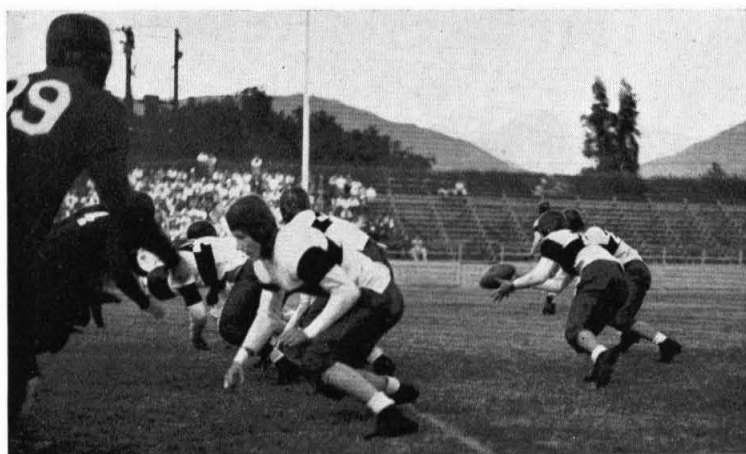
Playing their last game of collegiate football, the work of six seniors was outstanding. Captain Wetmore, Zimmerman, Miller, and Larson played good defensive ball in the line; while Rosencranz and Horkey performed creditably in the backfield.

The Beaver varsity was coached again this year by "Fox" Stanton; and according to his remark at the football banquet, "this is the best Caltech team since 1931, when we won the championship."

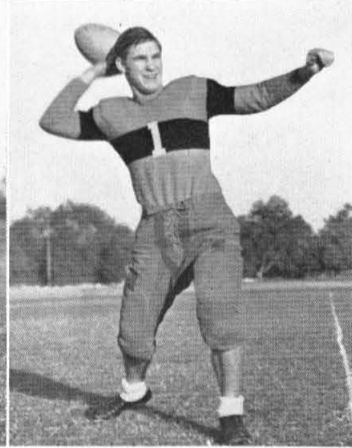
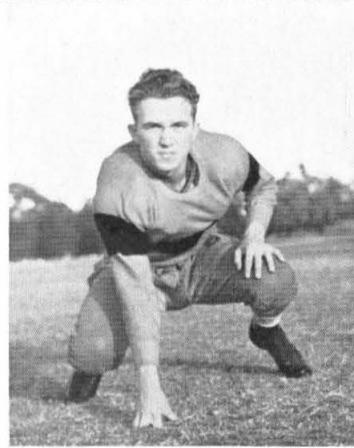
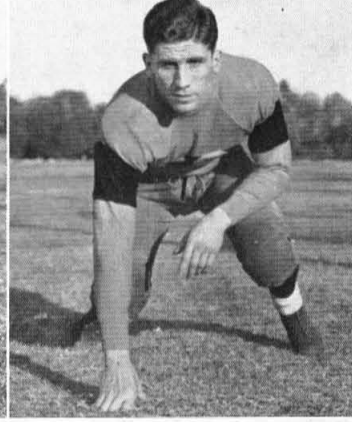
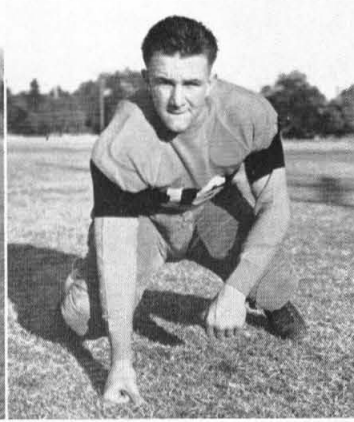
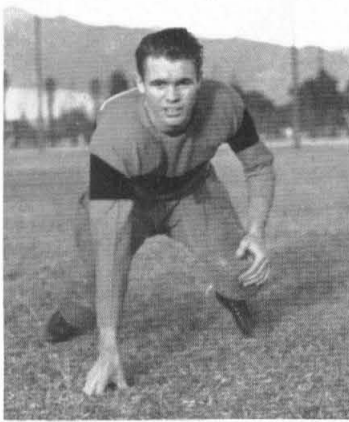
The annual football banquet topped off the season. On this occasion, the Wheaton trophy was presented to Jim Balsley for outstanding playing ability, sportsmanship and leadership; Claude Brown, first-string center, was elected to Captaincy of the 1937 squad.

The work of the "scrub" team, headed by the Honorary-Captain Edgar Griswold, helped considerably in giving the varsity team the necessary practice; and among its members are men who should become regulars on next year's squad.

With thirteen returning lettermen, eight of whom were on this year's first string, the prospects for the 1937 season are at least good.



Off Tackle



Carl Larson
Jack Baker

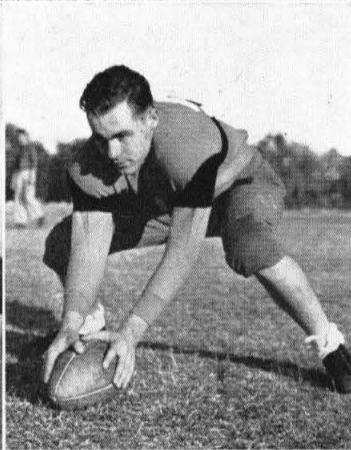
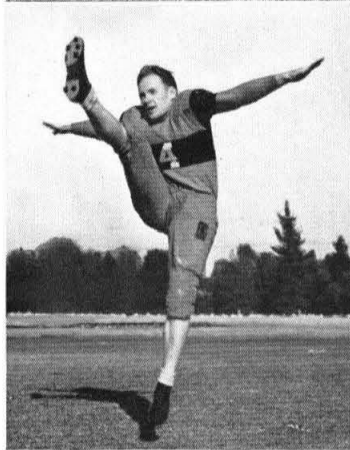
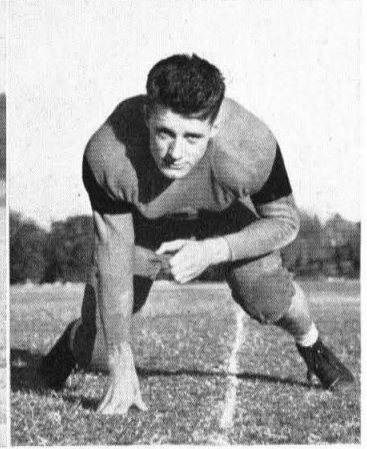
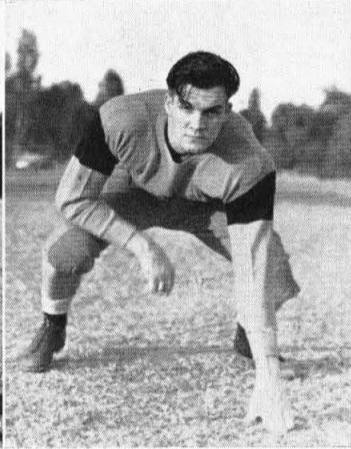
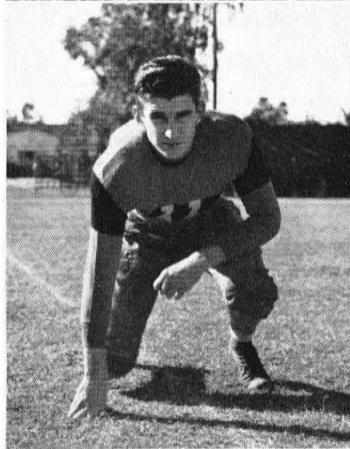
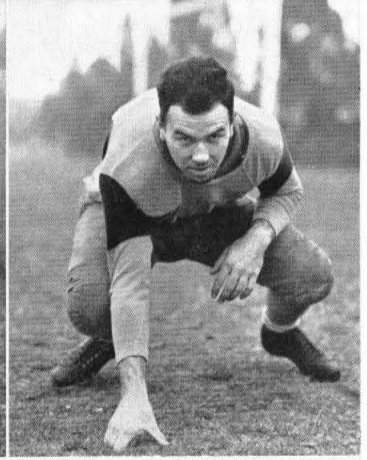
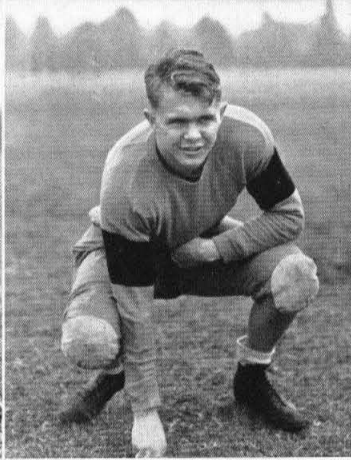
Frank Jewett
James Van Horn
Captain Bill Wetmore

John Griffiths
George Wallace
Clay Smith

L E T T E R M E N

Sidelines





George Mann
Al Zimmerman
Jack McLean

Jack Osborn
Wendell Miller
Captain-elect Claude Brown

Dick Rowell
Jim Balsley

L E T T E R M E N

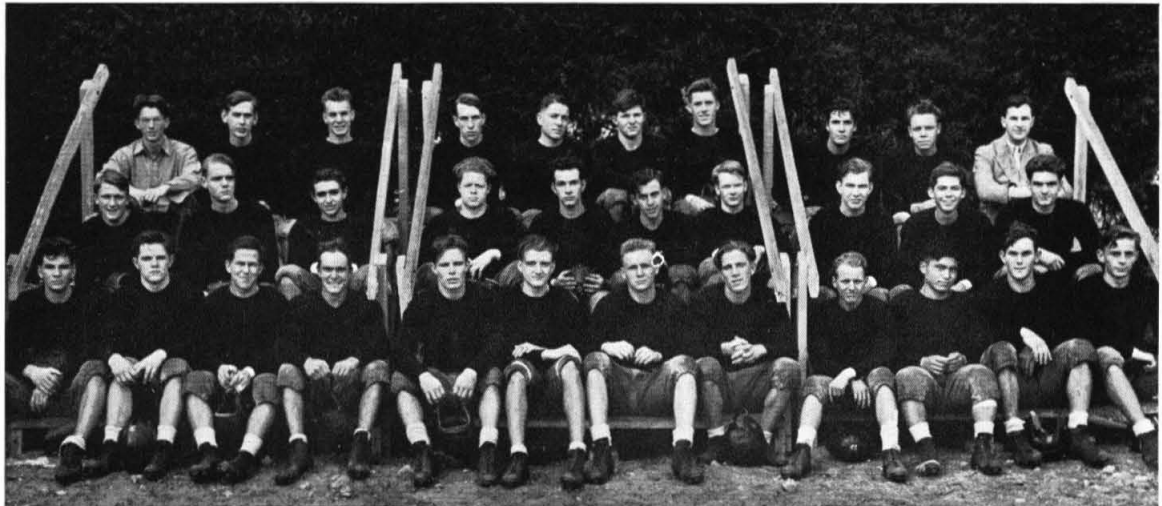


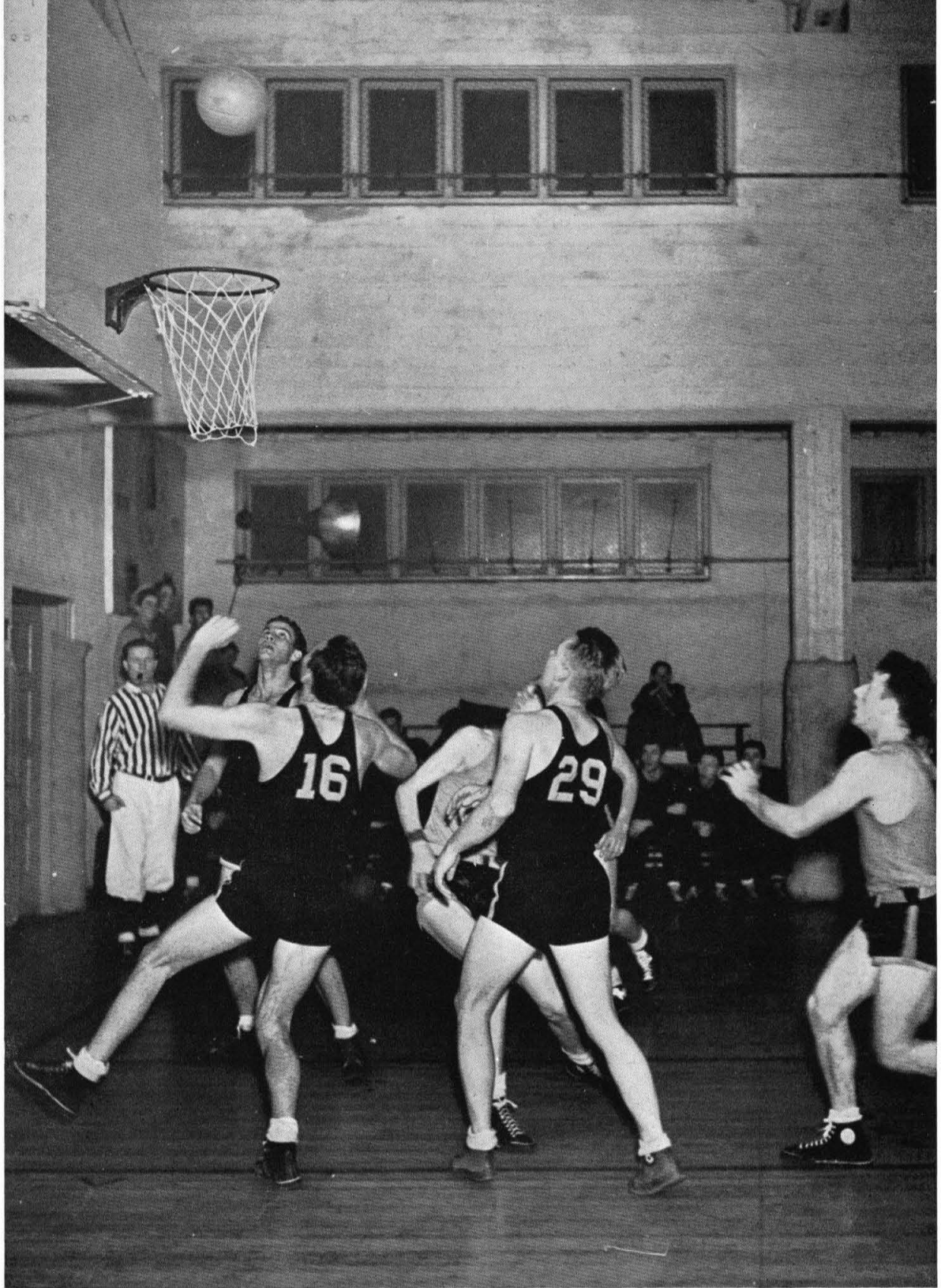
Manager Hoyt Austin

This year's **Frosh Football** team, although the turnout was large, won but one victory. In the first encounter, a game with the powerful Inglewood High eleven, the Frosh fell by a score of 32 to 6. The next game saw the Techbabes emerge the victors over Webb School in a close battle, 13 to 6. In their league games, the "Pea-Greens" fared even worse, due mostly to the fact that both Oxy and Pomona had abnormally strong elevens. In the first Pomona contest, Caltech lost by a score of 49 to 0; and the end of the Occidental game found our men on the bottom, 52 to 6. However, the Tech Frosh, with more experience, came back later to hold Pomona to the score of 20 to 6. Following the Pomona game, and coming as a tremendous letdown, was the rout with Redlands—56 to 0 was the score of this one.

Lack of experience as usual spelled the downfall of our Frosh in many of the games. Size also played an important part. However, because of the able coaching of George Mellinger, former Captain of the Drake University football squad, many of the Frosh will be able to don uniforms next year, and give good account of themselves as varsity players.

Back row: Bergmann, Mackay, Kemp, Harris, Sweningsen, M. Staatz, Partch, White, Meyer, Mellinger; **second row:** Wilbur, Speilberger, Shulman, Dessel, Held, Tielrooy, Varnes, Keyser, Goodmanson, Howard; **front row:** Hirons, D. Staatz, Palmer, Van Dyke, Haugen, Foster, Walter, Hofmann, Oldson, Nakado, Biddison, Oder.





Basket!—*Martin*

BASKETBALL



Back row: Rynearson, Goodin, Diehm, Horkey, Harper, Walley, Flint; **front row:** Kienholz, Osborn, Schuman, Wolfberg, Smith, Nash, Sullivan, Beck, Hiatt.

Handicapped by a lack of organized pre-season practice and by the necessity of holding all their contests on foreign floors, Tech's varsity cagers were unable to win a single major encounter during the season, dropping seven tilts to four different opponents.

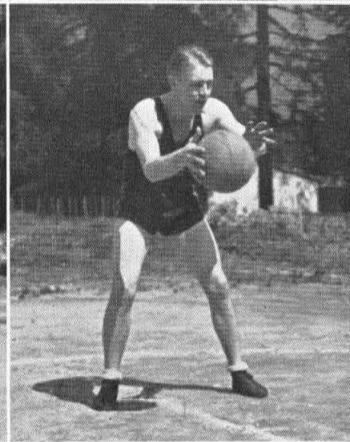
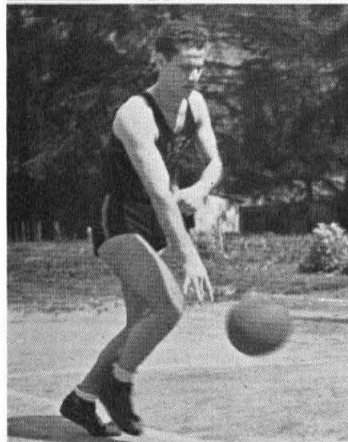
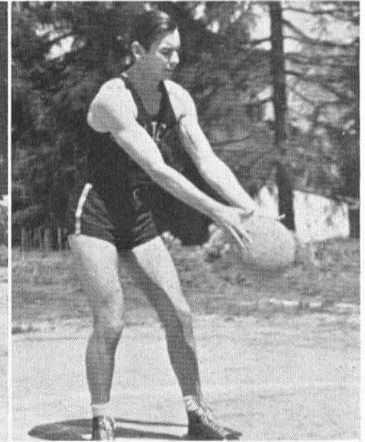
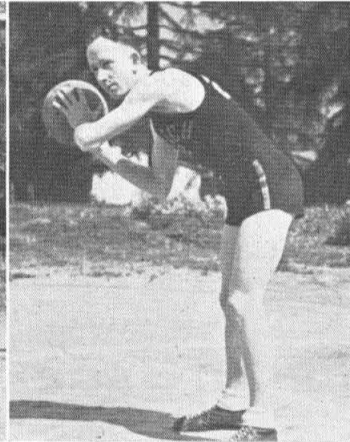
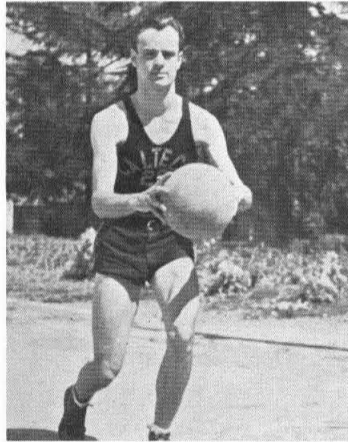
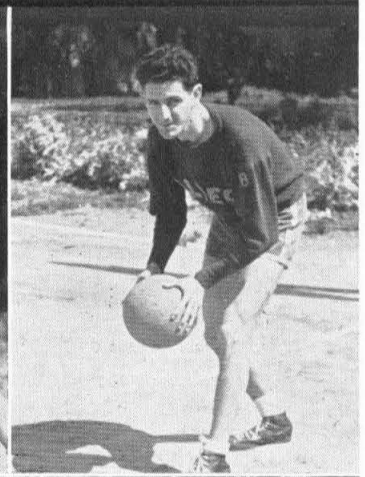
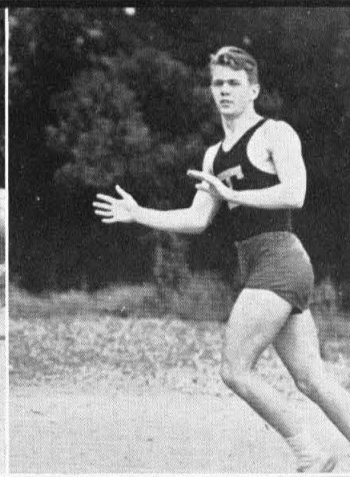
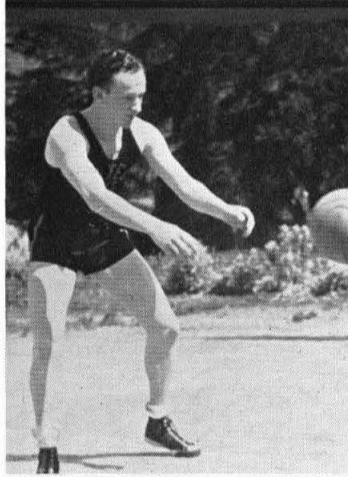
After only two weeks of practice, the Beavers displayed spirit but lack of coordination in a 27-37 loss to **Pomona**. A return match furnished the highlight of the season as the vastly improved Engineers came within a point of triumph in a 25-26 heartbreaker. Trailing 19-26 with five minutes to play, they staged a desperate rally that was nipped short by the final whistle.

While still in early season form, the locals fell 17-56 before the polished **Chapman** squad. In the second engage-

ment, the Caltech team threatened constantly throughout their 30-48 losing struggle.

After battling the favored **Redlands** quintet to a 17-17 deadlock at the half, the dismayed Techmen watched their shots rim the basket, while the encouraged Bulldogs pounded the hoop for a 52-29 advantage as the game ended.

Uncanny accuracy on the part of speedy **Occidental** forwards, plus the inability of the Tech players to sink their free throws, resulted in a 27-58 setback for the Beavers in their first Bengal encounter. The second contest saw forty minutes of game fighting on the part of the determined Engineers, playing their final set-to of the season. Although again outscored, they forced their opponents to the limit before dropping the 30-46 tiff.



Captain-elect Stan Wolfberg
Tom Harper
Dan Schuman

Jack Osborn
Garn Rynearson
Captain Hal Smith

Bernard Walley
Harry Goodin
(*Manager* Fremont Radcliffe)

L E T T E R M E N



Bleachers

When the **Frosh Basketball** quintet opened the season with a convincing 25-19 victory over Monrovia High and followed with a 35-30 win over the powerful El Monte squad, it appeared that Coach George Mellinger's babes might be in for a sizeable winning streak.

Webb School gave the yearling Beavers their first setback, tripping them hard in a 28-18 encounter. This was followed by a 44-29 loss at the hands of a Chapman frosh team which displayed unusual strength.

Bright spot on the record was the 34-30 victory over the same Chapman quintet in a rematch. Fast playing and excellent shooting featured the only Tech collegiate win.

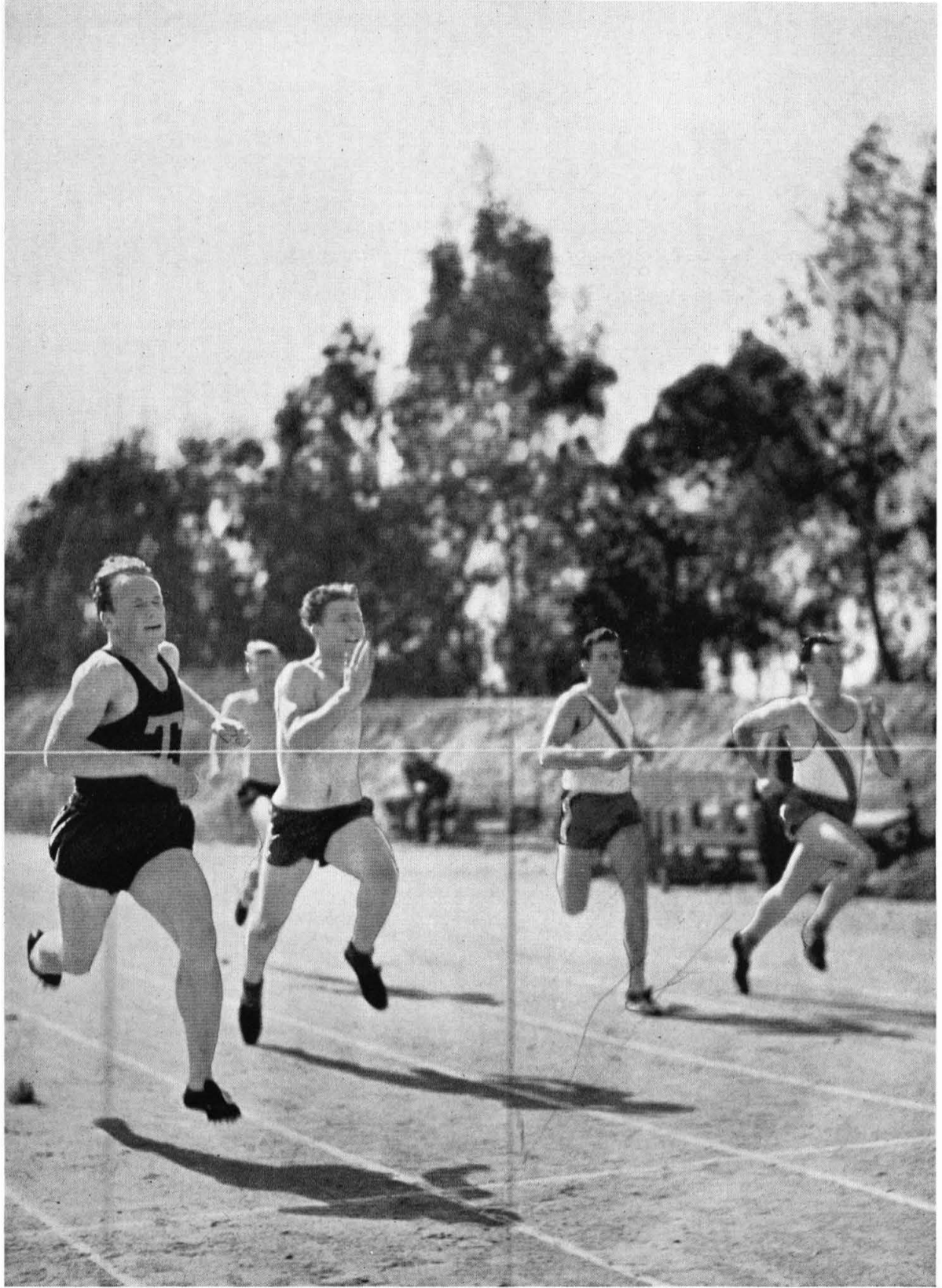
Redlands trimmed the youngsters in a fast game, 44-27; and a bad slump the following week resulted in a one-sided match with Pomona—the 54-16 score favored the Sagechicks.

Occidental's classy Tiger Kittens handed the Tech frosh two defeats, the scores of which stood at 56-39 and 53-37. The last of the Oxy games closed the season with a total of three wins and six losses.

Numerals were awarded to Frank Skalecky, Millard Jacobs, Frank Bergmann, Howard Reynolds, Alex Shields, Keith Anderson, Gerald Foster, Walter Larson and Robert Meyer.

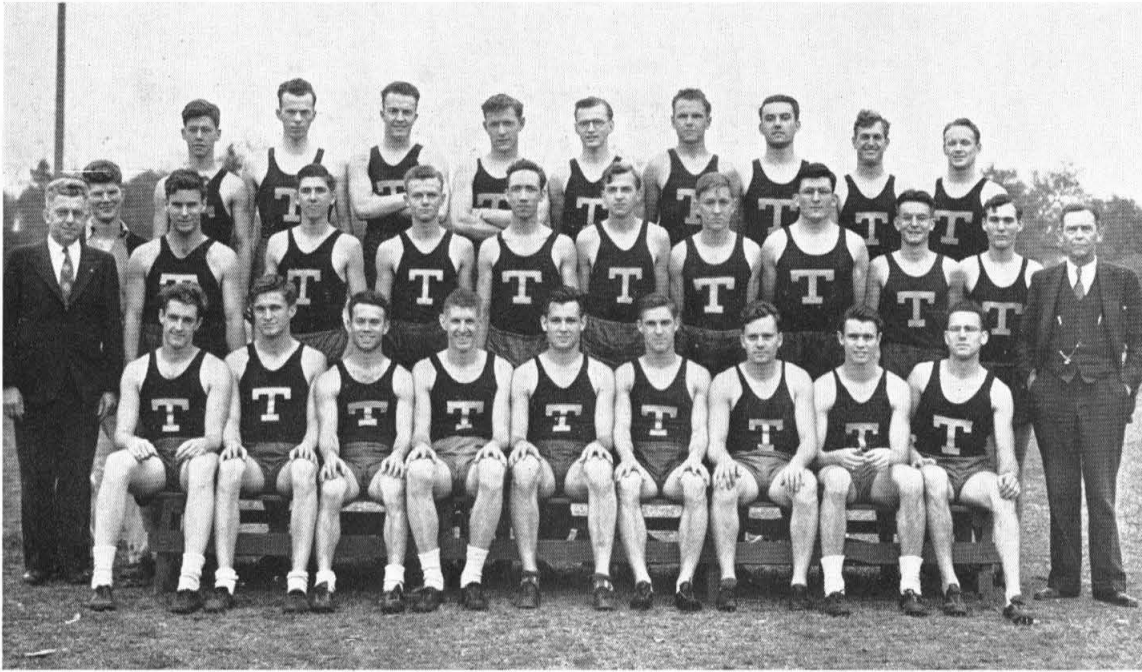
Back row: Mellinger, Larson, Meyer, Wilbur; **front row:** Anderson, Skalecky, Jacobs, Reynolds, Mackay.





First and Second in the Hundred—*Martin*

TRACK



Back row: Davis, Springer, Freede, Bragg, Braithwaite, Nellis, Wilson, Gates, McLean; **second row:** Hanes, Townsend, Benton, Strong, Knight, Downing, Ellis, Brown, Bailey, Voorhees, Rudkin, Stanton; **front row:** Austin, Fenzi, Wileman, Horkey, Snelling, Smith, Bowers, Baker, DuFresne.

For the first four weeks of the winter term, ambitious track men were hampered by hostile weather conditions. Not only mud and rain, but also a period of extreme cold, from the native's point of view, slowed up the pre-season training.

After the interclass meet, it was evident that the high jump mark would be raised steadily by Orrin Bowers, Sophomore ace, who jumped well over six feet. Captain Wilbur Snelling broke the class meet record for the quarter-mile event in 52.6.

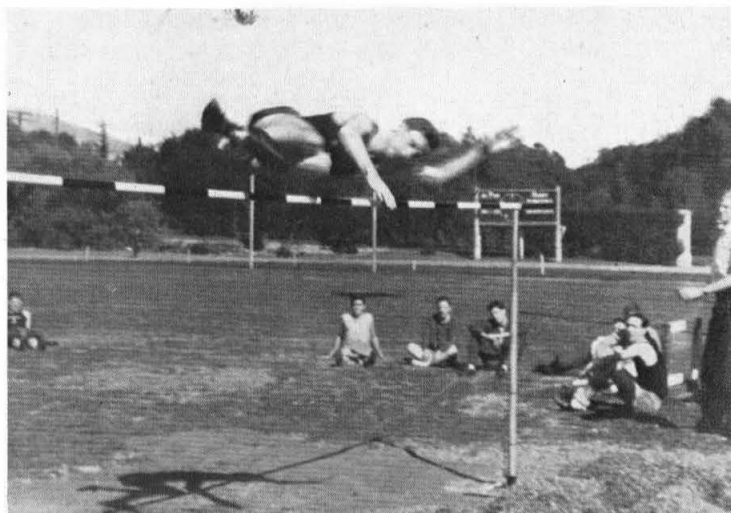
The meet with **Glendale J. C.**, first on the calendar, resulted in a 76 to 54 defeat. With the absence of Jack McLean, Tech had to be content with seconds and thirds in the sprints. Winners in the meet were Snelling in the 440, McCreery in the broad jump, Benton in the javelin, and Bowers in the high jump.

Five of the previous year's records were smashed in the **Pomona-Caltech Relays**, resulting in the Beavers' carrying off the perpetual trophy. The final score stood $8\frac{1}{2}$ to $5\frac{1}{2}$, favoring the Engineers.

Practically every man on the squad was entered in the Long Beach **A.A.U. Relays** in order to gain experience in the stiff competition. The four-man mile relay team placed second to the strong California group. The 440 relay men took a third; and Bowers tied with three others for the high jump mark.

The Beavers came back strong the following week to upset the **Santa Monica J. C.** aggregation, 70 to 61. Sweeping the broad jump, pole vault and shot put, the Techmen proved their strength in the field events.

Bowers Does It Again



With a decided superiority in the field events, **Occidental** stole the show in a three-way meet with Whittier and Caltech. Orrin Bowers outdid himself this time to set his highest mark of 6' 47/8" in the high jump. A tie for second in the furlong by McLean was the only other outstanding showing. Score: Oxy 81 1/2, Whittier 56, Caltech 24 1/2.

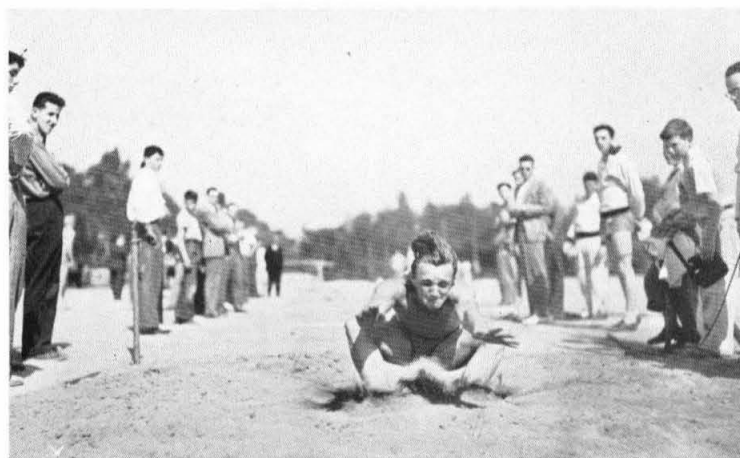
The following week, the Engineers went down to defeat at the hands of the **P.J.C.** squad, 74 1/2 to 56 1/2. Mack Robinson, Olympic runner from P.J.C., had it all his own way in several events. Ed Horkey stepped out by winning both hurdle races for Tech.

The only restraints in the monotonous piling up of **U.C.L.A.** points were second places in the half and the highs taken by Springer and Horkey. Baker and Mathews

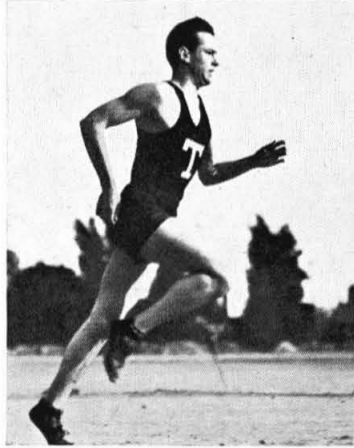
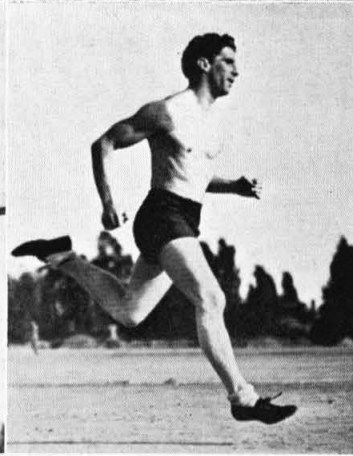
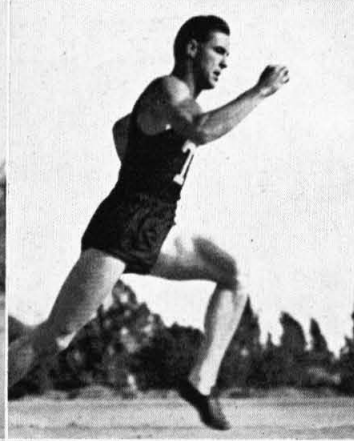
garnered first and second in the pole vault; and Bowers won the high jump. The final score was U.C.L.A. 100, Tech 31.

The strong team from **Compton J.C.** took the Beavers into camp the next week by a score of 75 to 56. Downing was the only winner in the track events, taking the highs in 16.4; but Caltech got firsts in all field events but the broad jump.

In the final meet of the year, Tech's tracksters upset all dope sheets to beat **Pomona**, 72 to 59. McLean and Bragg took first and second in both sprints; and Captain Snelling won the quarter in 51.6 seconds. Austin and Baker took the discus and pole vault; and Bowers won the high jump. McCreery's broad jump of 21' 5" was best in that event. The Engineer relay team topped off the day and season with an easy victory in the finale.



Whacking Down



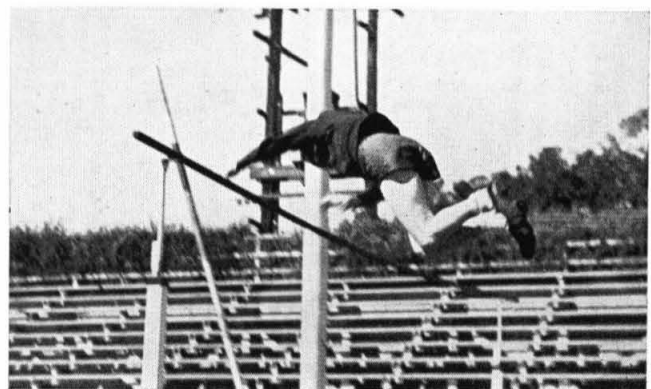
Gardner Wilson
Arthur Downing

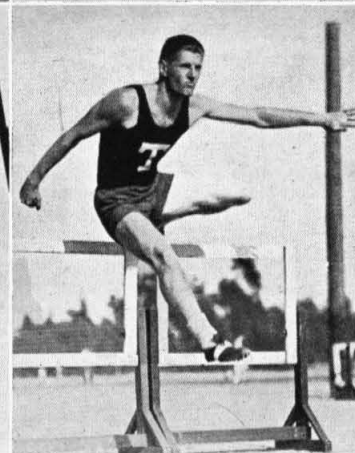
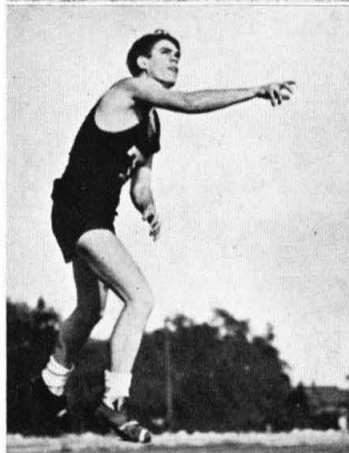
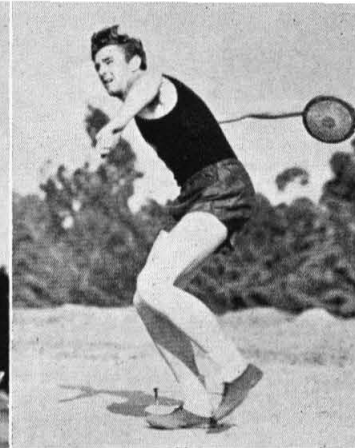
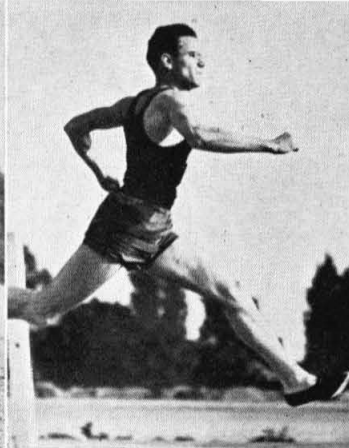
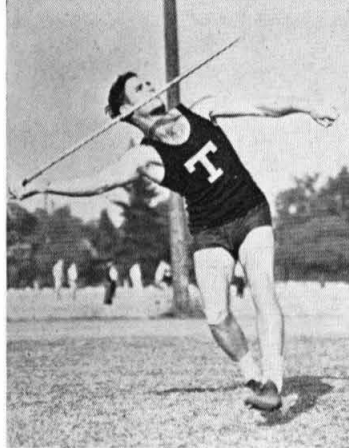
Clay Smith
Orrin Bowers
Captain Wilbur Snelling

Jack Baker
George Wallace
Ed Wileman

L E T T E R M E N

Ebbie at Pomona



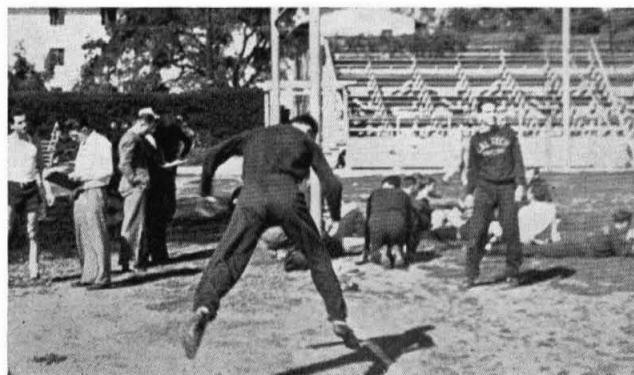


Ralph Benton
Bill Ellery
Frank McCreery

Armand DuFresne
Tyler Mathew
Jack McLean

Hoyt Austin
Ed Horkey
(Manager Bob Townsend)

L E T T E R M E N



Javelin Tosses

Several of the **Frosh Track** performers showed themselves to be good prospective material for the varsity squad; even though the team was generally weak. The track events were fairly well taken care of; but Tech lacked strength in the field and weight events.

The Pomona meet, last on the schedule, saw the team at its best. Friend Baker, running the 100 in 10.5 sec. and the low sticks in 25.7 sec. shared the honor of a double win with Don Walter, who ran the high hurdles in 16.8 sec. and took the pole vault at 10' 6". Dave Whittlesey copped the furlong in 23.2 sec., while lanky Keith Anderson turned in a time of 2:09.5 min. to win the half mile. Sullivan's leap of 5' 8" was enough to win the high jump. Pomona, however, swept the field events, except for a few second and third places, to take the meet by a score of 74 to 56.

The cross-country training of Anderson, Grigg, Hankey, Loeffler, and Marriott stood them in good stead during the Oxy meet when they piled up 20 of Tech's 42½ points in the distance runs. However, Hedges of Oxy took four firsts to put Oxy on top.

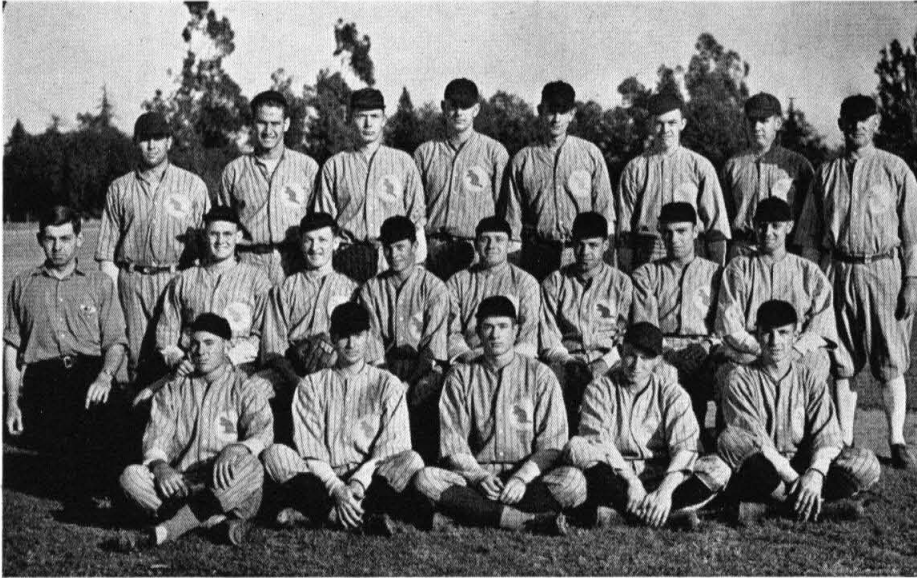
Back row: Walter, Marriott, Love, Kemp, Dessel, Hofmann, Mayer; **front row:** Benton, Loeffler, Mickley, Spielberg, Anderson, Grigg, Hankey, M. Staatz.





Sliding Home—*Schlatter*

BASEBALL



Back row: Rowell, Schuman, Sheppard, Gewe, Crozier, Fahrner, Winchell, Musselman;
second row: Gerlough, Davidson, Wolfberg, Levet, Dorwart, Schombel, Campbell, Ridgway; **front row:** Engelder, Frost, Lavender, Jones, Mann.

With eight returning lettermen backed by a squad of about twenty other men, the prospects for a good baseball season were very good. Practice games began March 10, and included contests with Chapman, Woodbury, Pomona J.C., Glendale J.C., Pasadena J.C., Citrus J.C., and Fullerton J.C.

Occidental was the first league opponent. On April 3, the Tigers won when their chucker struck out twenty men, allowing two hits, and their batters whacked Captain George Dorwart's offerings for extra base hits.

Santa Monica J.C., although not in the conference, was the next Saturday rival, winning 11-5 over the locals.

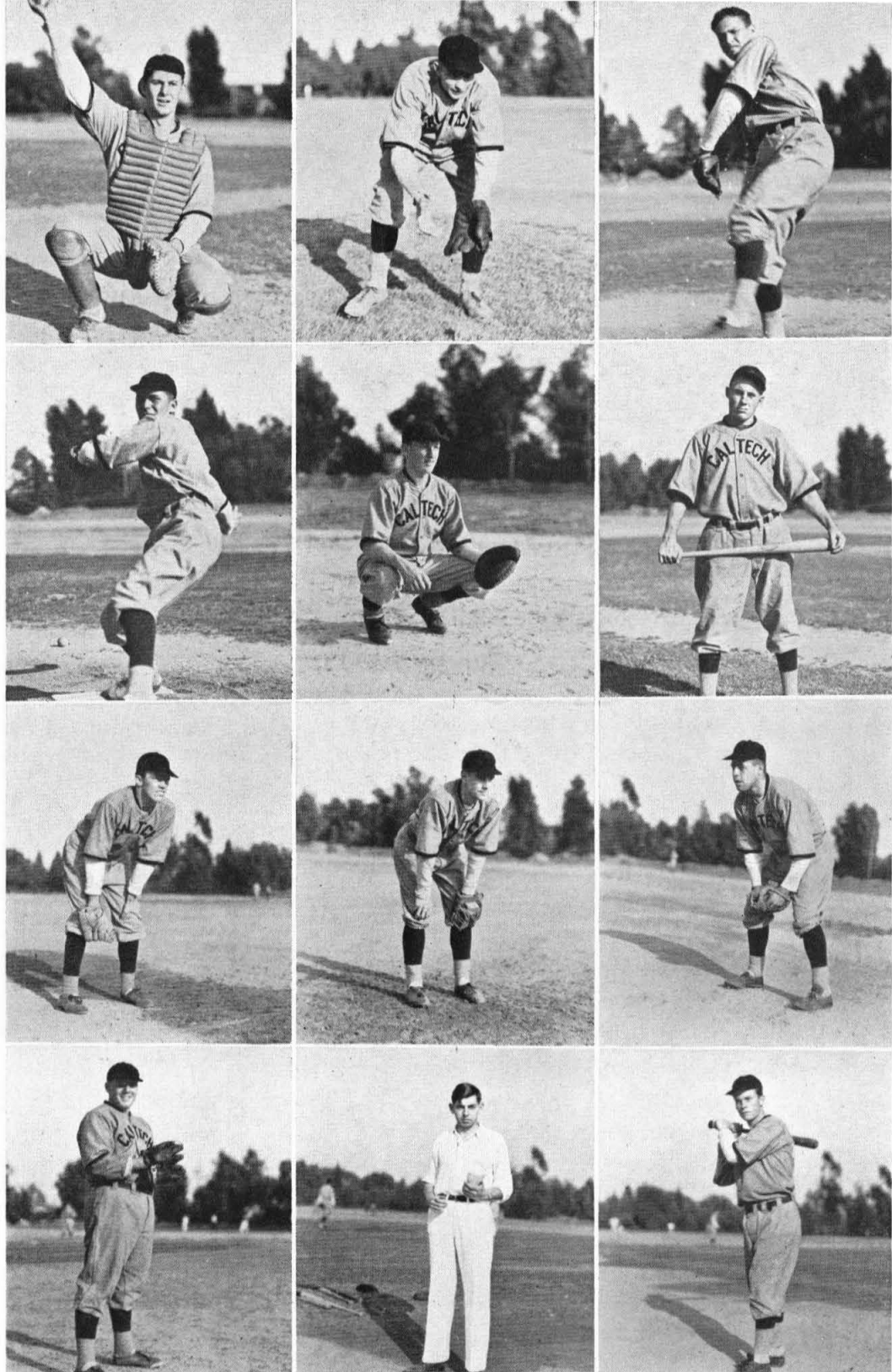
The third week-end saw the sensational game of the year played at Redlands. Both Dorwart and Blaisdell, Bulldog hurler, pitched the entire twelve-inning game to a 5-3 Tech victory. Schuman and Levet starred at the plate.

At Pomona College the following week, Caltech's ball club got an early lead; but in the seventh frame Captain Dorwart was knocked out of the box by Pomona batters and was replaced by Dan Schuman. In this inning the Pomonans tallied seven runs. In the ninth, two Pomona men reached home on errors to take the contest 11 to 10.

A week later Chapman College panthers defeated Tech 5 to 3. Although Dorwart pitched one of his best games this season, striking out ten men, the opposing hurler proved too good.

On May 4, Tech met Oxy for the second time. Captain Lyons, pitching for Occidental, climaxed his career by hurling a no-hit, no-run game, striking out 19 men and turning in a 11 to 0 victory.

The final game of the season was played at Paddock Field on May 8. After a close game, Pomona nosed out a 5 to 4 win, their second one-run margin over the Beaver nine.



Bob Gewe
 Herb Sheppard
 Ted Fahrner
Captain George Dorwart

George Crozier
 Stan Wolfberg
 Holloway Frost
Manager Dan Gerlough

Dan Schuman
 Paul Engelder
 Len Schombel
Captain-elect Mel Levett

L E T T E R M E N

Although the **Frosh Baseball** season opened with the prediction that victory would never be theirs, Coach Ed Doll's proteges managed to settle down and turn in a quite respectable performance.

Their lack of practice and inexperience showed up in the Webb game, first on the schedule, when the Beavers lost by a 25 to 11 score. Ten runs were scored in the first inning by Webb, due to an abundance of Engineer errors.

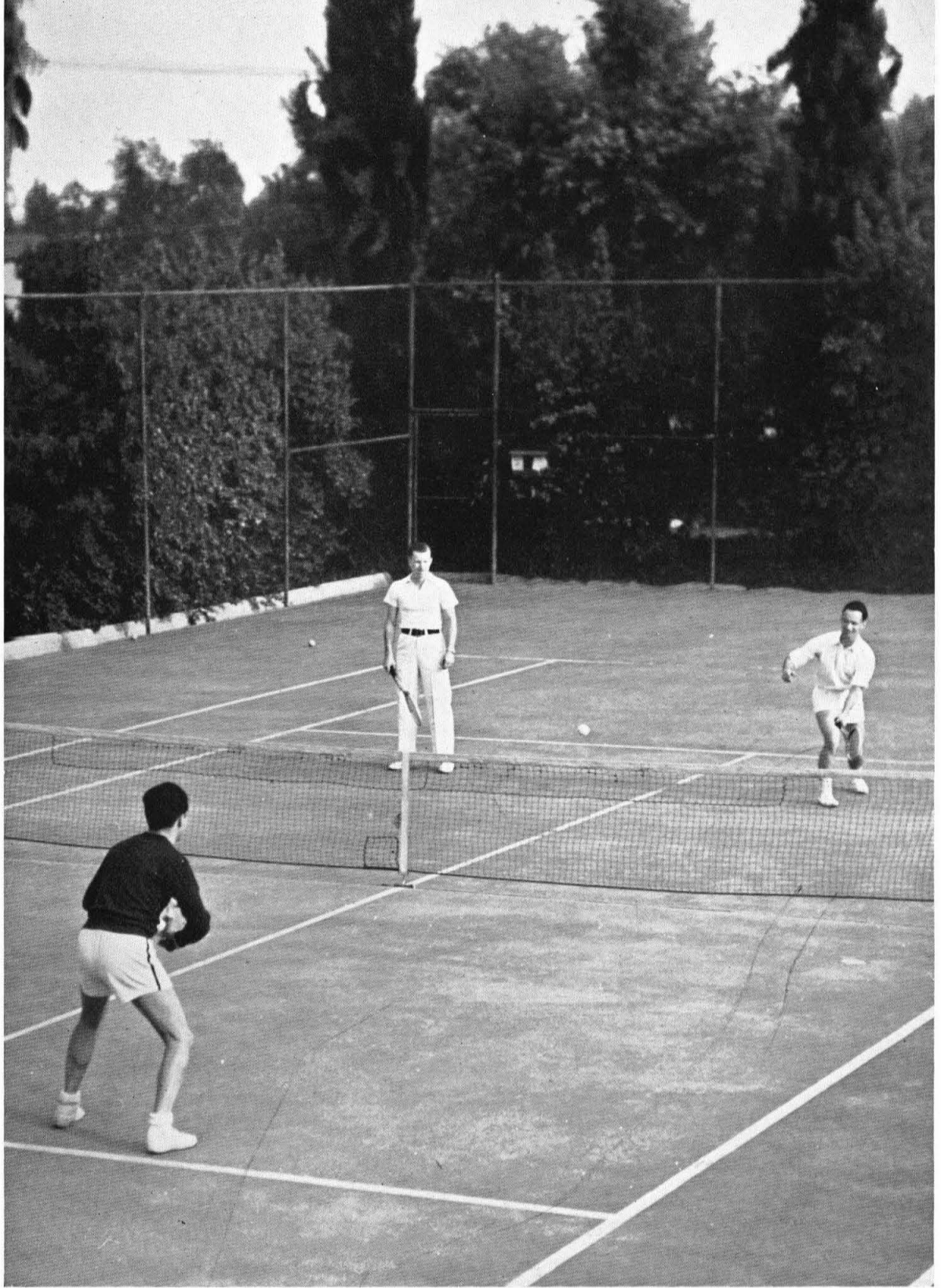
Pomona followed the next week, but their team was turned back by a determined nine of peagreeners, and the tilt ended with the scoreboard 10 to 9 in favor of the Techmen. The game was hard played, and victory wasn't certain until the end.

Occidental's freshman horsehidiers took the locals into camp the next week, however, to the score of 16 to 8. Two innings full of errors gave the Cubs the chance they were waiting for, and they capitalized on each mistake.

The final game of the season, a rematch with the Pomona Sagechix, ended in a 5-4 victory for Pomona. With Pomona one run ahead throughout, a last minute run tied the score in the ninth. Pomona rallied, however, to bring across the winning run in the latter half of the tenth.

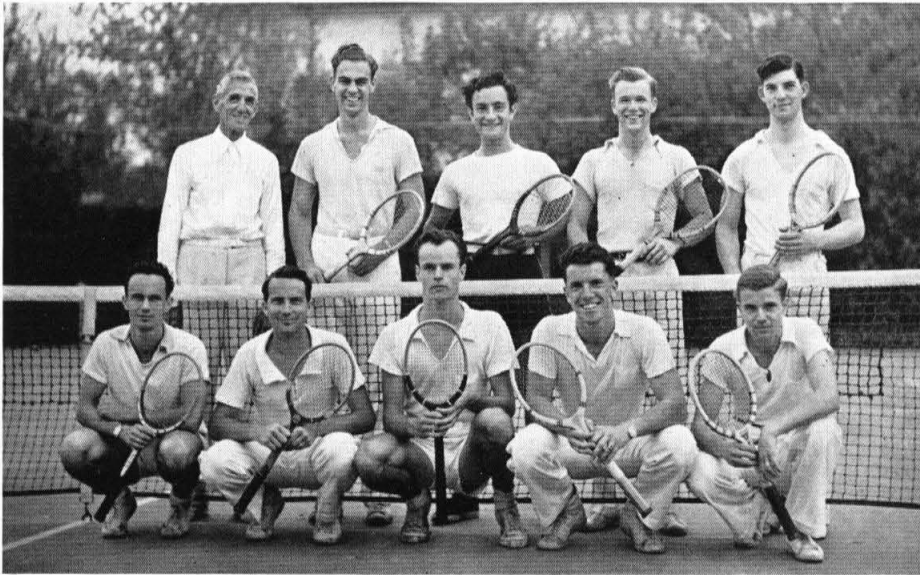


Back row: Doll, Walker, Brose, Hiron, Scarborough, Meyer; **front row:** Keyser, Tielrooy, Nicholson, Wilbur, Oldson, Stevens, Payne; **not pictured:** Kemp, Main, Walter, Van Dyke.



Doubles—*Schlatter*

TENNIS



Back row: Hoyt, Warner, Levin, Dixon, Craft; **front row:** Elliott, Dowd, Harper, Bussard, Keller.

The 1937 varsity tennis season may be stamped as perhaps the most successful in Tech's history, that is, if success may be measured by the experience gained and activity displayed by the team. Extremely fortunate were the Beavers in securing as coach Dr. Henry Hoyt, one of Pasadena's keenest tennis enthusiasts and an expert player in his own right. Under a new policy, compulsory practices were held at scheduled hours four days of the week.

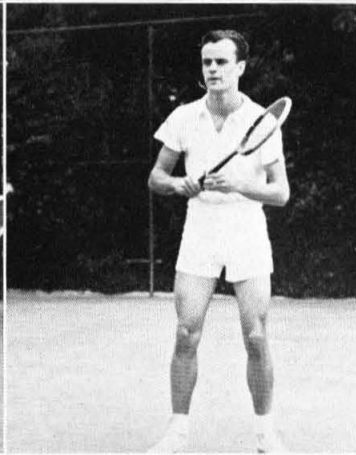
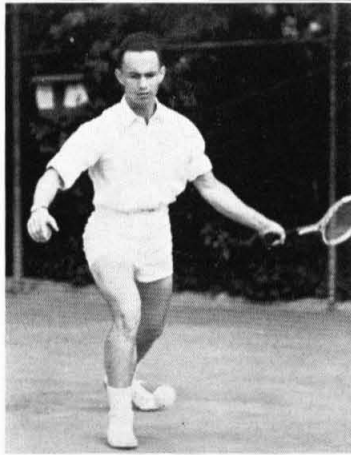
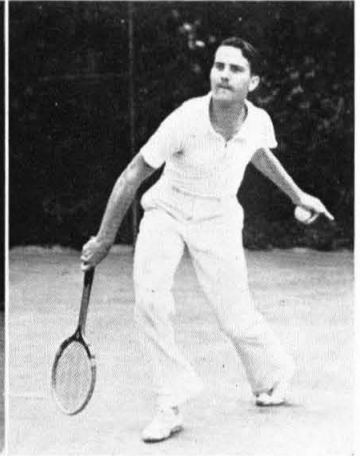
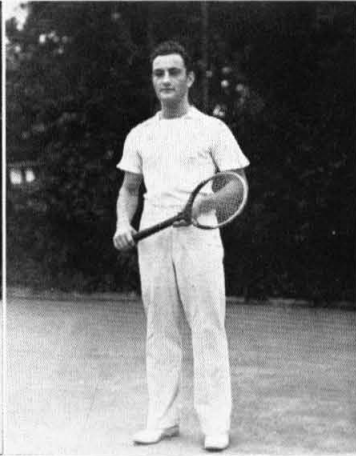
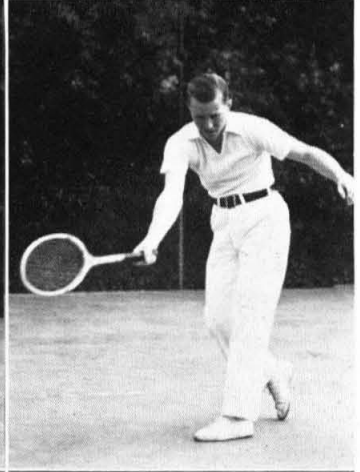
The lineup for the majority of the season consisted of Captain Tom Harper, Sam Keller, Munson Dowd, Gordon Bussard, Blaine Dixon, Gerald Levin, Lowell Hulbirt, Bruce Elliott and Howard Craft playing in that order. In the doubles, Harper and Dowd filled the first spot, followed by Hulbirt and Keller, with Bussard and Dixon in third position.

The team has met with success in a good

share of its encounters to date, its record being marred only by a 14-1 loss to U.C.L.A. and two setbacks, 8-1 and 5-2, at the hands of the strong Redlands outfit—the latter contests were very much closer than the score indicates. Victims included: Pomona, 5-4; Oxy, 7-2; Pomona J. C., 9-0; and Santa Monica J. C., 6-3. With the hardest part of the schedule over, the team's percentage should improve greatly during the latter part of the season.

Captain Harper, thrice winner of the school championship and playing his final season for Tech, has suffered but one loss thus far in competition, a close defeat which was erased by a later victory.

Harper, Keller and Dowd will represent Caltech in the Pacific Coast Championships at Ojai this year, and are conceded a chance of surprising some of their more highly rated opponents.

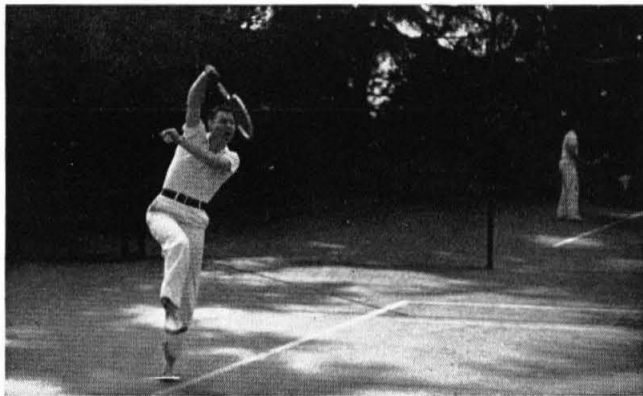


Gordon Bussard
Sam Keller
Bruce Elliott

Blaine Dixon
Gerald Levin
Captain Tom Harper

(Manager) Lowell Hulbirt
Munson Dowd

L E T T E R M E N



Service

This year's **Frosh Tennis** team emerged undefeated from its stiff schedule of inter-collegiate competition, exhibiting one of the strongest arrays of talent in recent years. The lineup consisted of Marshal Brooks, Fred Brunner, Frank Skalecky, John Harper, Randlow Smith, and LeRoy Kemp, handling the singles in the order named, Brooks and Brunner, Skalecky and Harper, and Smith and Kemp pairing off for the doubles.

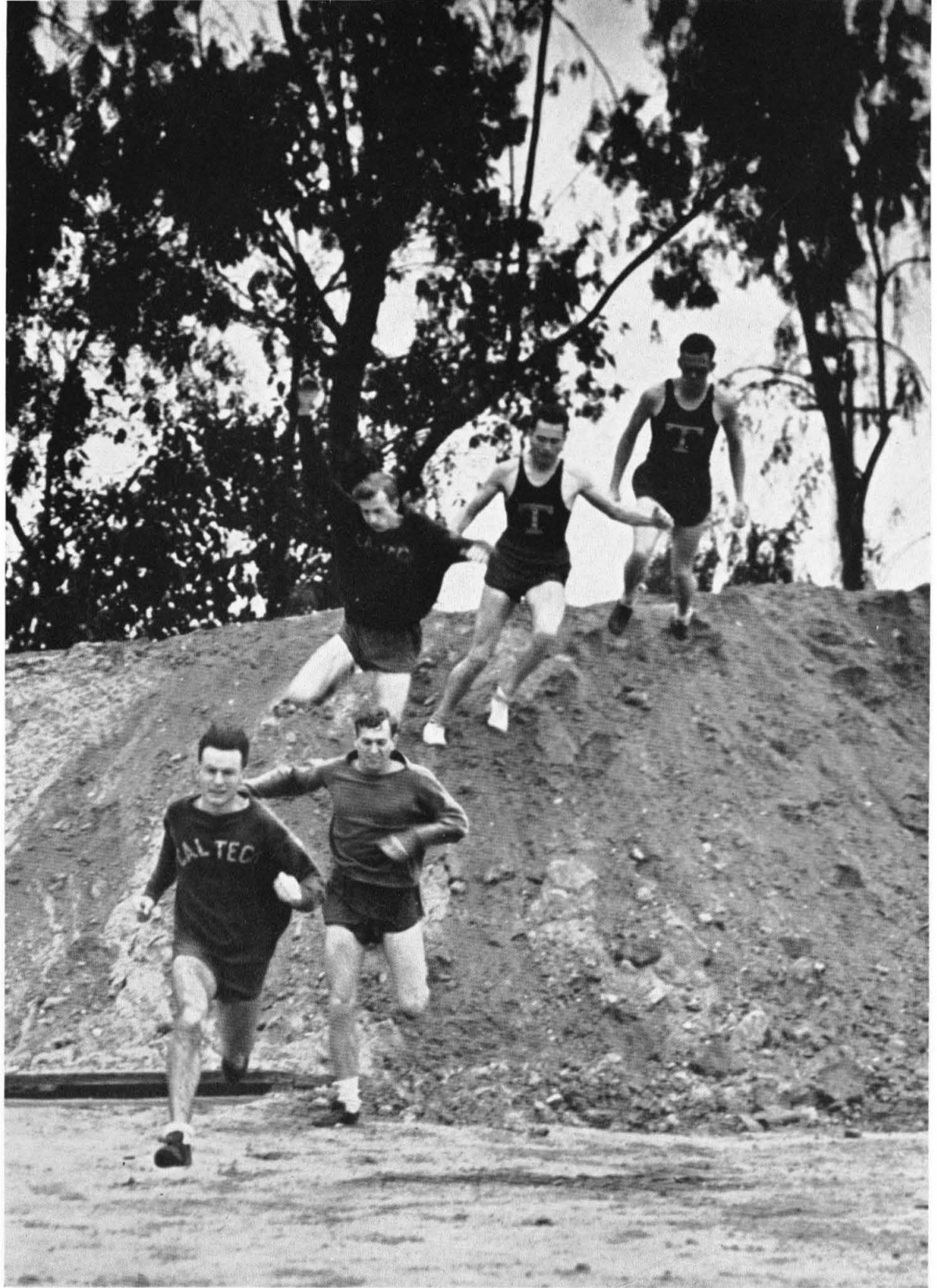
A clean sweep against the Loyola netmen, followed by decisive victories over Redlands, Pomona and Occidental proved that the Beaverbabes had a powerful unit of racket-wielders.

No reflection on the caliber of the freshmen was their lone setback of the season against a strong Montebello High School squad. The invaders boasted a list of star players headed by Jack Kramer, National Boys Champion; and their team ultimately triumphed in Southern California competition.

While other colleges boasted of one or two good players, none of them had a six-man team of such all-around strength as this year's Caltech aggregation. Fred Brunner, second singles man, was elected Captain of the team at the close of the season.

Back row: Kemp, Skalecky, Smith; **front row:** Harper, Brunner, Brooks.





Leather Lungers—*Schlatter*

MINOR SPORTS



Back row: Nellis, Springer, Hanes, Ellis, Schneider; **front row:** Pond, Rudkin, Gates, DuFresne, Hall, Voorhees.

The **Cross-country** squads, with one of the largest turnouts for both frosh and varsity ever recorded, finished a most successful season by winning both of the trophies at the annual Pomona invitational run.

This was the first time in the history of Tech teams that both trophies had returned from this meet. Stan Voorhees and Carter Lowell garnered individual medals for third and fourth places; and Bob Grigg, of the undefeated yearlings, took a fourth place medal.

Dual meets were held during the season with P.J.C., U.C.L.A. and Redlands. Although the varsity squad did not fare so well in these contests, the freshmen managed to place well up near the top, even defeating a Redlands team made up of Bulldog frosh and second-string varsity.

Again this year the runners held a banquet at the close of the season, to celebrate

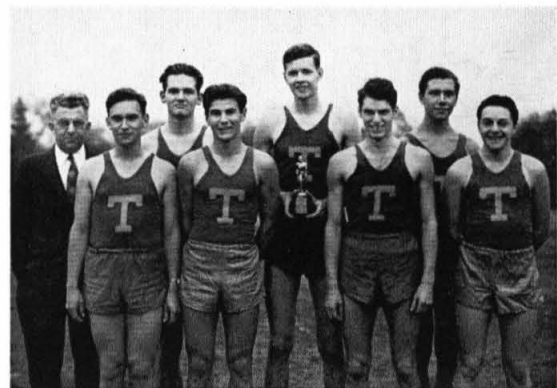
their success and promote a spirit of good fellowship for the coming season.

For next year, the teams hope to have a special course laid out accurately in the foothills by the civil engineering students.

Varsity runners making letters were Charles Gates, captain; Carter Lowell; Stan Voorhees, captain-elect; Herbert Ellis; George Rudkin; Donald Nellis; Armand DuFresne; Marcus Hall; and Steve Clark.

Freshman numerals went to Keith Anderson, captain; Bob Grigg; Bill Marriott; Leo Brewer; Don Loeffler; Eugene Hankey; and Jules Mayer.

Hanes, Mayer, Loeffler, Marriott, Anderson, Grigg, Hankey, L. Brewer.





Back row: Holiburt, Sorenson, Harte, Rowell, Trowbridge, Dougherty, Provine, Lawson, Griswold; **front row:** Wamack, Allen, Balsley, Wetmore, House, Eccles.

The P.A.C. rugby squad, as it is called, is peculiarly organized, in that, composed chiefly of Techmen, it derives its existence and membership in the Southern California Rugby Union from the Pasadena Athletic Club. Bill Wetmore of Caltech was Captain of this year's team, which was managed by Harcourt Bull of the P.A.C.

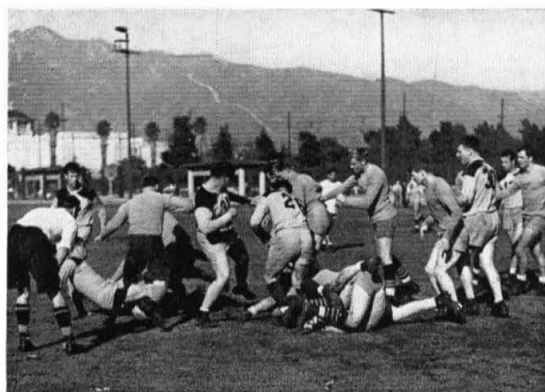
The season, although interesting and valuable, cannot be called successful; as the Prosser Cup Series Championship which the team held the year before was lost. Wins came from Golden State, 10-3, and Santa Monica, forfeit. A 3-3 tie left any

mythical city **Rugby** championship undecided in the Pasadena Majors game. The list of defeats reads: U.S.C., 1-11; San Diego Marines, 6-10; Santa Barbara, 3-14 and 8-10; Spoilers, 5-8; Bruins, 3-15; and Hollywood, 5-13.

Early-season prospects were quite bright until the loss of two P.A.C. men and several scholastically unstable Techsters weakened the team considerably. Improvement came with experience throughout the season; but baseball cut the ranks again before the final game with Hollywood.

On "Pasadena Rugby Day," both the P.A.C. team and the Majors played out-of-towners at Tournament Park. Another big event was the visit of the University of British Columbia rugby team. The contact with the fellows from the north contributed greatly to local interest in rugby and to local understanding of the fine amateur spirit which surrounds the game.

Pasadena Rugby Day



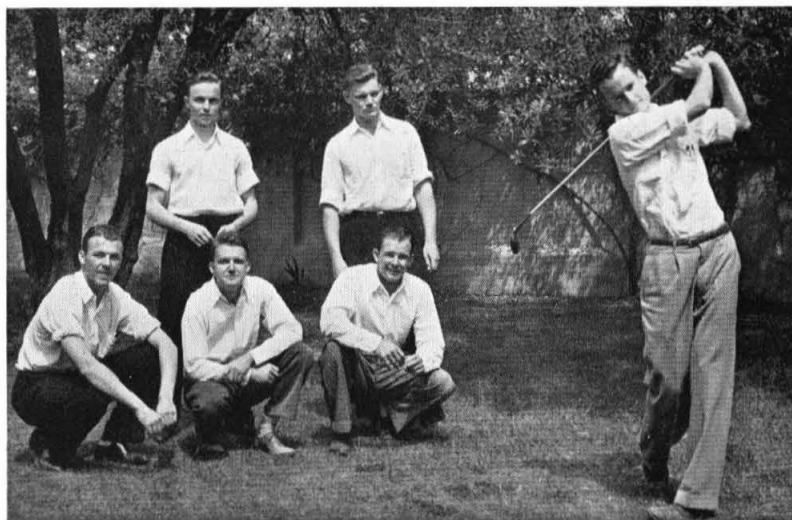
Since the start of a **Golf** team three years ago, interest in the sport at Tech has been greatly increased. This year the season as a whole was fairly successful.

The team, with almost no previous practice, plunged into a strenuous twelve-game season. They made a poor showing for the first few games, going down before U.C.L.A., P.J.C. and Santa Monica J.C. Soon, however, they hit their stride with two decisive victories over Oxy, a win over L.A.J.C., and finally a close match with Pomona which ended in a 10-8 Tech victory.

The Pomona win was the high point of the season. The Sagehens, with an imposing list of victories to their credit, came down to the Midwick course and found the Beavers in top form. In a close battle, the first team won five out of six points. The second team followed by winning four points; and then the third team won the necessary point to assure victory.

Sam Watson was first man and Captain this year; and he and Dave Sherwood played first team. Stuart McLaughlin and Harry Hoiles played second team; and Bob Winchell and Bill Lawson made up the third.

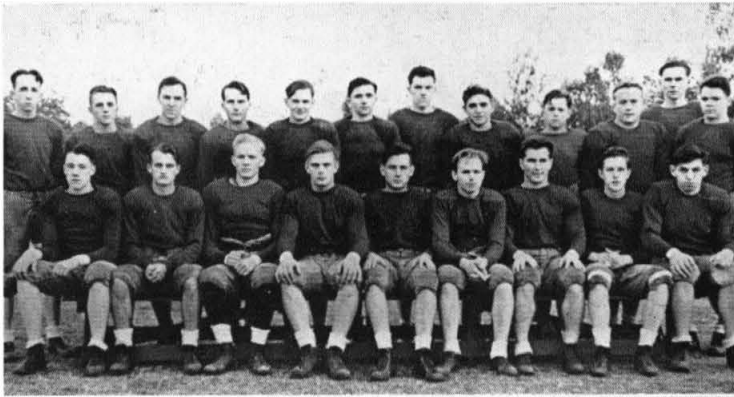
Back row: Nash, Sherwood; **front row:** McLaughlin, Hoiles, Lawson, Watson.





Grunt and Groan—*Martin*

INTERHOUSE SPORTS



Football Champions. **Top**— Fleming — **back row**: Rynearson, McCreery, Bertness, Dowd, Lawrie, Lycett, Fahrner, Shulman, Mickley, Belzer, Skalecky, Gilman; **front row**: Davidson, Milburn, Peterson, Oakes, Snelling, Evard, Blake, Lee, Gerlough. **Bottom**— Ricketts — **back row**: Smith, Longfelder, George, Ropp, Moncrief, Engelder, Nash, Rowell; **front row**: Staatz, Sullivan, Peat, Lavender, Knight, Althouse, Fenzi, Ellery, Elliott.

The Interhouse Trophy, awarded each year to the student house whose athletic teams pile up the greatest number of points in the interhouse competition, was won this year by the Fleming House redshirts. This victory makes it four straight for the Fleming athletes.

The competition for the trophy opened in the fall term with a spirited fight in the round-robin football matches. This year, the Ricketts team, winners the previous year of the gridiron struggles, were tied by the Fleming squad, with three wins and

one loss chalked up for each of the aggregations. Dabney came in third, Blacker fourth, and Throop Club fifth.

Leather-lungers from Dabney took the first place in the cross-country races, followed by Throop, Ricketts, and Fleming. Blacker failed to qualify in all of the runs, so forfeited fifth place.

The only other first-term interhouse athletic competition was the indoor baseball games, with Dabney taking a certain first in the schedule. Ricketts, Blacker, Fleming, and Throop finished in the order named.

Besides the points given for winners in the tournaments, credit is allowed to the houses who have the greatest number of men out for a varsity or frosh collegiate sport. As these "professionals" are barred from the interhouse competition, allowance is made to the house which is thus handicapped. The first term, Throop Club led the others quite a bit in the number of men receiving Varsity and Frosh rating. Ricketts took second, with Fleming third, and Dabney and Blacker tying for fourth.

Indoor Champions — Dabney — **standing**: Campbell, Carstarphen, *Coach* Sam, Folkins; **seated**: Griffis, Wolfberg, Harper, Davidson, Bussard, Gates, Warner.



The close of these first term activities found Ricketts in the lead with 86½ points. Fleming stood second with 73½, followed in a close third by Throop with 70. Dabney took fourth with 68, trailed by Blacker with a total of 27 points for the term.

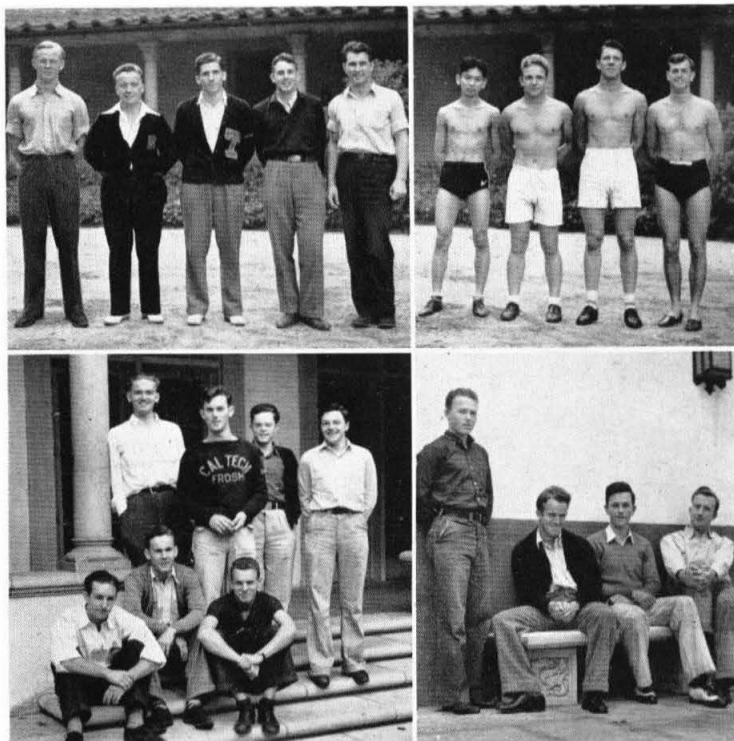
Fleming, however, turned on the pressure in the opening of the second term contests by taking first place in the interhouse basketball and track competition.

The casaba tussles were all fast and exceptionally well played, with the closest battle centering around the Ricketts-Fleming engagements. Ricketts, however, finished only second best in the meets. Dabney took third, followed by Blacker in fourth and Throop in fifth places.

Before the interhouse trackfest, Fleming and Throop were slated to battle it out for first place, but a strong Ricketts squad fought up to the front and nearly beat out the Fleming men who, however, managed to win the meet by six points.

Two meet records were broken in the first day of the meet, with Bailey, of Fleming,

Track Champions—Fleming—**standing**: Austen, Penn, Benton; **seated**: White, Barry, Wileman, Walter.



Wrestling Champions; **Top left**—Fleming: Peterson, Belzer, Wallace, Miller, Blake; **top right**—Dabney: Asakawa, Mills, Carstarphen, Gates. Track Champions; **bottom left**—Fleming—**standing**: Loeffler, Biddison, Mickley, Brewer; **seated**: Austen, Barry, Kemp. Tennis Champions; **bottom right**—Blacker: German, Robinson, Macleish, Stone.

tossing the discus 115 feet, and Ellis, of Ricketts, running the high sticks in 17.1 seconds. Considering the meet was held so early in the season, these records are quite creditable.

Throop finished a strong third in the competition, with Dabney fourth and Blacker fifth. At the close of the meet, excitement was running high as Fleming was then only three points behind the determined Ricketteers in the trophy standings.

Dabney and Fleming then tied in the wrestling matches, with Ricketts coming third, Blacker fourth, and Throop fifth. Some unusual talent was uncovered as the

house grapplers vied for the coveted trophy points.

In the final competition of the second term, handball, Dabney's pill slappers triumphed in a close victory over Blacker. Fleming took third honors, with Throop beating out Ricketts for fourth place.

Honors for Varsity and Frosh rating again went to the non-resident Throopers, who, unfortunately, don't seem to have enough good men left to place so strongly in the interhouse competition.

In the third term, results of which have not yet been released definitely, the four houses and Throop vied for trophy points in tennis, baseball, and swimming.

In tennis, the Blacker netmen had the advantage over their opponents, while the redshirted Fleming squads seemed to take the lead in both the baseball and swimming competition.

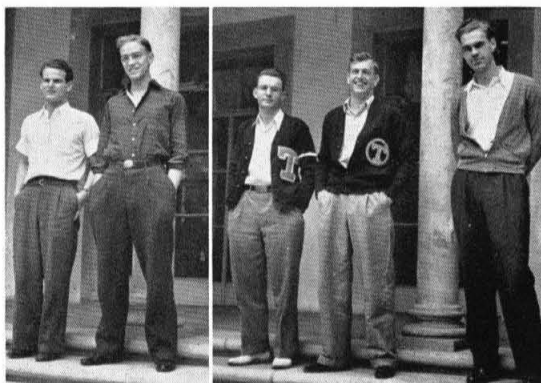
This will make the sixth year of the trophy's existence. The first two years it was won by the Non-Resident Club, now organized into Throop Club. For the past

four years, however, it has been retained by Fleming House.

The other athletic award, contested for by the houses, is Discobolus. A bronze miniature of the famed Greek discus thrower, it passes from house to house, as one will challenge the other in any sport.

All sorts of athletic contests, which must involve at least four players, are held to decide who shall have possession of the Discobolus, and for this reason numerous challenges keep it traveling from one place to another, seldom remaining the possession of one house for a period of more than a month or two.

Handball Champions—Dabney: Sidler, Griffis. Cross-country Champions—Dabney: Voorhees, Gates, Warner.



Caltech's Extra-Curricular Activities .

Caltech's extra-curricular possibilities rest in the four houses and the Throop Club, the four classes, three musical groups, forensics, dramatics, seven inter-collegiate sports, three technical societies, eight general organizations, six honoraries, and student body government.

Indicative of the growth of Caltech's extra-curricular activities is the degree of organization of the Associated Student Body. Today the Student Body is composed of approximately six hundred undergraduates organized as a non-profit corporation. Each undergraduate pays eleven dollars per year Student Body dues, and a special assessment of three dollars for the Big "T" annual. The Student Body dues are apportioned half to the Institute toward the maintenance of athletics, the remainder to the Students' Board of Directors for application to the needs of the Student

Body along other lines.

The fundamental principle of student-student and student-faculty relations is the Honor Spirit. The Honor Spirit is vitalized and enforced thru an Honor System supervised by a Board of Control.

The present Student Body government stands for twenty-seven years of activity by student groups on this campus. Its present form of incorporation was recently adopted in 1935. The Honor System was established in 1912 and strengthened in 1921. The Faculty-Student Relations Committee was formed in 1922. The Court of Traditions dates from 1923.

The Big "T" was preceded by an annual called the "Orange and White." Today's "California Tech" was conceived in 1913 as the "Throop Tech." The Little "T" handbook is the successor of a Freshman handbook first published in 1921.

H O U S E S

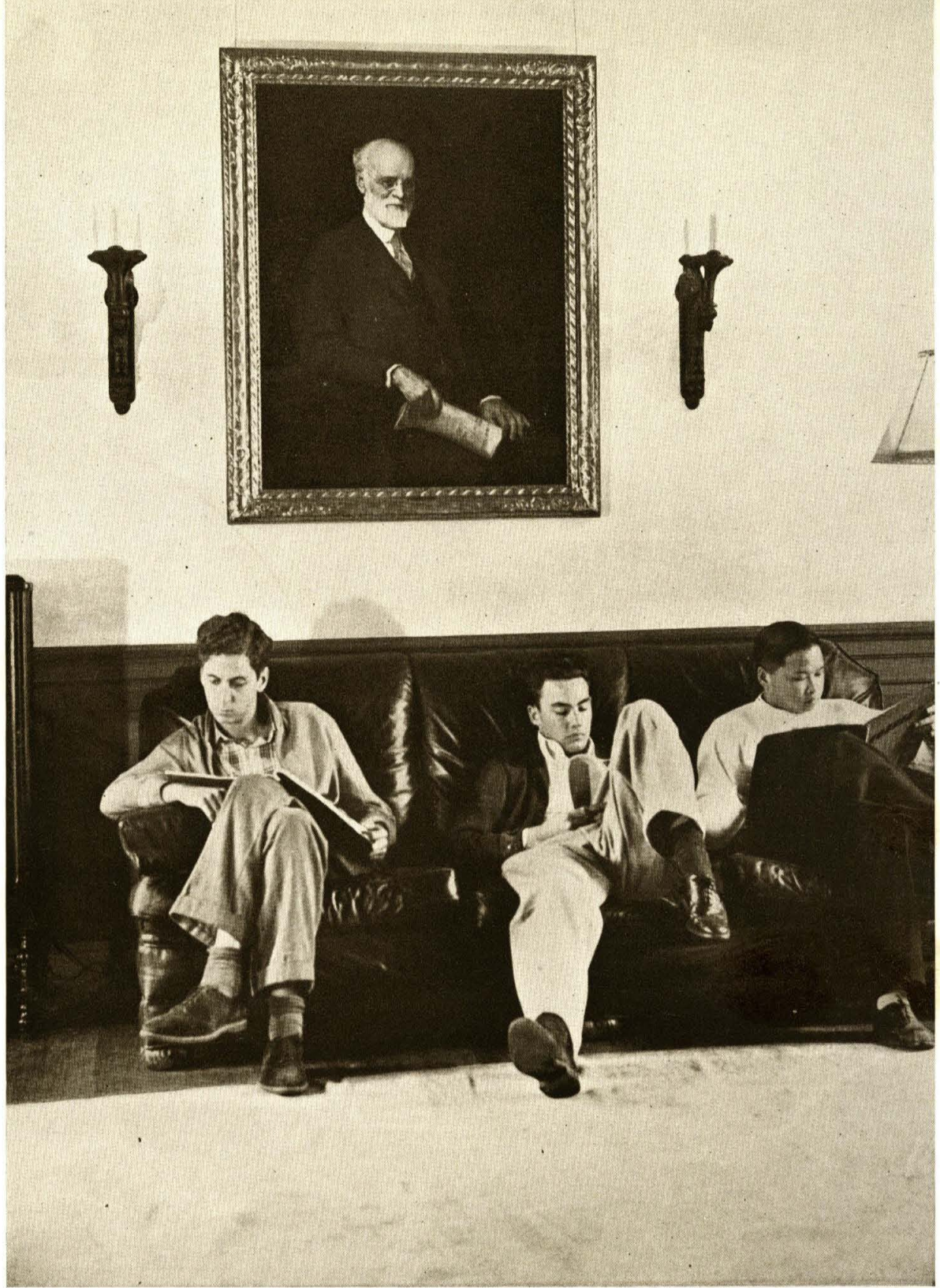


A.D. 1931

Merriam

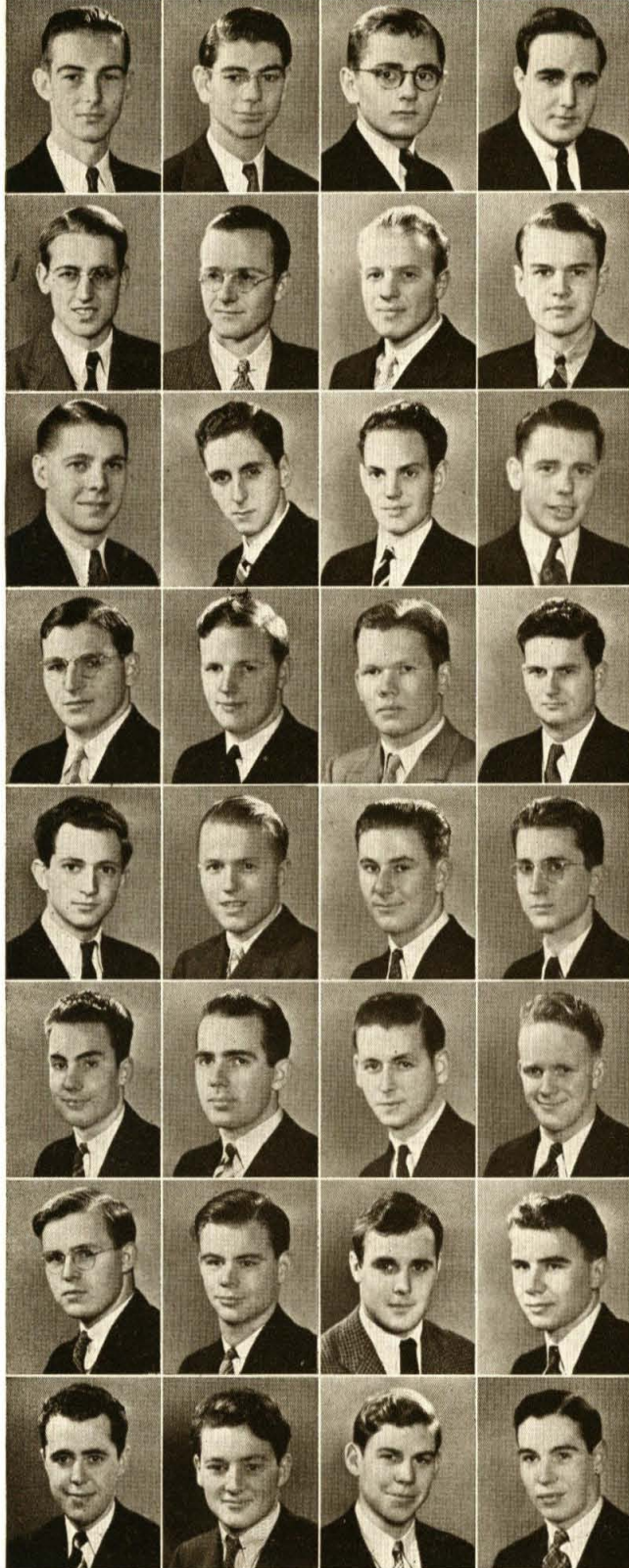
THE STUDENT HOUSES (1931)

“The completion of the first group of the residence halls marks the initial step in a plan to meet the housing and living problems of the students in such a way as to develop a series of eight residence halls, ‘Each to have its own distinctive atmosphere, each to be the center about which the loyalties developed in student days and the memories of student life shall cluster.’”—BULLETIN OF THE CALIFORNIA INSTITUTE OF TECHNOLOGY, January, 1937.



Blacker Lounge—*Strelecki*

BLACKER HOUSE



Beavon
Beller
Benedict
Bonham
Briggs
Caldwell
Carey
Connell

Cornwall
Cowie
Crane
Davies
Dickerson
Ellings
Evans
Forward

Frankel
German
Gewe
Gillings
Goodell
Green
Griffiths
Grobecker

Hadley
Hayes
Hayward
Hines
Hopkins
Horovitz
Ingalls
Jewett

The members of **Blacker** again enjoyed a successful year in many ways. Blacker lived up to its reputation of having men in all phases of activity on the campus and also continued with an active house program.

The year started off with the usual four weeks of freshman rotation, during which time an informal radio dance was held. The next important event was the Hallowe'en dance, when Blacker, decorated to resemble ancient Egypt, proved for the third consecutive time its superior social facility by having the most popular dance as exhibited by the large crowd attending both from Blacker and from the other houses. Informal dances after football games and two staggers completed the term's program.

The second term had as the feature of its social program a formal dance at the Del Mar Club at which some forty-five couples attended. Other events were an informal dance to the music of Hank Evans, a radio dance, a stag theatre party, and a formal dance with the Gamma Phi Beta sorority from U. C. L. A. The third term's diversified activities included a treasure hunt, a costume party with a circus motif, an informal orchestra dance, and a tea dance at the Grove. As a result, the average Blacker man's calendar was

Vice-President Roland Stone, *Treasurer* David Luckenbill, *President* Edward Price, *Secretary* Donald MacDonald, *Athletic Manager* Robert Gewe, *Resident Associate* Harvey Eagleson.



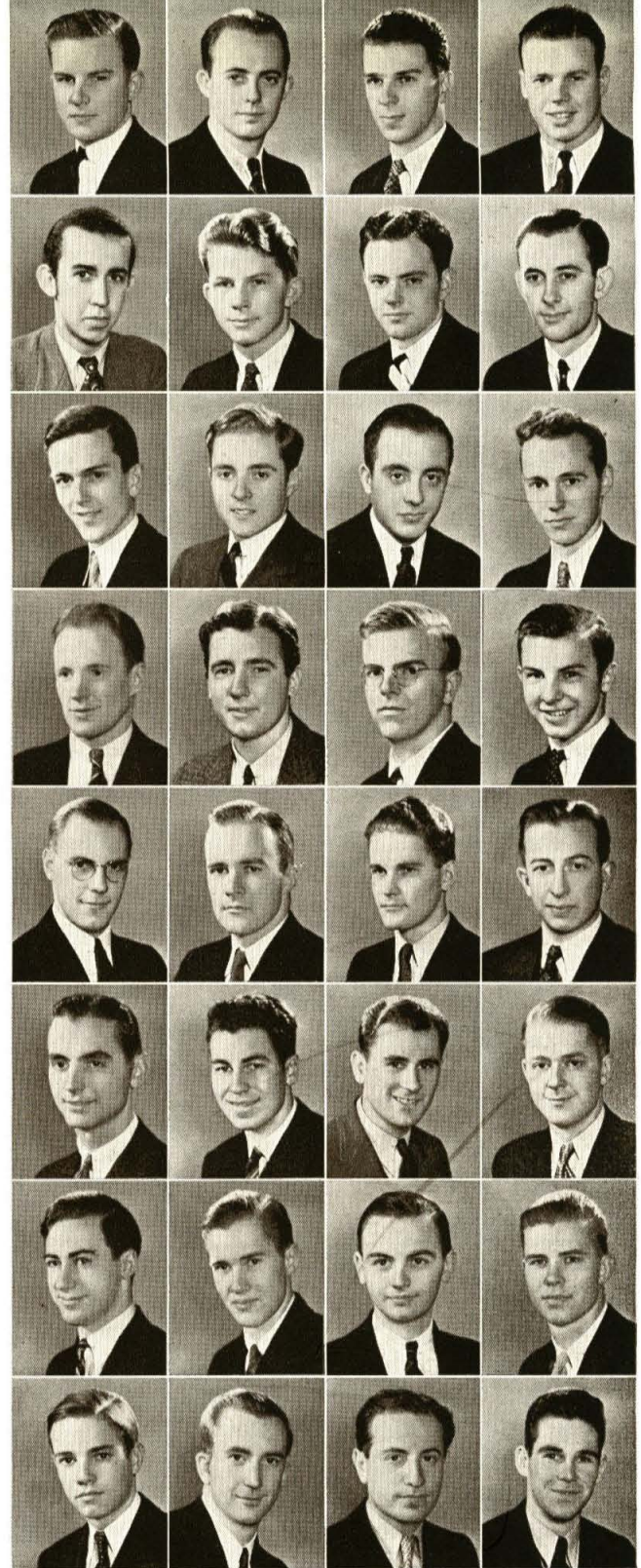
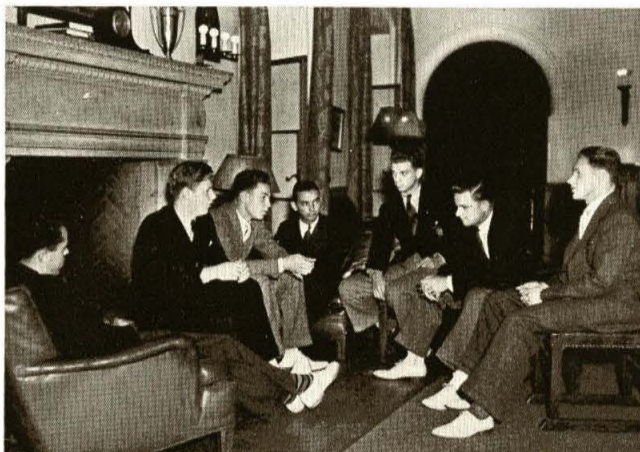
very full indeed. **Blacker** owes thanks for a good year socially to the Social Committee headed by Jack Kinley.

One of the features of house life enjoyed by the men consisted of the entertainment provided for the house by each entry-way. A prize was awarded to the show judged best by the Upperclass Committee. The award this year was given to the shadow play managed by Pete Schaffner as the committeeman in his alley—the skit satirized the life of the House.

In athletics Blacker was not outstanding, but always managed to have a team competing. The interhouse tennis championship was won by Blacker. “Abe” Lincoln, the forensic challenge trophy, has been absent from the Blacker mantel only a little more than a term in four years. Blacker also has maintained the best scholastic average of all the Houses this year.

More informal activities about the House center about the lounge, where bridge is perhaps the most popular diversion. Magazine-reading is also very popular, as is the radio—swing addicts usually overwork the phonograph when the new records are still new. Still more informal games are popular in the rooms and hallways, where the men can relax free from the world’s constraints.

Upperclass Committeemen: Boyd Hopkins, Arthur Ellings, August Segelhorst, Paul Schaffner, John Kinley, Evan Johnson, John McLean.



Johnson
Kybal
Macleish
McLean
Park
Schaffner
P. Smith
Steinmetz

Jones
Longwell
Maleev
Miller
Price
Segelhorst
W. Smith
Stone

Kinley
Luckenbill
Manildi
Morgan
Rechif
Selberg
Spalding
Test

Kuttler
MacDonald
McKee
Palmer
Richards
F. Smith
Steel
Thomas

The associates of the House have been helpful this year in paying attentions to the House; and this has been appreciated by the members. Blacker also owes a great deal of thanks to its Resident Associate, Dr. Eagleson, who has been in Blacker six years and is responsible for a great deal of Blacker's progress during that time.

Besides all these internal activities, Blacker men have been outstanding outside. For two successive years Blacker has had four men on the Board of Directors. Last year they were: Jack McLean, Secretary; Martin Webster, Publicity Manager; Hank Evans, Rally Committee Chairman; Charles Miller, Representative-at-Large—next year: Jack McLean, President; Roland Stone, Vice-President; Hank Evans, Treasurer; Evan Johnson, Rally Committee Chairman. Last year Boyd Hopkins and Dave Luckenbill were Co-Editors of the *California Tech*. Martin Webster and Edward Price edited and managed the 1936-37 *Little "T."* Elliott Bonham filled the position of Exhibit Day Chairman.

Blacker was particularly outstanding in activities in the forensic line; a majority of the debate team was from the House, as has been the situation in the past. The Blacker men of dramatic turn continued to dominate the production of the plays. The staff of the *California Tech* was also predominantly Blacker; and Blacker had a number of men in the orchestra and band, and some in athletics.

With such a year behind it and much expected for next year, it is certain that Blacker has shown its outstanding place on the campus.

Todd

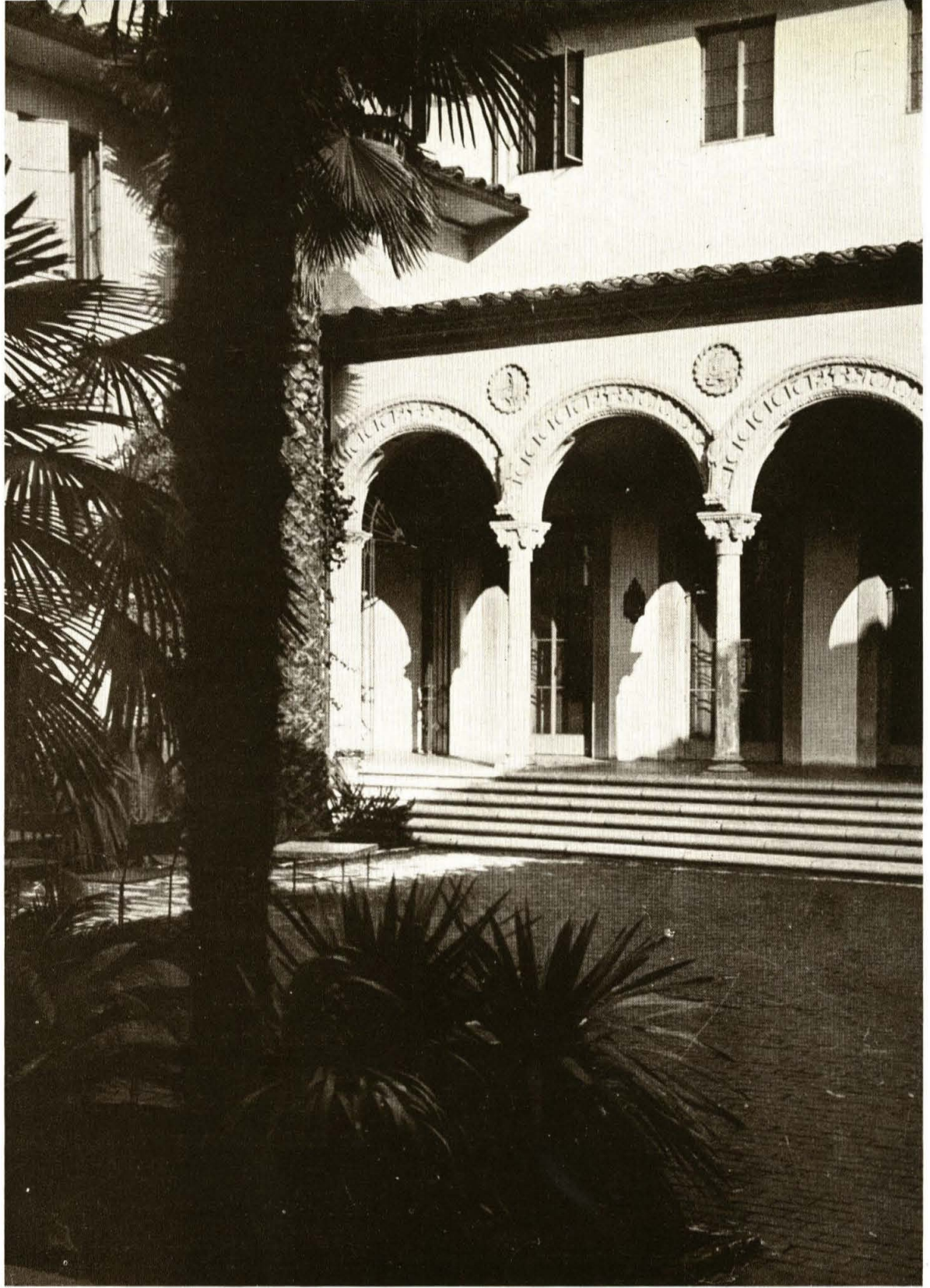
Velazquez

Vetter

Webster

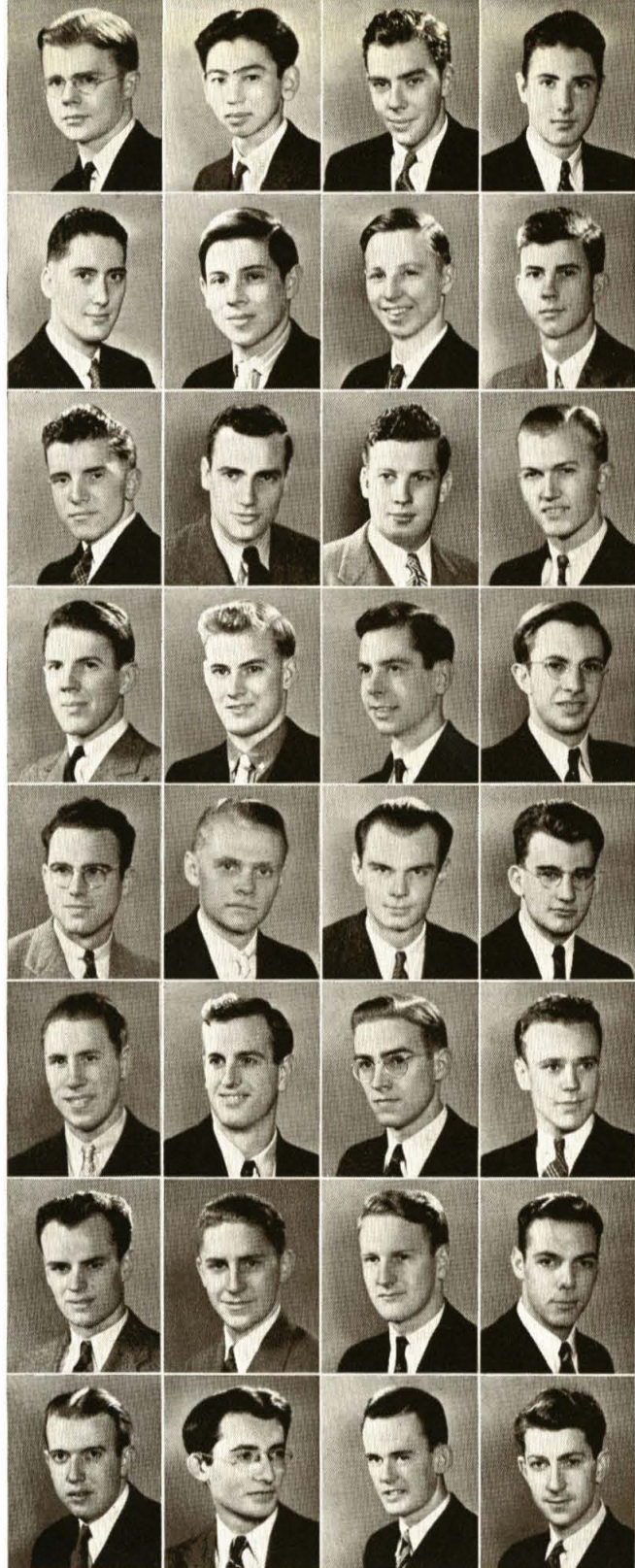
Westheimer





Dabney Court—*Tobin*

DABNEY HOUSE



Alcock
Boothe
Bussard
Carstarphen
DuFresne
Fraser
T. Harper
Jones

Asakawa
Brewer
Campbell
Davidson
Erickson
Gates
Haussler
Kazan

Bauer
Brose
Carroll
Dennis
Folkins
Griffis
Hitchings
Kyte

Berg
Brown
Carlson
Dion
France
J. Harper
Hotz
Legge

Building into **Dabney** House during the past year a well-balanced group of men and a spirit of genuine fellowship has produced more than a group with limited house interests; for, as a supporter of student body activities, it has been one of the most active groups on the campus. Trying to present the opportunity for active participation in all activities by every member, much has been gained both by the men and by the House.

In social activity, in athletics, in scholarship and in other activities, Dabney has been outstanding on the campus both as an originator of new ideas and as a faithful supporter of tradition. Highlights of the year's well-filled social program might be listed as the most popular dance of the interhouse Halloween party, the Thanksgiving Wilshire Bowl party, the eventful snow party at Big Pines, the traditional and very informal Hodge-Podge, the long-remembered winter formal dinner-dance at the Mayfair Hotel, Dr. and Mrs. Munro's formal supper dance at the Valley Hunt Club, and the traditional garden dance held under the stars in the house court.

Boasting good representation on all varsity athletic teams, Dabney likewise might be called the "House of Captains," for it possesses as outstanding members leaders in several sports. Athletic

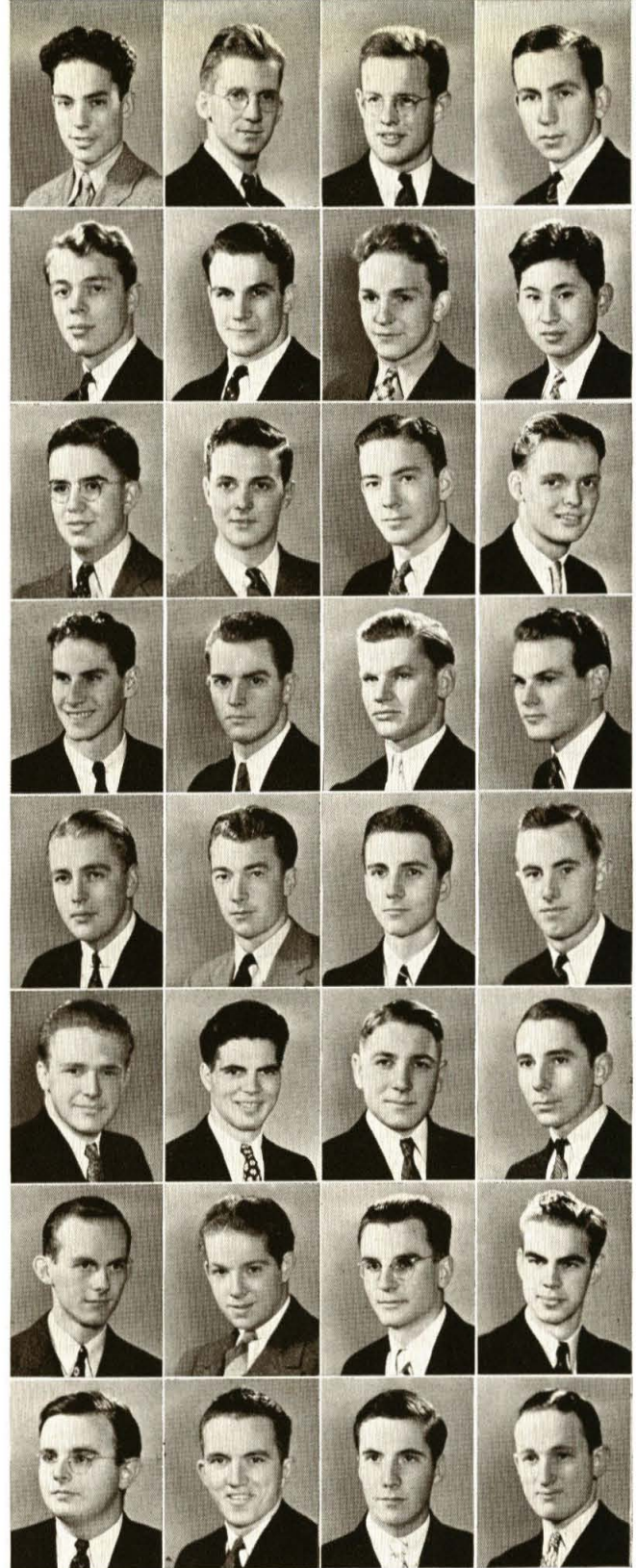
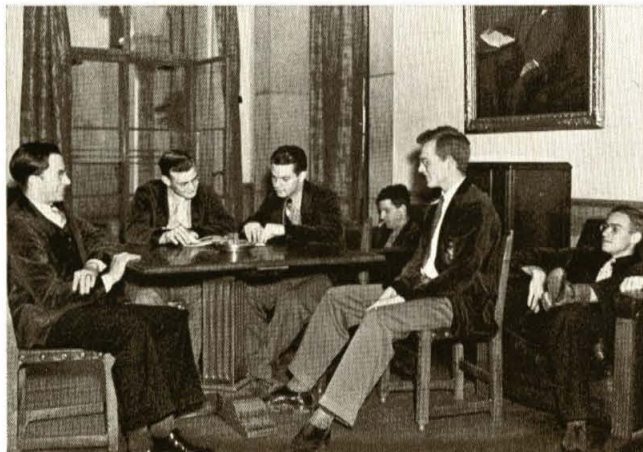
Vice-President William Wetmore, President Gordon Bussard, Athletic Manager Stanley Wolfberg, Resident Associate Donald Clark, Treasurer Charles Gates, Secretary Harold Smith.



chiefs living in **Dabney** are: Football Captain Bill Wetmore, Basketball Captain Hal Smith and Captain-elect Stan Wolfberg, Tennis Captain Tom Harper, and Cross-country Captain Charley Gates and Captain-elect Stan Voorhees. In addition, the House has enjoyed a very successful year of intramural athletics, being interhouse champions in indoor baseball, cross-country and handball, besides sharing the interhouse wrestling championship. As last year, the Discobolus Athletic Challenge Trophy spent over two-thirds of its time in Dabney, seldom leaving the well-grooved place on her mantel. A good spirit characterized all teams, win or lose; and with an active backing from the other house members, Athletic Manager Wolfberg and Company can look back on a successful year in every way. Dabney managed to keep a good standing in the race for the interhouse trophy, although it never seriously challenged the leaders. This showing in athletics was only a part of Dabney's attempt to do well in all lines.

Outstanding as an active and forceful group on the campus, as shown by the fact that she has three of the six men in school selected for the national "Who's Who Among Students in American Colleges," Dabney likewise led the houses in scholarship averages at the last survey of the year; so

Upperclass Committeemen: Frederic Dion, Donald Davidson, Harold Sharp, John Legge, Ethan MacMichael, LeVan Griffis.



Levit
Meanley
Munoz
Schuman
H. Smith
Snyder
Teague
Weinberger

Lewis
Miller
Paul
Sharp
O. Smith
Stones
Tuttle
Wetmore

MacMichael
Mills
Payne
Sherwood
R. Smith
Sweningsen
Voorhees
White

McCracken
Morikawa
Regan
Sidler
W. Smith
Taggart
Warner
Wolfberg

that as a compact and well-rounded group of men with a genuine spirit of fellowship, the members of Dabney House cannot be beaten. Although such results could never have been achieved without the ever-present cooperation of all house members, credit for the organization and much of the unseen work must fairly be given to the officers and to the upperclass committeemen.

Many men of Dabney have taken outstanding parts in work about the campus. On the Board of Directors for the past year were Gordon Bussard, Treasurer, and William Wetmore, Athletic Manager. Next year's Board of Directors finds as members Stanley Wolfberg, Athletic Manager, and Jack White, Representative-at-Large, from Dabney. Don Davidson, President of the Junior class, and Wendell Miller, President of both the Senior Class and the Beavers, were also prominent members of Dabney House.

Dabney was active on the campus through work in journalism and dramatics, as well as in the athletics in which she stood out.

Dabney's non-resident associates have been particularly helpful to that house this year as they have been in the past. The dance given by Dr. and Mrs. Munro at the Valley Hunt Club was particularly enjoyable and was indeed one of the most pleasant social events of the past year at the Institute. Other associates have also been very helpful in aiding the House with its program. Another addition to Dabney this year was the appointment of Dr. "Butch" Clark as resident associate to replace Mr. C. K. Alexander, who had been in the House for some time. Dr. Clark was well-liked by the members; and his welcome suggestions and timely advice were greatly appreciated by the House.

Although it will miss its graduating men next year, Dabney has much good material in its lower classes and is expected to continue along the same lines.



Fleming Court—*Strelecki*

FLEMING HOUSE



Anderson
Barry
Benton
Brewer
Dowd
Farnham
Gilman
Hoiles

Austen
Battle
Bertness
Clarke
Edwards
Freede
Grainger
Holmes

Austin
Beck
Biddison
Davidson
Fahrner
Friend
Hardenberg
Kemp

Bailey
Belzer
Blake
Davis
Farneman
Gerlough
Harris
Kimball

Residents of **Fleming** House hold the unorthodox view that there are worth-while things to be acquired from Tech besides mere engineering or scientific knowledge. Few of them will let their work monopolize their time to such an extent that they have no room for outside activities. The result is that Fleming men have more than their share of good times and constitute one of the most lively and up-and-coming groups on the campus. Perhaps another characteristic of its members is their individuality and initiative. One can never tell when the men of the House will gather in the basement for all manner of bizarre contests or games, or meet in the lounge for a program of skits put on by individual entries. These numerous get-togethers help immeasurably to unify such a diverse group of men as any aggregation the size of Fleming House is bound to contain. However, while all types are represented, from those who can amass 250 credits in a term through a majority who get gentlemen's grades to those who are interested in practically everything but studies, the House is closely knit. Such a diversity of members is desirable to give a much-needed balance; and variety of interests is requisite to the maintenance of a House which gets the most out of Tech.

Athletic Manager Theodore Bertness, Entertainment Chairman John Austen, Secretary William Lawson, Vice-President Munson Dowd, Social Chairman Harry Miller, President John Edwards.

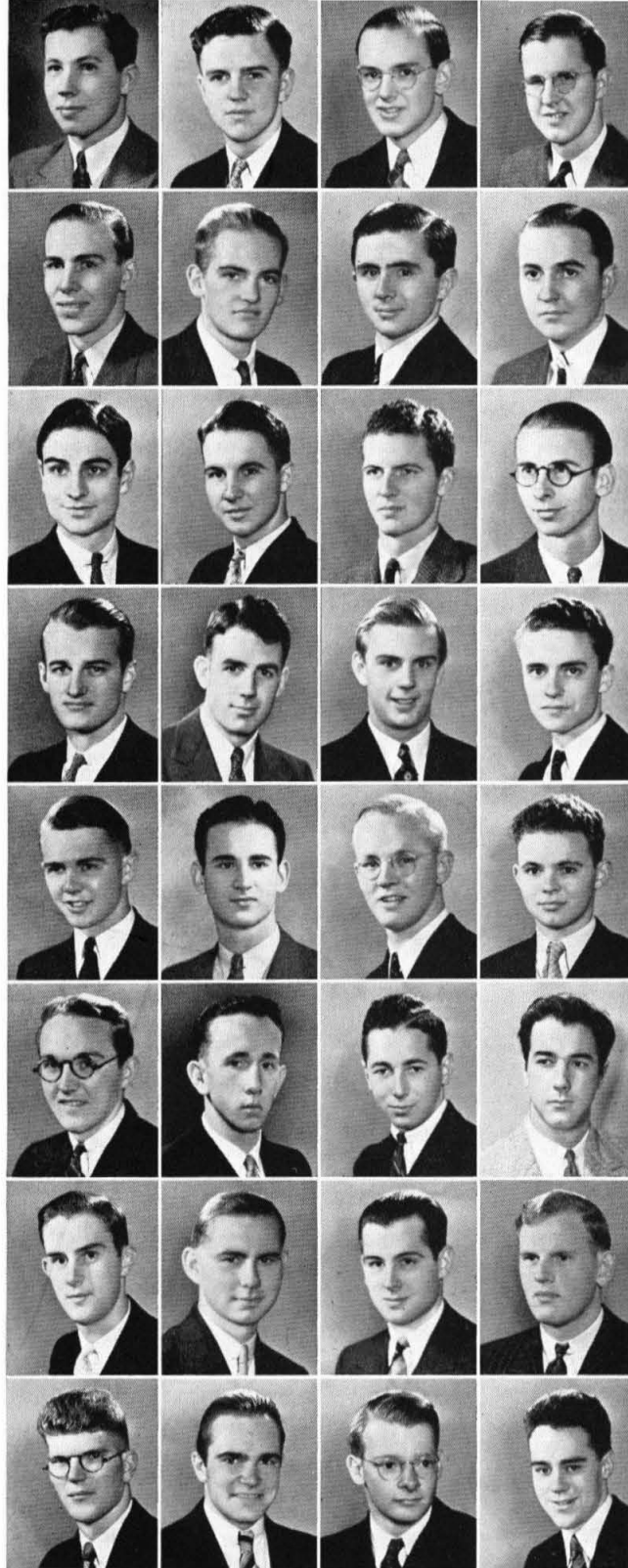


Again this year, **Fleming** has continued the progress of past years. While there are few outstanding events of which to tell, the members feel that they have had their share of entertainment of various kinds, have had a lot of fun on the athletic fields, and have not neglected their academic work. At any event, they have had a darn good time.

Fleming House has always had an athletic heritage. They were the first of the four student houses to win the Interhouse Athletic Trophy; so it was only natural that a good part of their efforts should have been spent in an effort to make it four in a row. So far it would appear that they have succeeded admirably. At present, with only swimming and baseball remaining, she is leading her nearest rival by a comfortable margin. It looks as if the goal of the present Seniors in the House, namely, to keep the Trophy in the House during their four years, is going to be achieved. A large measure of the House's athletic success this year is due to its freshman members. They are a very active group and have made up a large part of all frosh teams, thus contributing many valuable points to their House.

In spite of this activity in athletics, their social life has not been neglected. Highlights of the

Upperclass Committeemen: Ted Fahrner, Treasurer Gardner Wilson, Ralph Benton, Wilbur Snelling, George Mann, Charles Clarke, Willard Farnham.



Langerud
Llewellyn
Main
Milburn
Osborn
Russell
Siechert
Townsend

Larson
Loeffler
Mann
Miller
Penn
Rynearson
Skalecky
VanDyke

Lawrie
Lycett
McGraw
Oakes
Peterson
Schneider
Snelling
Varnes

Lee
Lynn
McSparran
Offeman
Pullen
Shields
Thompson
Walker

social program were a sport dance held at Oakwild, a joint no-date dance held with Dorsey Hall of Scripps, a formal dance at the Deauville Club, the traditional freshman dance, and various stags and record dances. At present the house members are looking forward to the high point of the year, an all-day beach party and various stags and record dances. In addition, many men found time to attend the polo matches at Midwick as the guest of Mr. and Mrs. Scott Brown, non-resident associates of the House. The House is further indebted to Mr. and Mrs. Willard Jackson, also non-resident associates, for their generosity in obtaining the services of the Abas String Quartet, who played well and interestingly at a tea given by the House. This concert was part of a series which were given in all the houses during the course of several weeks.

As this year draws to a close, Fleming members may look back over the year with a feeling of satisfaction, and may rest assured that in the future, as always, the House will offer the same diversified program of athletics, social functions, stags, and concerts; and, in addition, there will be the Fleming House originality and spontaneity that provides the keenest enjoyment and warmest memories of college life. These qualities are, we believe, particularly Fleming's.

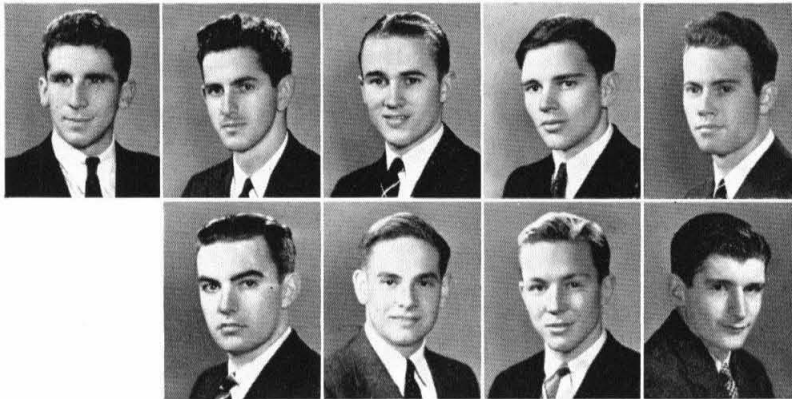
Wallace

Walley
Wilson

Walter
Winchell

White
Youngs

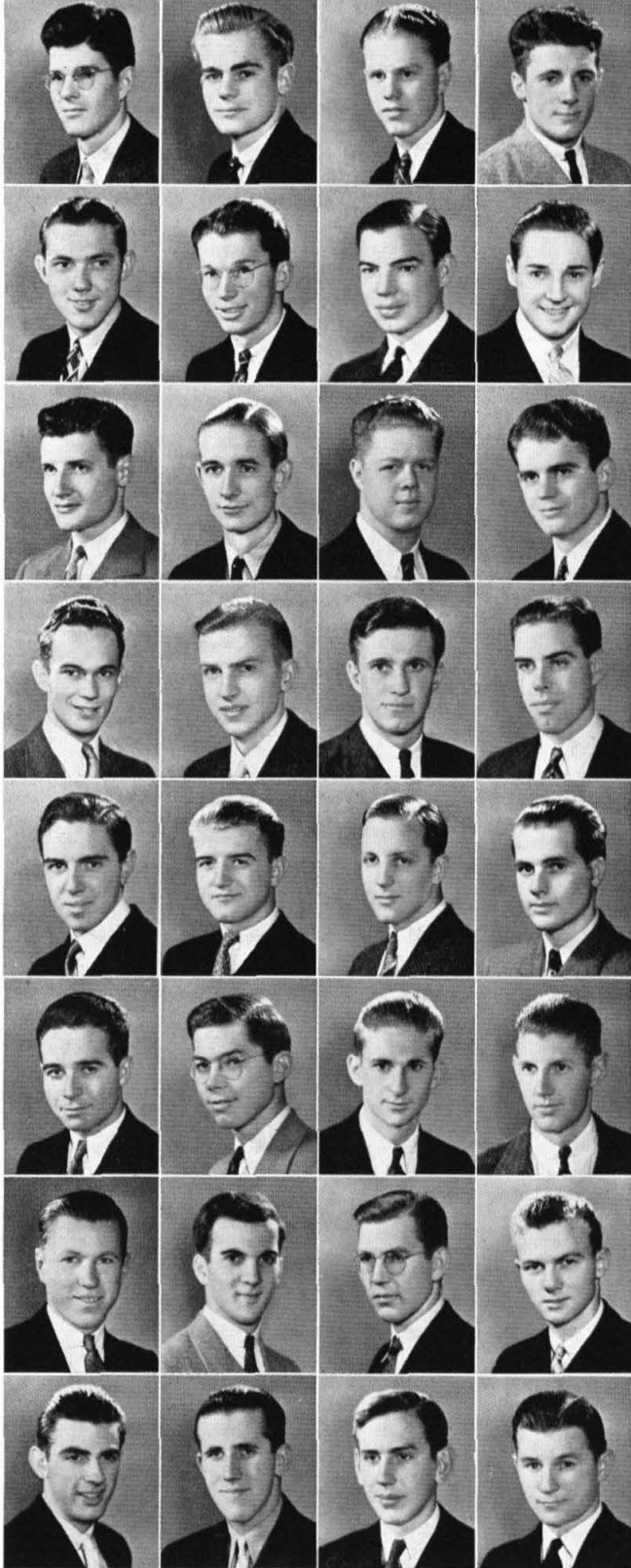
Wileman
Zimmerman





Ricketts Archway—*Strelecki*

RICKETTS HOUSE



Ahlroth
Bennett
Cox
Elliot
Flower
George
Hulbirt
Lavatelli

Allen
Bergmann
Crozier
Ellis
Foster
Goodmanson
Jewett
Longfelder

Althouse
Brown
Dessel
Fenzi
Frampton
Hagen
Keyser
Mackay

Balsley
Chatham
Ellery
Fleming
Frost
Horkey
Knight
Mackie

In sports, **Ricketts** House again measured up to her usual high standards. Varsity and frosh teams always found an adequate representation of Ricketts men in their ranks. Calculated to land in fourth or fifth place in the competition for the interhouse trophy, the House maintained first position throughout the major part of the year. After getting off to a good start in indoor baseball by placing second, the Ricketts House team shared first honors with that of Fleming House in the football scramble. This year's occupation of first place in football is the third consecutive time that Ricketts has attained this position, giving her undisputed supremacy in this sport. Track found the Ricketts team, which was slated to fight a hard fight for last place, barely nudged out of the first spot. Again this year the house Varsity secured second place in basketball by a safe margin. In baseball, Ricketts contributed most heavily to the support of the Institute varsity, and still put out a first-class interhouse team. These triumphs, plus consistent work in the minor sports, are what kept the House near the top throughout the year.

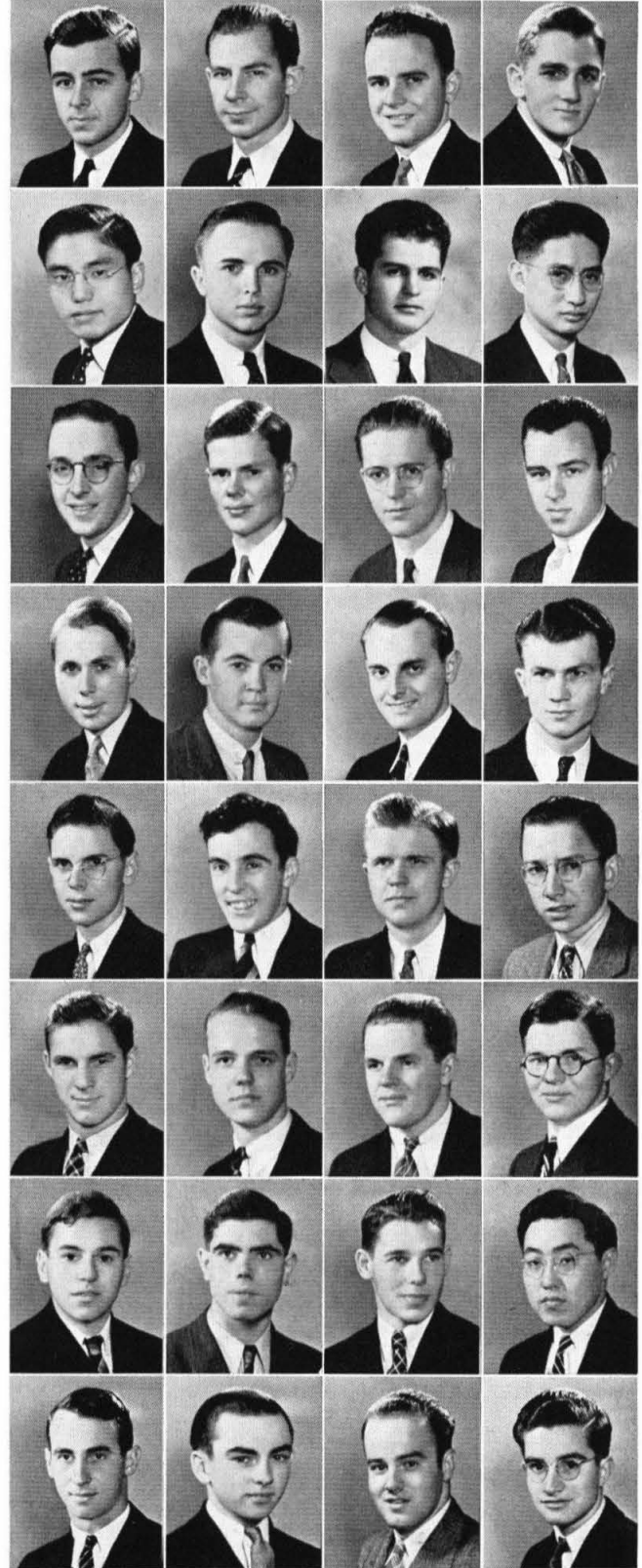
In the field of social activities, as well as in the field of sports, Ricketts House excelled. Although getting the freshmen settled barred all the planned activities during the first four weeks of

President Richard Ridgway, Treasurer Warren Fenzi, Secretary William Norton, Vice-President Bruce Elliott, Athletic Manager William Nash.



school year, **Ricketts** lost no time in welcoming its new members when they arrived. All the game tables and a bar were moved into the lounge; and fortunes in "Ricketts Bucks" were made and lost by the minute at the annual smoker. The evening wound up with a program of local magicians, and imported dancers giving a rendition of the hula. The general opinion gotten by the janitors as they swept up the cigar stubs and rolled out the empty cider kegs was that Ricketts was "off" to another year. Of the other three annual affairs, much the same can be said. They were the best yet! This was largely due to the fact that the dances were better attended than they have ever been in the past. The "Barn" had its floor constantly crowded during the interhouse Hallowe'en dance. Traditional comers to this affair have learned to look forward to an evening of fun and rollicking in this delightfully rustic setting. The formal, last year held at the glamorous El Trocadero, was given the second term of this year at the swank Victor Hugo in Beverly Hills, carrying out the idea of having one big off-campus dance. The exclusiveness of the Victor Hugo was added to by the fact that the House had its affair in a private section with its own orchestra. Finally, the spring dance, held outdoors between Ricketts and Fleming,

Upperclass Committeemen: Martin Poggi, Richard Rowell, William Nash, Lowell Hulbirt, John Merriam, Clay Smith, Douglas Rollow.



Mahoney
Nakada
Norton
Poggi
Root
Smith
Stowell
Van Fleet

Merriam
Nash
Oakley
Reynolds
Ropp
Spielberger
Sullivan
Weir

Moncrief
Nichols
Page
Ridgway
Sandberg
D. Staatz
Thomas
Wilkinson

Nagle
Nojima
Phillips
Rollow
Sandiford
M. Staatz
Tomiyasu
Zukerman

was voted the best hop of the year and proved to be a perfect climax to the social programme of the year. Here, under a California moon and Chinese lanterns, the Ricketteers danced and romanced to the music of Harry Baker and his orchestra.

The House entertained its Associates and friends at two affairs this year. The first time was at a Sunday afternoon concert given by the Abas String Quartet through the courtesy of Mrs. Jackson. After the concert, tea was served in the dining room of the House. The second affair was a novel "revolving banquet" at which the guests change tables after each course. This revolving idea was suggested by one of the non-resident associates, Mr. C. B. Voorhis, and was done in order that each guest might have an opportunity to meet the maximum number of the fellows in the House.

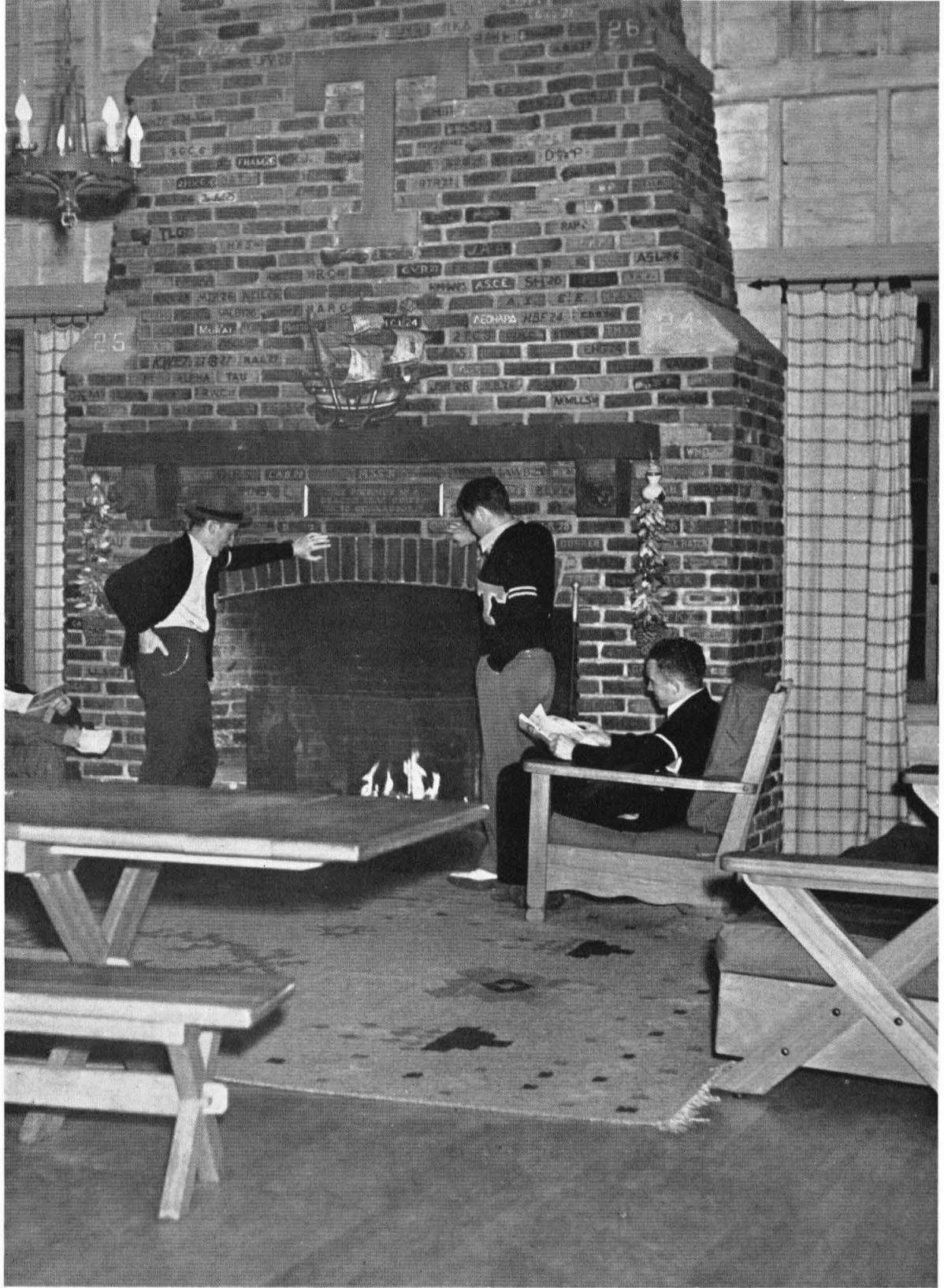
Also novel in the list of activities was an affair which consisted of a dinner at the House, a Treasure Hunt immediately following dinner, and a dance after that. Thanks to the ingenuity of Blacker's "Doc" Eagleson, the clues were of such a nature that few of the searchers reached the end. Also included in the evening's entertainment were two spanish exhibition dances.

Two exchange dances were held between Ricketts House and Scripps College, following an idea introduced by Vice-President Bruce Elliot. The first of these was held with Clark Hall, the second dance with Dorsey Hall.

Mr. and Mrs. C. B. Voorhis gave the members of the House a barbecue supper at their home which was even better than a similar party given by them last year. In addition to all these, a stag party was held each term: the first a bowling party, the second an ice skating party and the third a Balboa Beach Stag.

At the end of the first term, Mr. Mac Rae, Resident Associate, went to New York to work in the Bell Telephone Laboratories. Although he was missed very much, in Mr. Mellinger, the new Associate, the men found adequate compensation for the loss of Mr. Mac Rae. Mr. Mellinger comes from Drake College, and is spending two years here in order to get his master's degree in aeronautical engineering.

In summary, everything has combined to make this one of the most successful years in Ricketts House history.



Saturday in the Lounge—*Martin*

THROOP CLUB



Adams
Baker
Bower
Campbell
Cleveland
Daams
Dixon
Flint

C. Anderson
Barber
Bragg
Cardwell
Cooper
Davis
Diehm
Gerhart

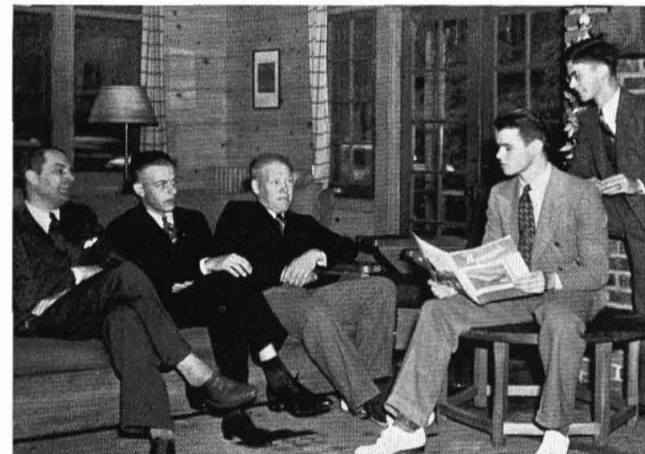
K. Anderson
Billheimer
Brown
Carrick
Craft
Day
Dorwart
Golson

Axtman
Blue
Burton
Carter
Cutler
Degnan
Downing
Gombotz

Growth of the **Throop** Club in activity and organization has been continued this year as in the past. The difficulties in bringing together a group of men who are not thrown together all the time has been only a challenge to the officers and has resulted in the formation of an excellent organization based upon the cooperation of all the members of the organization. The Throop Club now embraces a rather large membership of men active in all lines of campus activity and glad to participate in the various club activities, which include dinners, stags, dances, teas, and athletic participation.

The functions of the Throop Club center about the lounge which was built by the members last year. Here the members find a good spot to read magazines, play bridge, listen to the phonograph, sleep on the comfortable furniture, or even study during the day. Here dinner meetings are held every two weeks. The lounge also affords a splendid place to hold dances whenever the members wish. When some social function is scheduled for the evening, a small group of busy men is usually seen about the lounge making ready for the event by polishing the floor and preparing the decorations. In the year and a half of its existence, the lounge has become very popular.

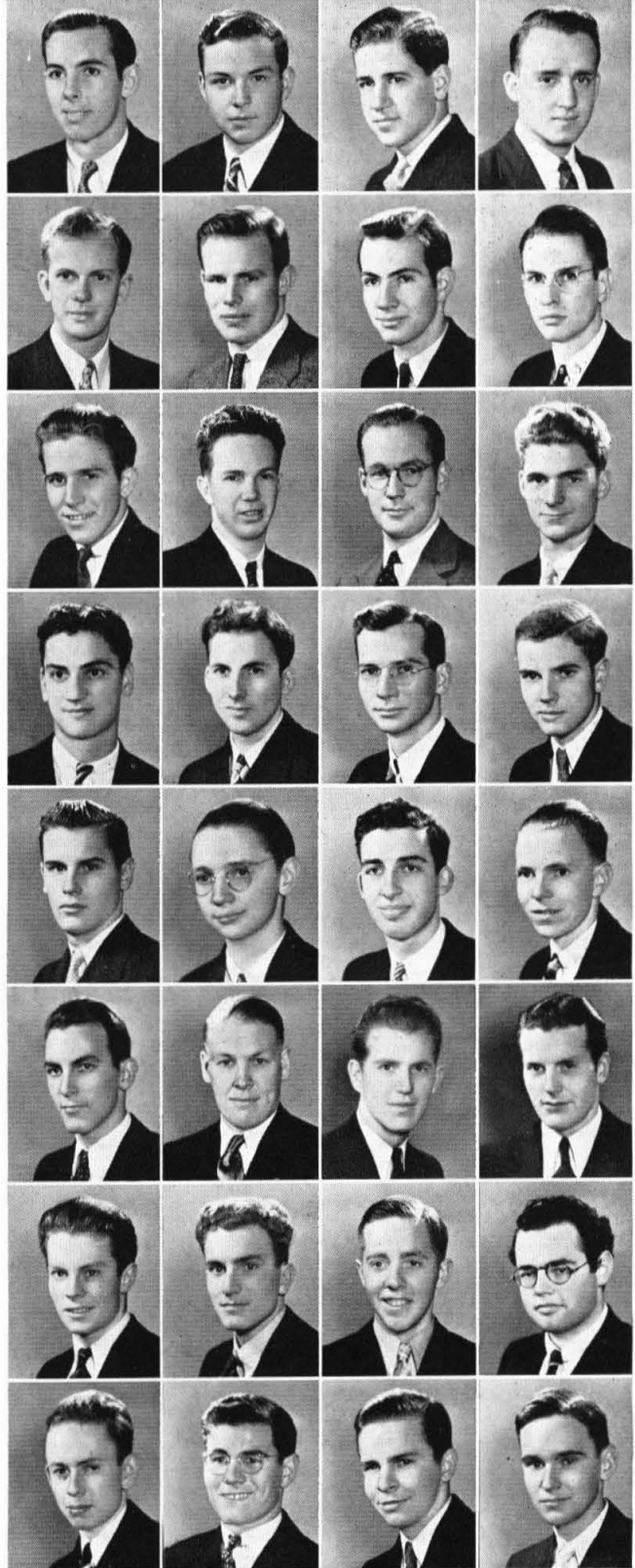
Associate L. Winchester Jones, President Alton Pabst, Secretary Carl Larson, Treasurer Jack Baker, Vice-President Thomas V Davis.



An extensive **Throop** social calendar began on the first night of school with a stag dinner held to honor Freshmen and new members. President Al Pabst acted as toastmaster. This stag was an auspicious start for the club year and was well attended. After the Pomona and Oxy games Throop continued its traditional policy of holding open house. At Thanksgiving, Bill Nance furnished the music for a semi-formal dance which was well attended. Several dinner meetings were held during the first term. The term's social activities ended with a record dance held in the lounge after finals were over.

Activities for the second term began with a tea in order to mark the first anniversary of the opening of the new lounge. Mrs. Millikan poured; and the Abas string quartette gave a recital of chamber music. After the Occidental basketball game, Hank Evans played for a sport dance in the lounge; and at a stag held later Professor Jones amused all by breaking the bank. A radio dance in the lounge and a dance at the Altadena recreation center added to a full social program which was climaxed by a dance with Ricketts at the La Canada Thursday Club. Many of the members spent all or part of the vacation enjoying the various attractions of Balboa.

Sophomore Chairman Jack Osborn, Athletic Manager James Van Horn, Publicity Manager Blaine Dixon, Librarian George Rudkin, Social Chairman Claude Brown.



Goodin
Hatfield
Hofmann
Jacobs
Kimball
Laird
Levet
Maguire

Graybeal
Haugen
Horine
James
Kluge
Larson
Lockwood
Marriott

Hall
Held
Horne
Jones
Kohl
Leggett
Lolmaugh
Mason

Harlan
Hiatt
Howard
Keller
Kupfer
Lentz
Love
Mayer

The second annual dance with the non-resident girls of Occidental, starting the third term season, turned out to be so popular that it is expected to be continued in the future. This started a rather complete social program for the term, including dances of all kinds: dignity demanded a semi-formal affair—the less dignified members prevailed on the others to have a sport dance—and those not satisfied with even this were able to swing a “Jam Session” at which a great deal of fun was had. To round off the program, a theatre party

was held to please the more intellectual element.

A comparison of Throop Club activities this year with those of former years shows that the new lounge has been a big factor in Throop’s social life. It has given the group an excellent place to assemble on the campus, and the result has been a great expansion socially. In addition to social affairs, Throop was well represented in athletics and in all forms of student-body activities.

D. Meyer
Ohlsson
Porter
Strong

R. Meyer
Oldson
Rudkin
Tielrooy
Wilbur

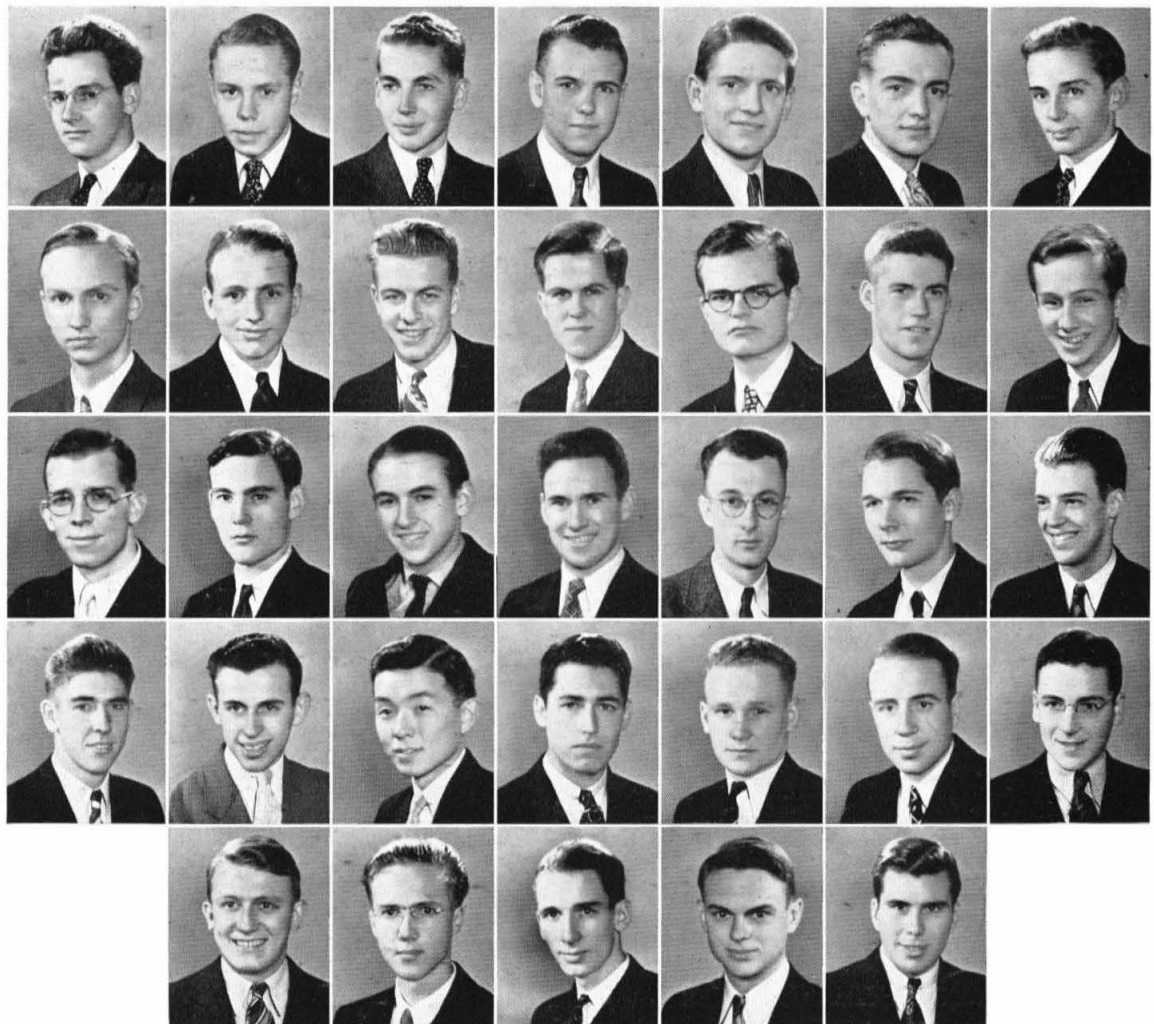
Moore
Pabst
Sattler
Tsubota
Williamson

Nellis
Palmer
Schlatter
Walker
Wimpress

Nicholson
Parker
C. Sheppard
Walter
Worcester

North
Partch
H. Sheppard
Wayman
Yale

Oder
Paul
Shisler
Weaver



Caltech's Campus

The major portion of the campus (22 acres) was obtained in 1908, and the remainder (8 acres on the east end) was acquired in 1923. The physical properties of the Institute include, beside the main campus: property on Arden Road, Biological Plant Laboratories on the north side of San Pasqual Street and in the city of Arcadia, a Biological Marine Laboratory at Corona del Mar, a Seismological Laboratory on the west side of the Arroyo Seco. On the campus proper are such wooden structures as the Steam, Gas Engine, and Hydraulics Laboratory, the barracks, and dormitory. The permanent buildings are listed below each with the date of construction.

1910—Throop Hall (then Pasadena Hall).
1916, 1926—Gates Chemical Laboratory.

1920-1923—Norman Bridge Laboratory of Physics.

1922—Culbertson Hall.

1924—High Potential Research Laboratory.

1927—Engineering Research Building.

1928—Dabney Hall of Humanities.

1928—William G. Kerckhoff Laboratories of the Biological Sciences.

1928—Daniel Guggenheim Aeronautical Laboratory.

1930—The Athenæum.

1930—Astrophysical Instrument Shop.

1931—The Student Houses.

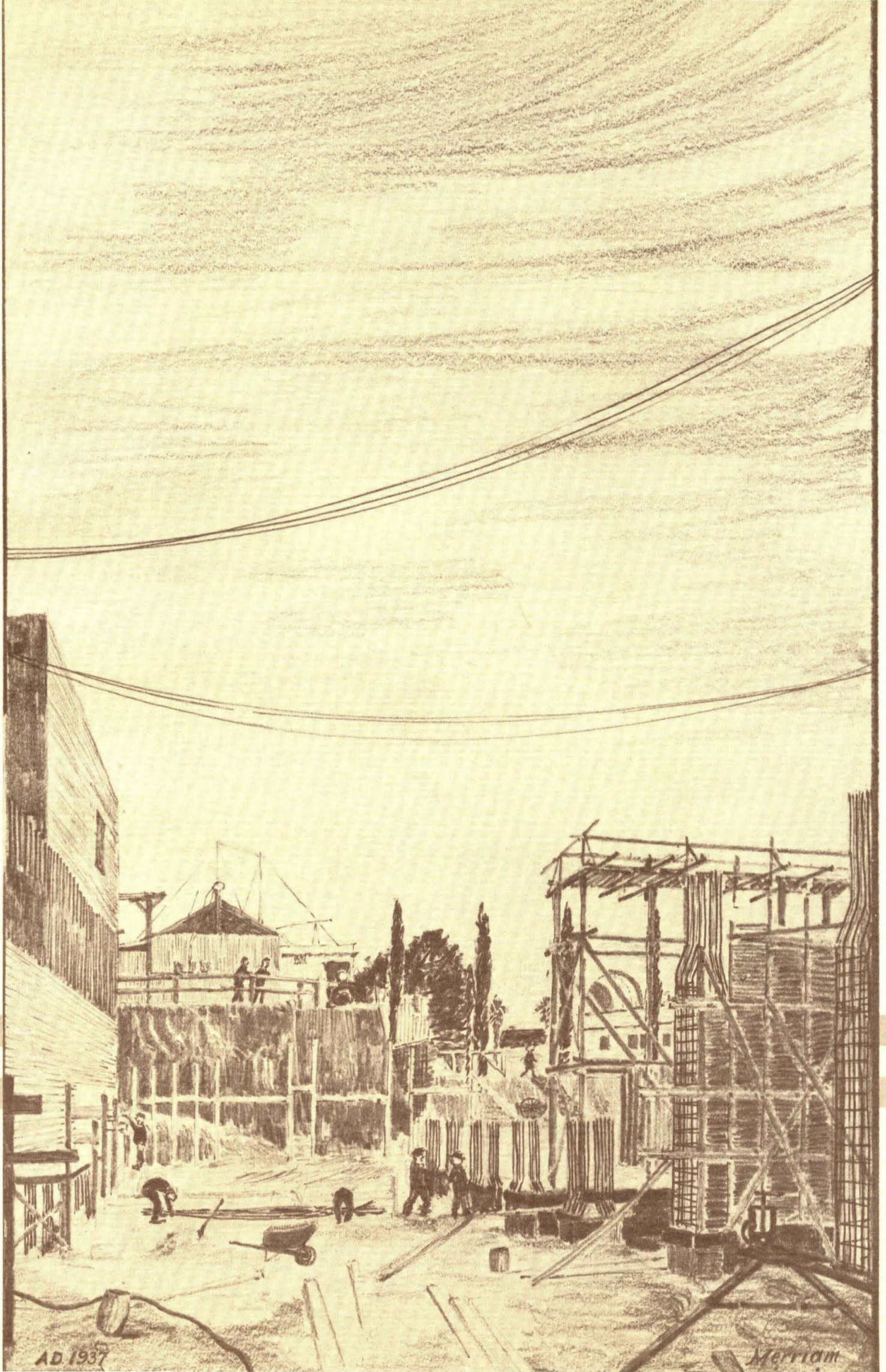
1931—W. K. Kellogg Laboratory of Radiation.

1932—Astrophysical Laboratory.

1933—Astrophysical Optical Shop.

1936—Soil Conservation Laboratory.

A C T I V I T I E S



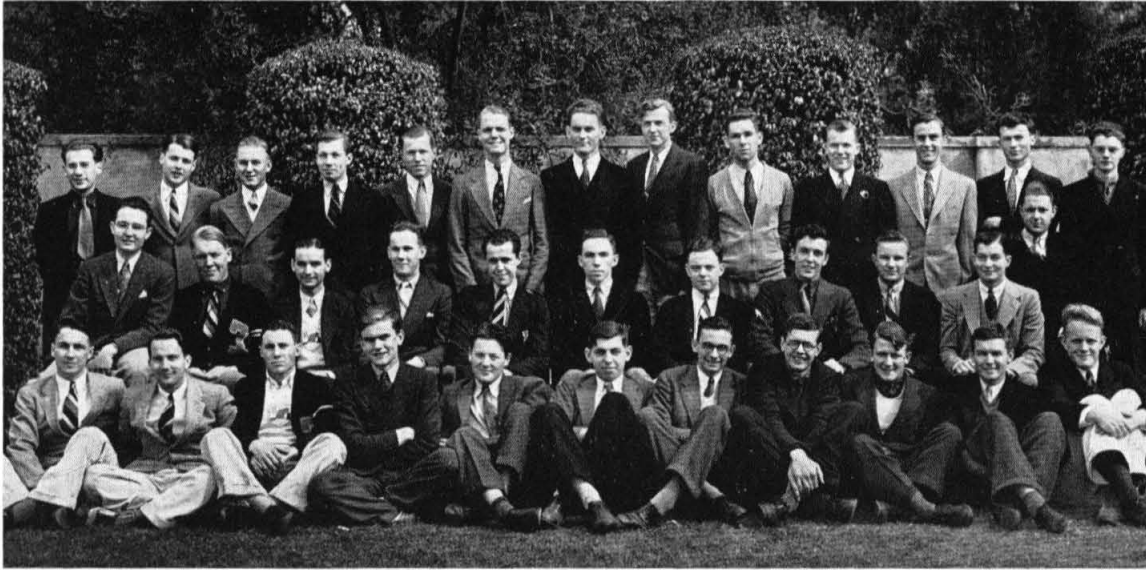
THE NEW BUILDINGS (1937)

"The dream is about to become a reality . . . The new structures, to be erected and fitted out at an estimated cost of \$1,300,000, are: The Seeley W. Mudd Laboratory of Geological Sciences, The Charles Arms Laboratory of Geological Sciences, an addition to the William G. Kerckhoff Biological Laboratory, and The Crellin Laboratory of Chemistry . . . Excavating on the new Crellin Laboratory of Chemistry will be finished the end of this week."—THE CALIFORNIA TECH, April, 1937.



Publications Corner—*Martin*

PUBLICATIONS



Back row: Windsor, Guillou, Beck, Langerud, Hulbirt, Spielberger, Rechif, Ellis, Thomas, Dixon, Siechert, Rollow, McLung; **second row:** Custer, Larson, Schaffner, Barry, Hopkins, Farnham, Luckenbill, Ropp, Johnson, Farneman, Smith; **front row:** Mann, Dowd, Engelder, Flint, Horovitz, Gerlough, Clark, Anderson, Wilbur, Campbell, Grobecker.

The **California Tech**, weekly newspaper published by the journalistically inclined students, presents sports, social and news events. A "Letters to the Editor" column offers the reader an opportunity to express opinions on current campus topics.

Noble Mains edited the *Tech* after the spring election last year, but transferred in June, to be succeeded by Pete Avenali. Bob Davidson was elected Editor when Pete failed to return in September.

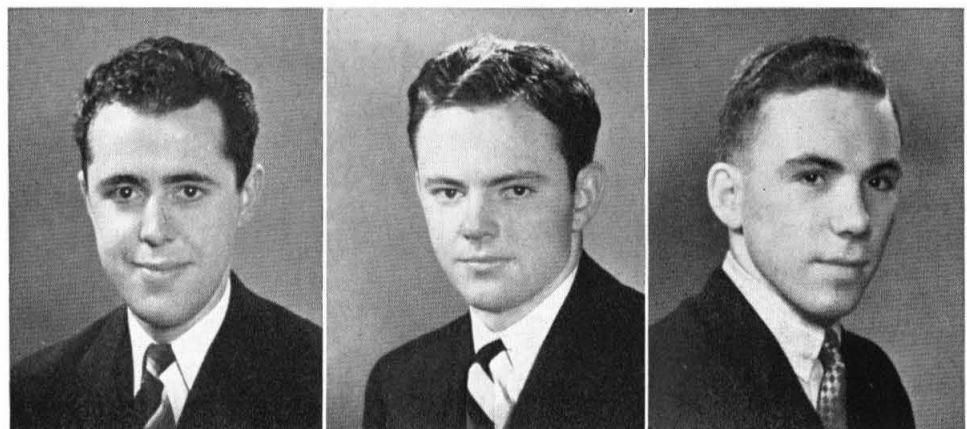
By the end of the first term, scholastic difficulties had beset Bob; so Boyd Hopkins and David Luckenbill were elected to a co-editorship. The two served out the year begun by Mains; and Keith Anderson took over after the regular election in March.

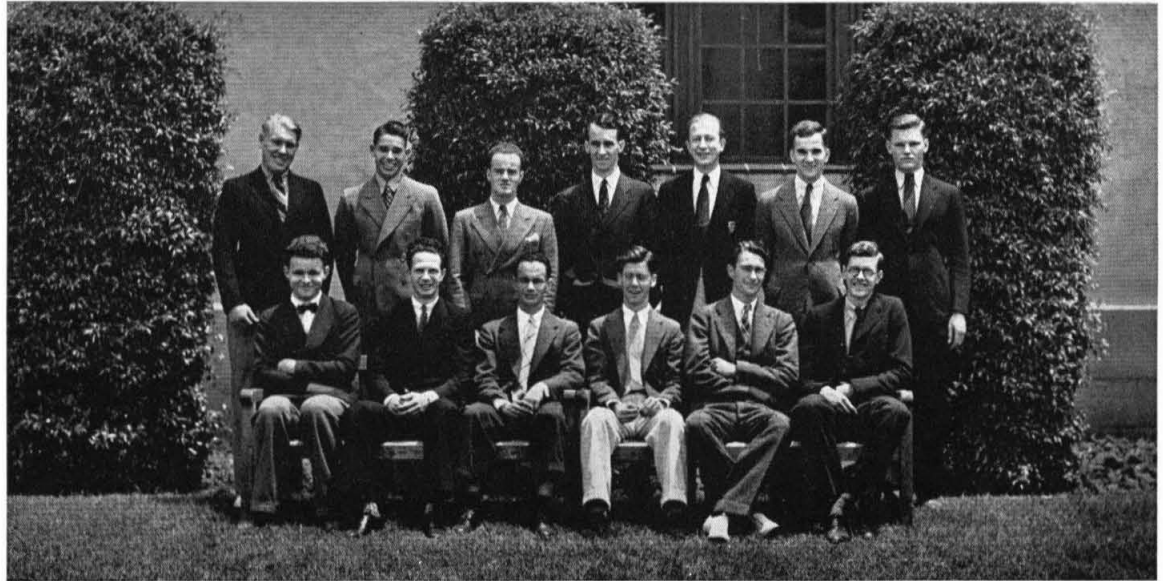
Ably handling the financial end of the paper, Willard Farnham held the position of Business Manager throughout the year, worked with all six editors, except Avenali. Assisting Farnham was John Farneman, who has just been elected to succeed him.

Boyd Hopkins
Tech Co-Editor

David Luckenbill
Tech Co-Editor

Willard Farnham
Tech Business Manager





Back row: Larson, Thomas, Wilkinson, van Fleet, Richards, Jewett, Sherwood; **front row:** Pullen, Horine, Elliott, Davis, Shepherd, Anderson; **not pictured:** Gates, J. Harper, T. Harper, Kimball, Mackay, Mahoney, Price, Siechert, Steinmetz, Tobin.

This book, the 1937 edition of the *Big T*, is the twenty-seventh annual of that name published by the undergraduate students of the California Institute of Technology, and the second such book to be financed under a system of compulsory subscription. Still, in the eyes of those closest to this particular edition, it appears that it must be the first in point of headaches.

The business staff, headed by Bruce Elliott, has procured even more advertisements than last year's men.

The **1937 Big T** makes its appearance a little later than usual, with our hope that it is a better book for that.

Very helpful from the beginning has been Ray Richards. Ed Price, Bob Mahoney and Keith Anderson have contributed greatly with writeups and rewrite assistance alike. Many others have helped in one way and another, but space does not allow mention here. Thank you all, gentlemen.

Next year, Lavender and Mackay will co-edit, VanFleet managing. Heaven help them!

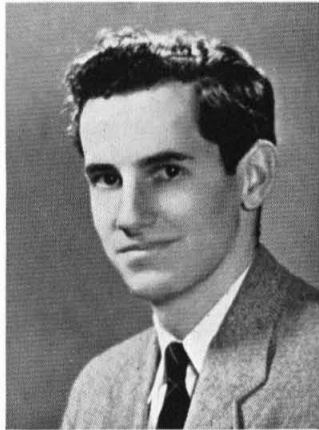
Robert Davidson
Tech Editor

Thomas V Davis
Big T Editor

Bruce Elliott
Big T Business Manager



Edward Price
Martin Webster



The 1936-1937 **Little T**, helped immeasurably by increased financial support from the student-body treasury, took a new form, included many new ideas, and presented itself as a publication of which Tech could well be proud. The co-editors, Edward T. Price and Martin H. Webster, were directly responsible for the distinction of this handbook.

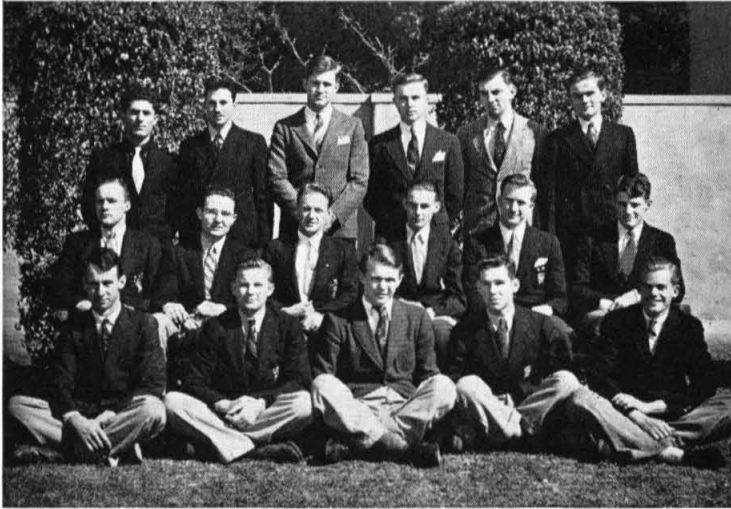
For the first time in history, the edition this year appeared in a convenient pocket size, bound in attractive dark brown leatherette, and stamped on its cover with a brilliant orange block-T. In addition to the general information so often sought throughout the year, the contents of the book included a list of the names and addresses of the student body, a list of the faculty offices, the school yells and songs, the corporation by-laws and numerous cuts of student-body leaders, and in its back fold a street map of Pasadena.

Although the *Little T* is aided by student-body appropriation, only the loyal support of local merchants who advertise so generously in all Tech publications made this handbook possible. Whether a Techman wants "Where-to-Buy-It" or Student Body Information it is offered in the *Little T*.



Culbertson—Martin

FINE ARTS



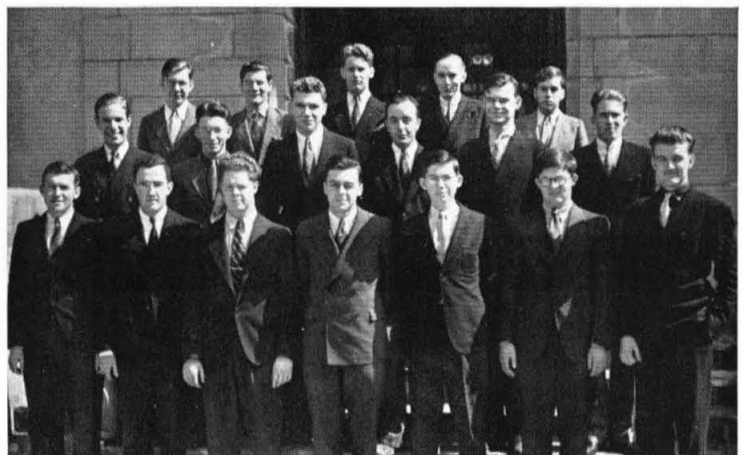
Back row: Ruggerio, James, Fenzi, Nash, Ivanoff, Flint; **second row:** Price, Custer, McLean, Beavon, Stone, Balsley; **front row:** van Fleet, Johnson, Osborn, Thomas, Allen.

The Caltech **Debate** squad, not always a championship outfit, still manages to make an unusually good showing for a technical school of this size.

Coach Ray Untereiner, with sixteen men to work with him, started the year by having the arguers spend their spare time in studying the pros and cons of Resolved: That Congress should have power to fix minimum wages and maximum hours for industry.

The first tournament, that of the Western Forensic Association, was held at Pasadena in November; and Tech sent five teams. Although none of them reached the finals, they gained valuable experience.

Back row: Keyser, Marriott, Brooks, Scarborough, Stowell; **second row:** Steinmetz, Bergmann, Hines, Manildi, Hayes, Billheimer; **front row:** Campbell, Stone, Dessel, Mahoney, Goodman, Staatz, Foster; **not pictured:** Brumfield.



Later, McLean and Beavon came out with four wins and three losses in the open division of the McMinnville contest.

Next, two Caltech teams entered the Southern California Conference tournament, and gave a good account of themselves without being too successful.

Closing the season, Tech entered five teams in the regional Pi Kappa Delta contest at Stockton, early in April. The leading team won four of six debates, a record bettered by only five of the thirty teams entered in that group. Stone and Allen followed McLean and Beavon by splitting their six at three wins and three losses.

Practice debates were held with U.C.L.A., Loyola and the University of Utah.

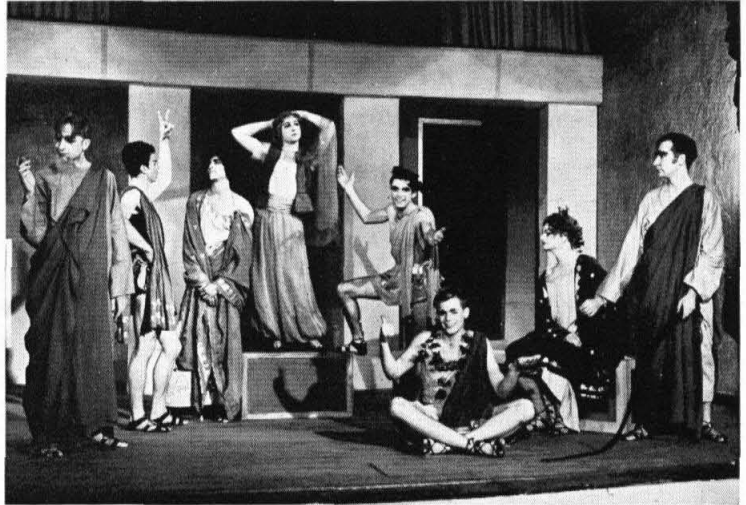
Roland Stone was the debate manager.

The freshman squad, coached by Robert Mahoney, debated the current electric utilities question with Redlands, their only prepared opponents. Their defeat ended the season, in which they met P.J.C. and Pasadena College in practice meets. Wallace Hayes managed the Freshmen.

Full of ageless humor and usual Roman coarseness was "The Persian" by Plautus, the fourteenth annual classical play sponsored as before by the local chapter of Pi Kappa Delta. Ably directed by Drs. Harvey Eagleson and Roger Stanton, the campus talent kept the audience rolling in the aisles from the first curtain to the last.

The plot revolves about the efforts of a servant, Toxilus, in his master's absence, to buy his own sweetheart from Dordalus, a slave dealer. Dordalus is persuaded by the cunning servant to buy a beautiful freedwoman disguised as a Persian slave. Roman law forces the dealer to give up the freedwoman; however, Toxilus already has the money, his sweetheart, and the pleasure of seeing his plans succeed at the expense of Dordalus. The final scene is a merry, drunken brawl.

This bawdy and rowdy play had its cast topped by Douglas Rollow, who gave a good and necessarily comic interpretation of Toxilus. Dordalus was splendidly portrayed by Ralph Jones; and Sagaristo, Toxilus'



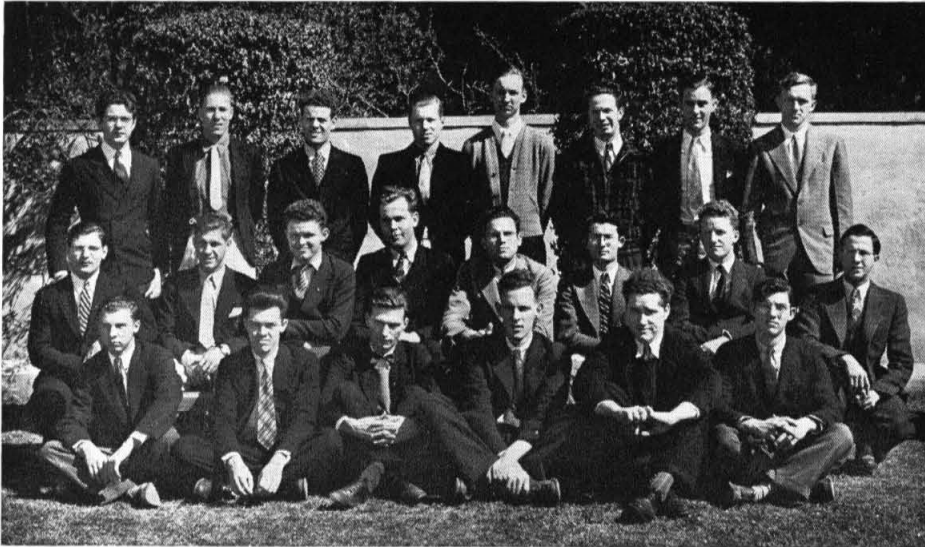
Richards, Rollow, Laird, Smith, Lavatelli, Allen, Parker, Jones.

aide and "**The Persian**" was ably played by Leo Lavatelli. Ray Richards did Saturio, a parasite, excellently. High comedy was offered by Richard Allen in the role of Paegnium. The women in the production—who are always worth the price of admission alone—were Saturio's daughter, Lemniselenis and Sophoclidisca, femininely personated by Philip Smith, John Parker and James Laird, respectively.

Four presentations were made, two matinees and two evening performances, over a period of three days. A dance was held for ticket-holders after the last show, Saturday evening, November 21.



Standing: Jones, Parker, Rollow, Richards; **seated:** Allen, Laird, Lavatelli, Smith.



Back row: Cardwell, Fraser, Morgan, Hulbirt, Ohlsson, Horine, Siechert, Hyers; **second row:** Dickerson, C. Smith, Pullen, Bergren, DuFresne, B. Kazan, Neufeld, Dion; **front row:** Palmer, Fahrner, Paxson, Hicks, Albrecht, Craft; **not pictured:** Bonner, Christie, Church, Foster, German, Golson, Holman, Kelly, Love, Nowlin, Rassmussen, Richardson, Rozencranz, Schairer, Stowell, White, Wiggins.

The past **Orchestra** season has seen the successful continuation of the policy adopted last year, that of presenting meritorious lesser-known works of the master composers. A symphony of Franz Beck dating back to 1760, the rarely played Schubert third symphony, the Mozart concerto for bassoon, the Haydn "Military" symphony, some dances of Beethoven, a Bach chorale and two arias from Mozart's "Magic Flute" were programmed.

After opening the season with the customary Monday assembly concert, the orchestra settled down to a long series of hard rehearsals to prepare for its spring season. Finally, shaken but undaunted, our symphonic lads emerged from the struggle to hold down the stage of the Civic Auditorium on the evening of May 5 for the first major concert. The success won in this appearance well repaid the long months of

preparation. Another assembly program and a radio broadcast followed; and the season was brought to a climax by an invitational concert in Culbertson as May ended.

William Bergren has continued setting a high musical standard for the boys. His work as Musical Director and Conductor during the past five seasons has brought the orchestra to an unexpectedly high level.

Bill Cardwell succeeded Dick Rosencranz as temporal head of the Orchestra early in the year, thereby assuming the burden of arranging for the season. Armand DuFresne held the Librarian job. Concertmaster was Benjamin Kazan, Second Principal Bruce Hicks.

Rehearsal





Back row: Forward, Kelly, Horine, Evans, Wimpres, Johnson, DuFresne, Loeffler, German; **second row:** Piro, Rollow, Dion, Richards, Dickerson, Hulbirt, Gerlough, Scarborough; **front row:** Crozier, Axtman, Cardwell, Grainger, Fraser; **not pictured:** Cox, Harlan, Jones, Jongeneel, Levin, Lewis, Meyer, Rainwater, Ruggerio, Walter.

Taking on a host of new duties this year, the Caltech Band has successfully performed them all. The football team had a two weeks' start on the band this year, but the fellows made up for it in the games to follow. Their presence was particularly noticed in the Oxy-Pajamarino parade through Pasadena, the annual "big-night" for all loyal Techmen.

The end of the football season, however, only began the season's activities for the band. The flashy orange uniforms appeared at several of the Friday student assemblies. Next the men settled down to cooperate with the Pasadena Junior College

Assembly



organization, the **Band** participating in the annual Rose Parade. In this capacity, the Techmen played on several national broadcasts, and acted as a part of the official Tournament of Roses band.

Early in March, the band presented a group of numbers in an assembly program for members and friends of the student body, and it was so well received that another was given in the third term.

This year, for the first time in the history of the organization, the band appeared on the annual exhibit day program, presenting two enthusiastically received concerts to the public attending the campus.

Included in the year's activities of the band were several popular functions for members of the band.

Boyne Grainger was president and manager for the band this last year. Lowell Hulbirt served as assistant manager, and Warden Lewis acted as librarian.

The Institute **Glee Club**, under the direction of Mr. Henry Lyons, fulfilled an unusual and diversified program for the past year. During the first term of the school year, the club met once a week to sing together for pleasure and recreation, ending the term with the rendition of a number of Christmas carols.

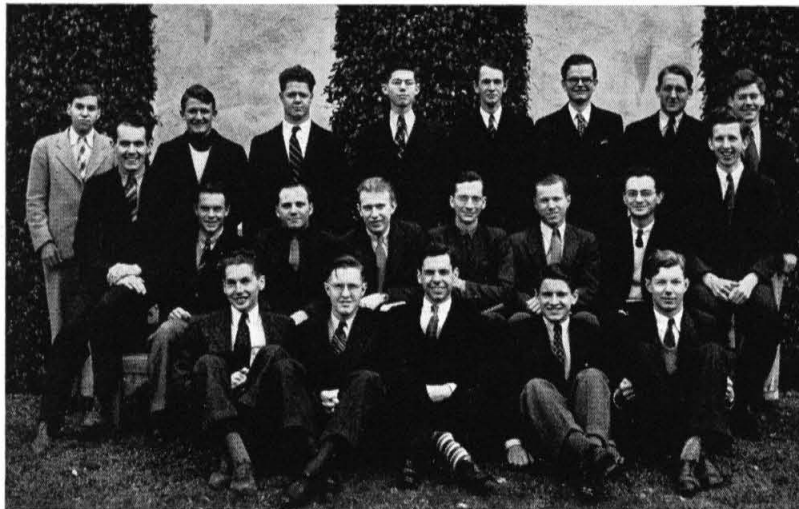
With the opening of 1937, the weekly rehearsals were centered about training for programs; and songs were presented to the student body during an early assembly. Another concert was given, this time before an outside audience, as part of the annual exhibit program on the campus.

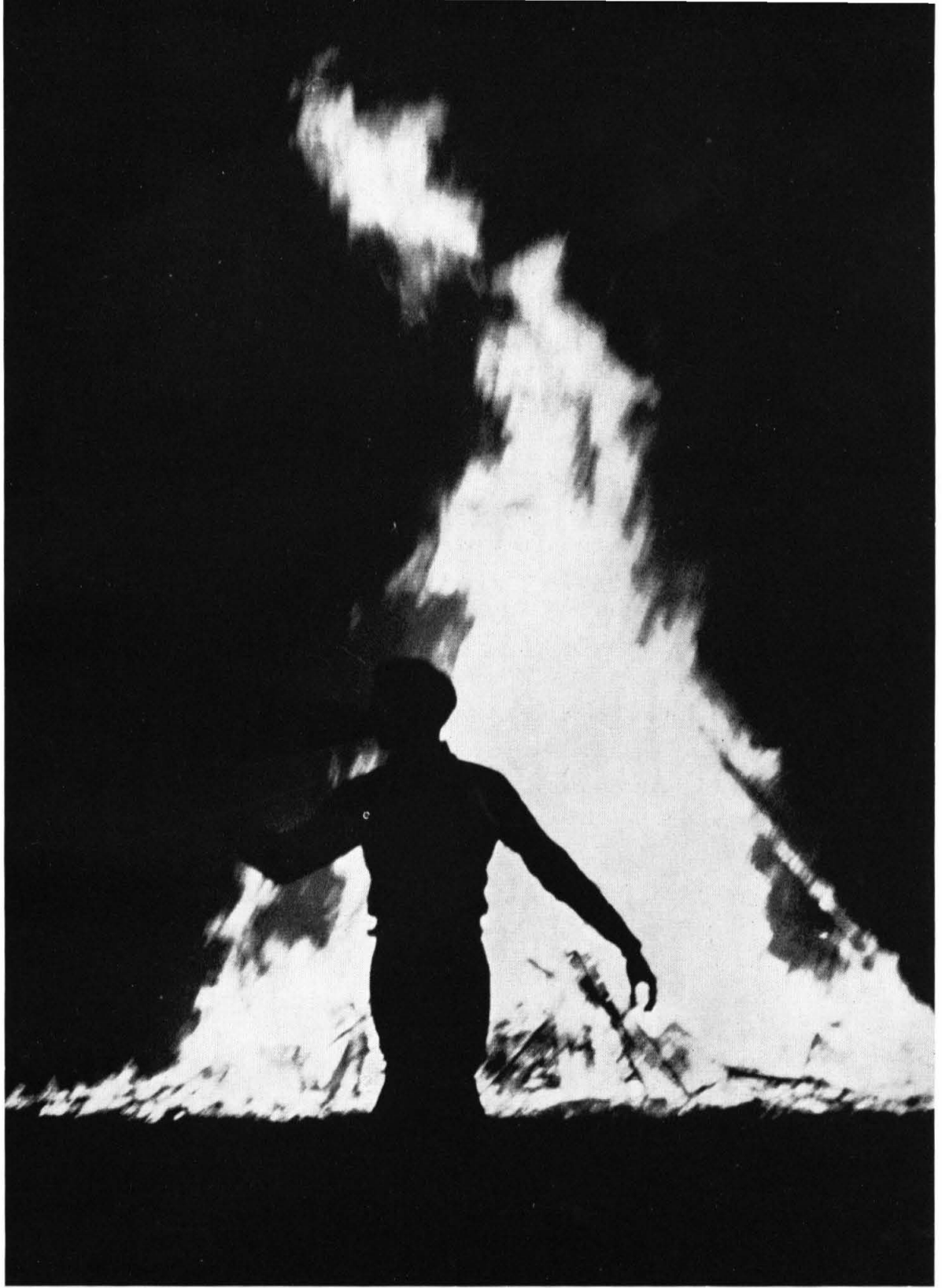
With a membership of only about two dozen men, the Glee Club offers an excellent relaxation from the studies which some of the men find oppressive.

Several programs were presented by the club at outside schools and neighboring colleges; and a beach party for the members climaxed the year's schedule.

Officers of the organization for the past year were Robert Jones, President; Melvin Levet, Manager; Paul Dennis, Secretary-Treasurer; and George Dorwart, Librarian.

Back row: Stoll, Wilbur, Dessel, Goodmanson, Schroder, Parker, Briggs, Davis;
second row: Green, Levet, Dorwart, R. C. Jones, R. W. Jones, Hulbirt, Baldwin, Veenhuyzen; **front row:** Moore, Lee, Dennis, Nicholson, Vermeulen.





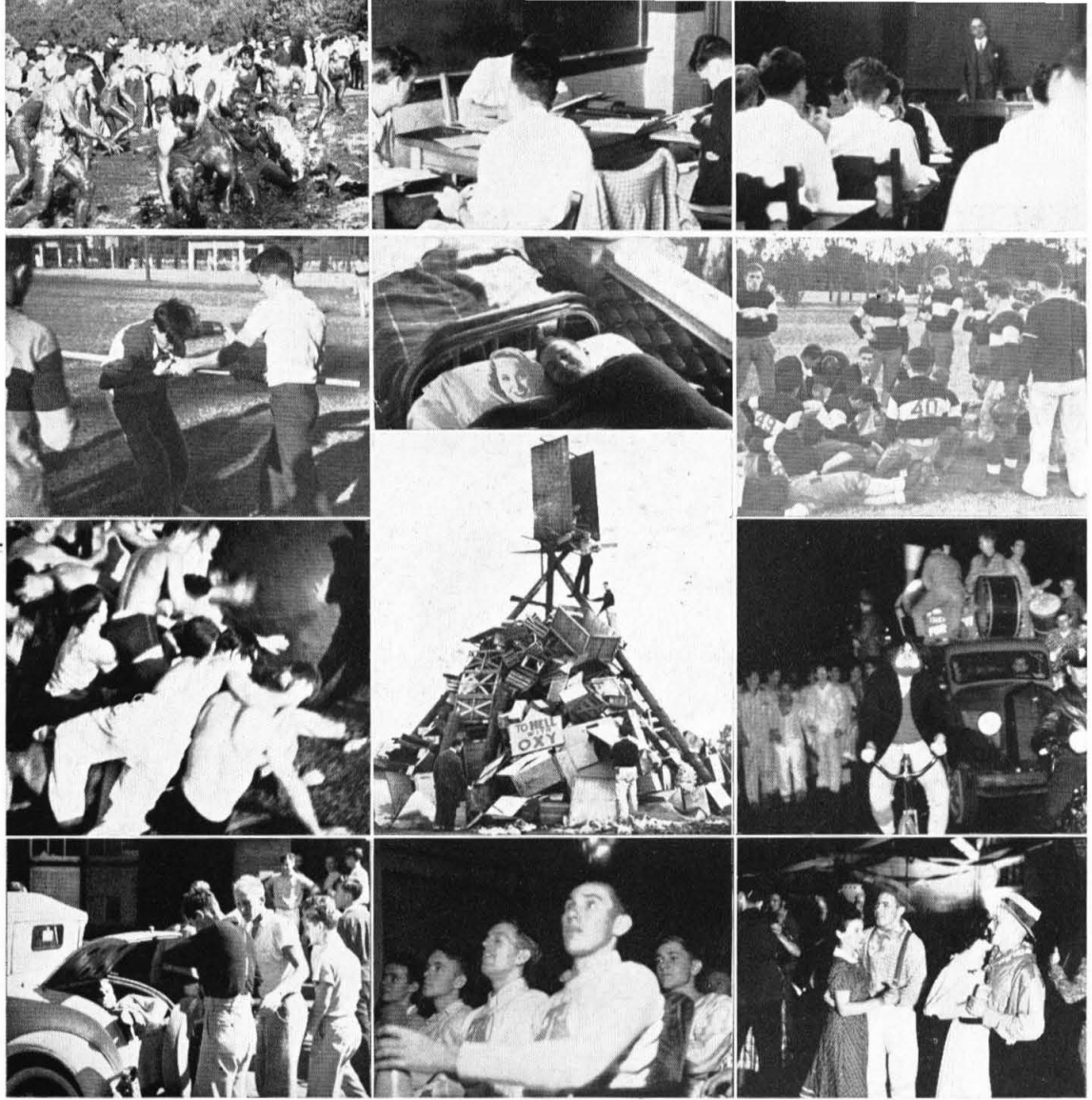
Pajamarino—Kimball

LIFE

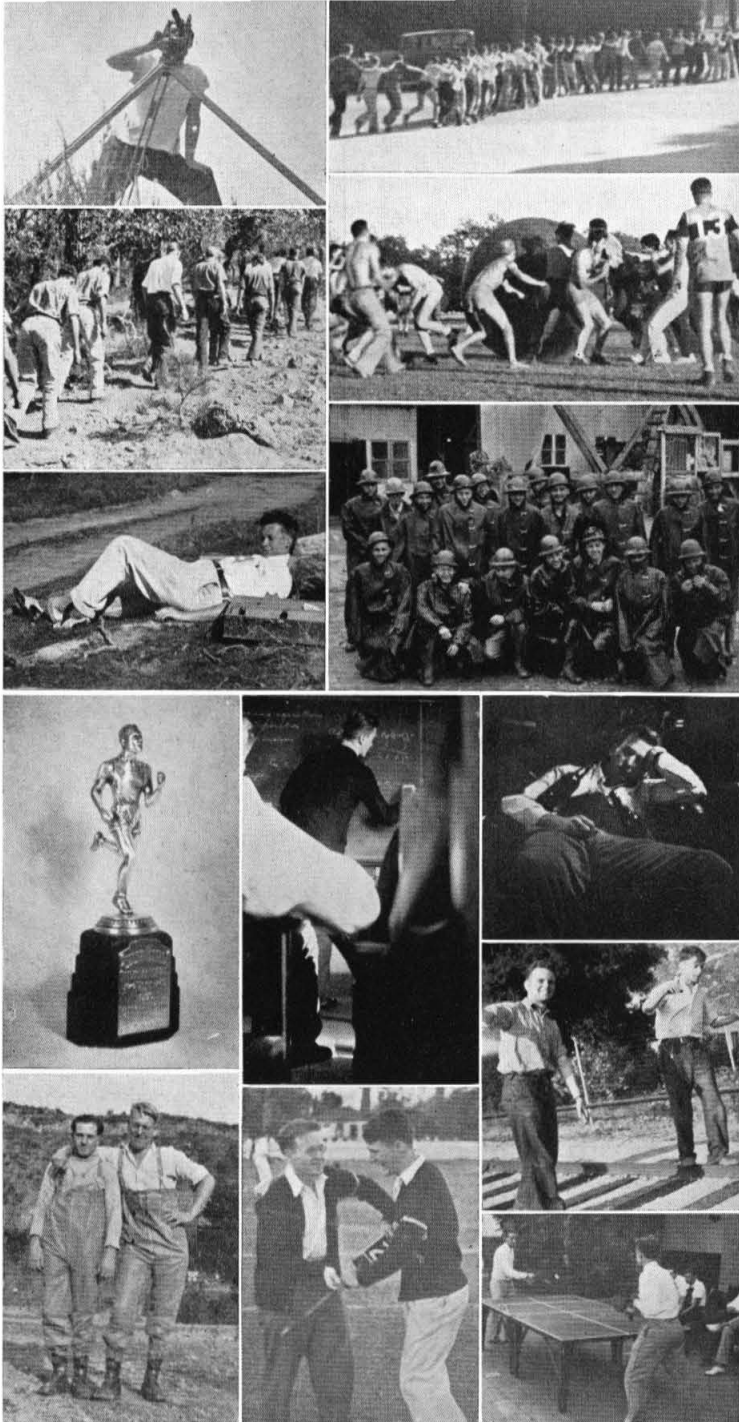


THE California Institute of Technology ranks among America's most outstanding institutions devoted to technical education and scientific research, and has contributed immeasurably to the progress and humanity of all peoples.

The people of Pasadena are proud of the accomplishments of Cal-Tech, its place in the cultural life of the community, and particularly the young men whom it sends to the four corners of the earth, trained under men of vision in laboratories of world renown, to contribute to the knowledge and development of all Mankind.



The Alumni Association of California Institute of Technology welcomes the Class of '37 and expresses its sincere wish that each member of the class, by joining the Association, perpetuate and extend his bonds of friendship with his fellow graduates.



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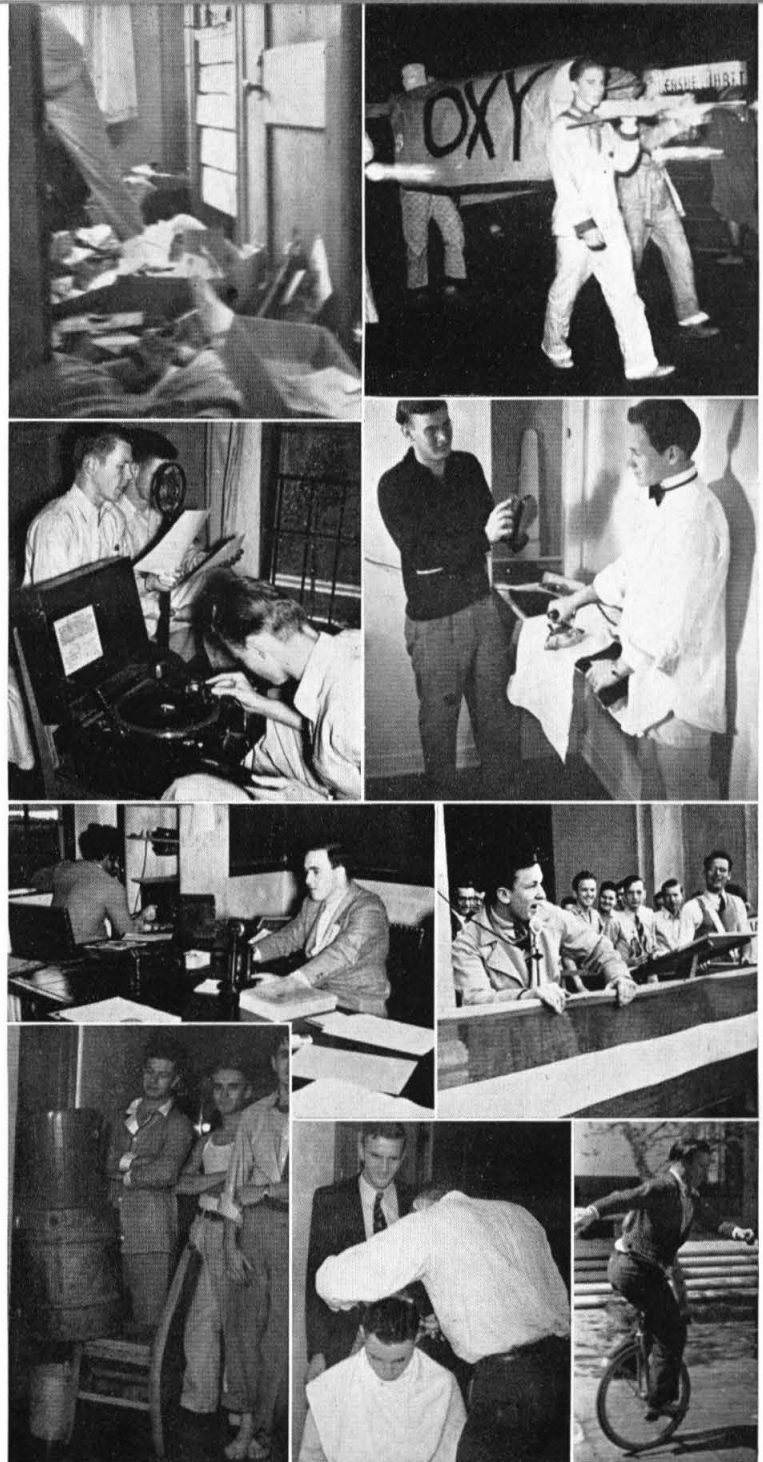
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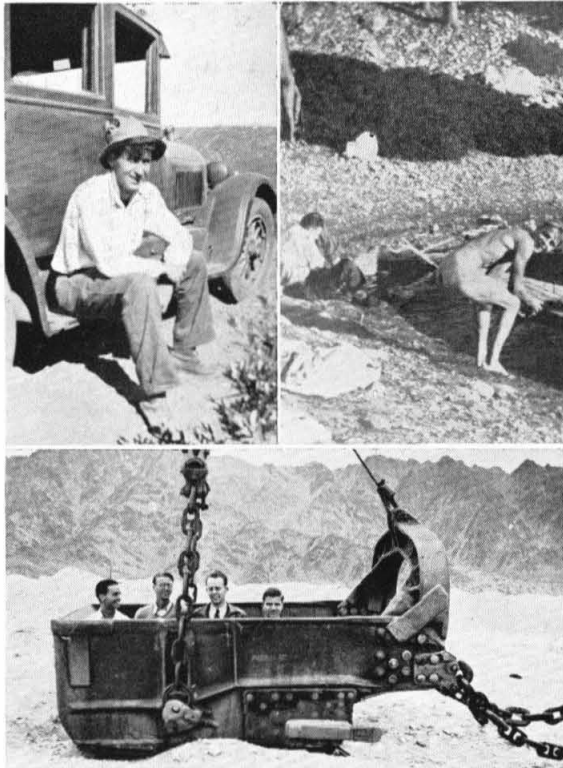
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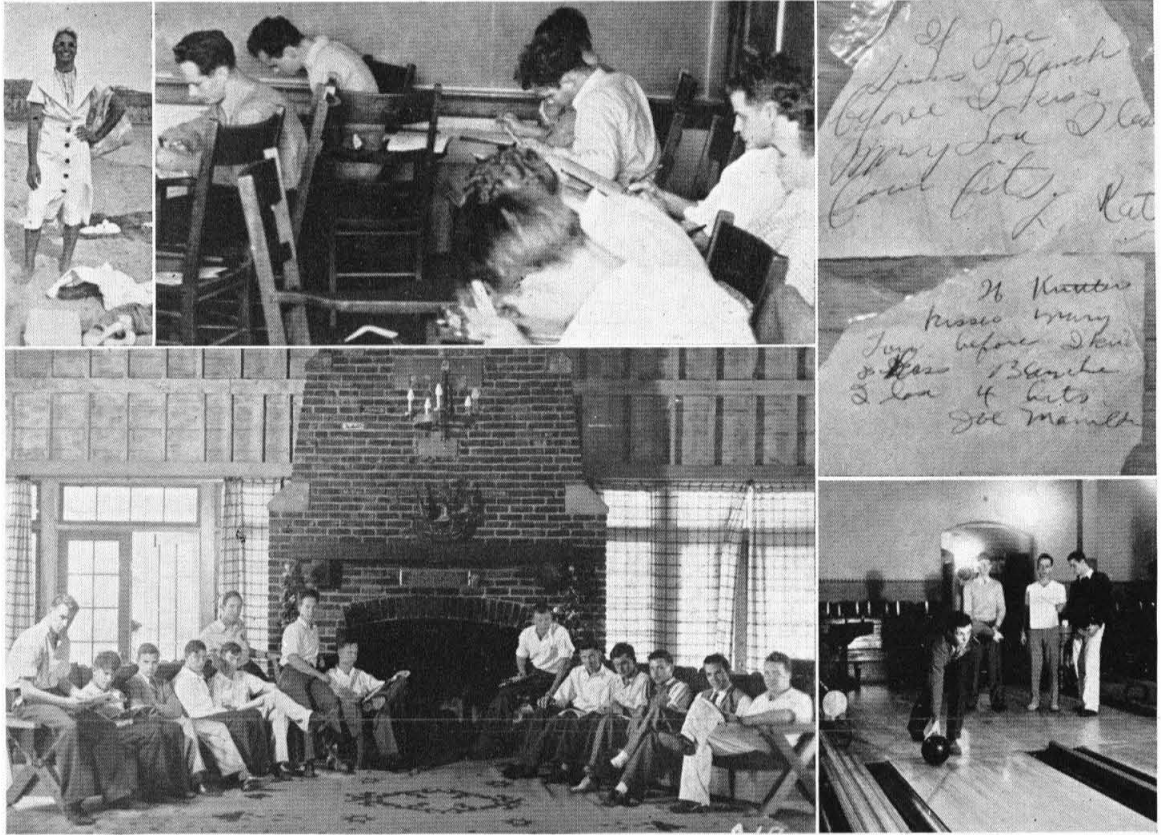
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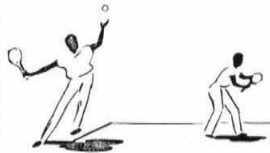
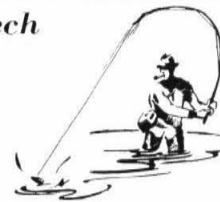
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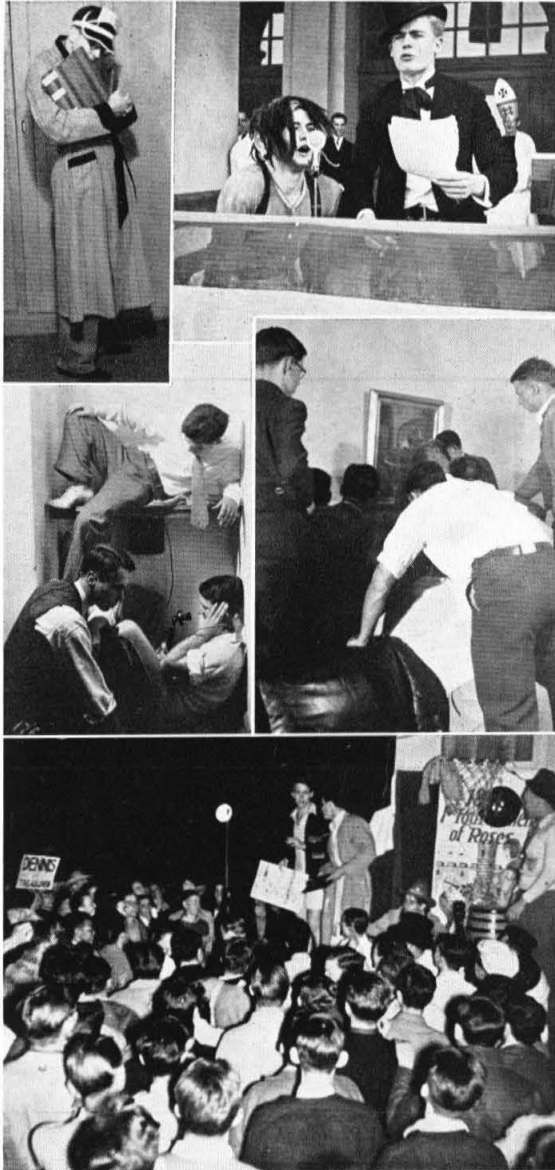
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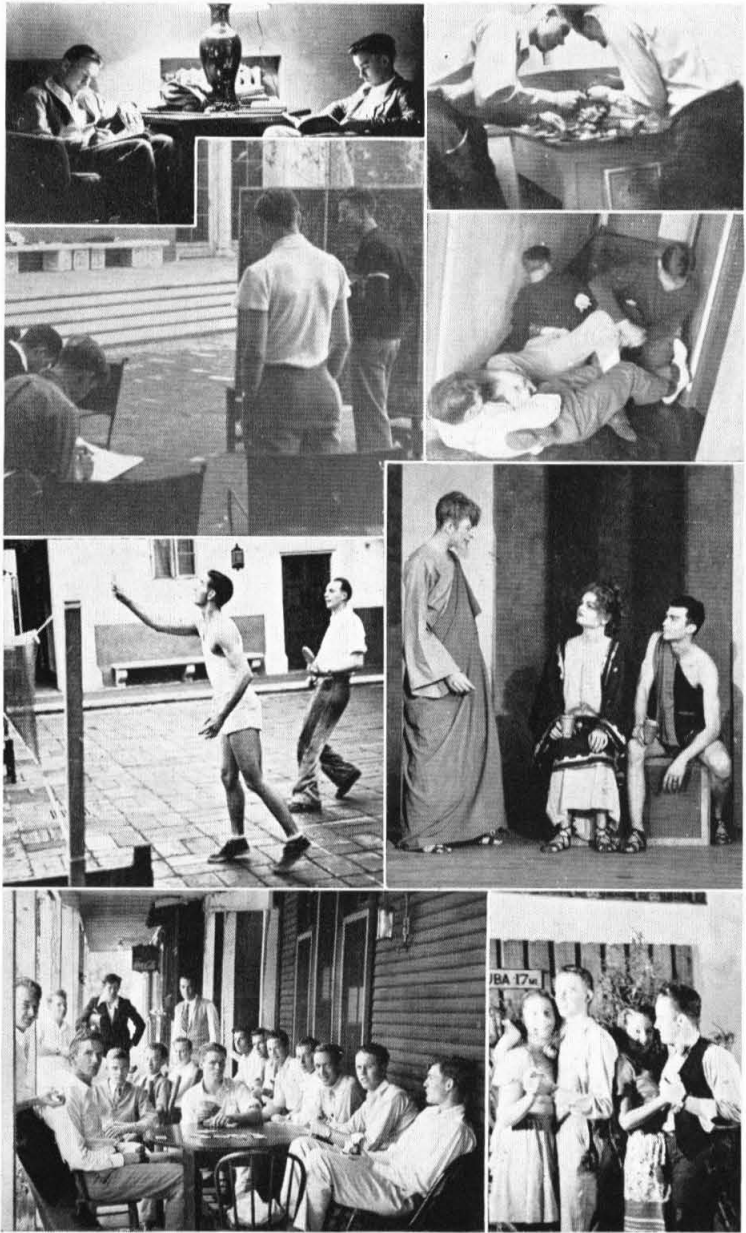
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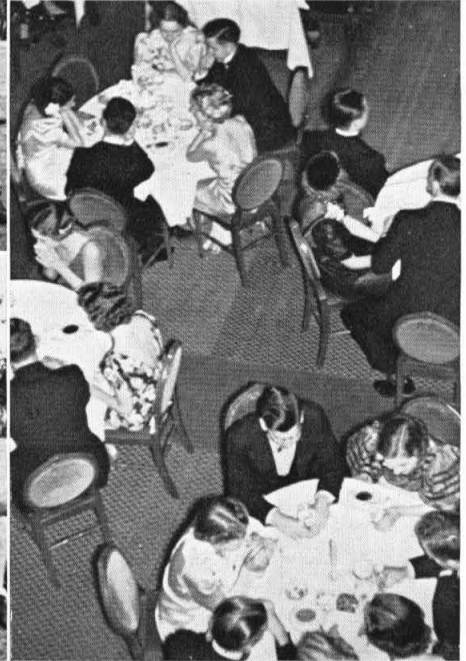
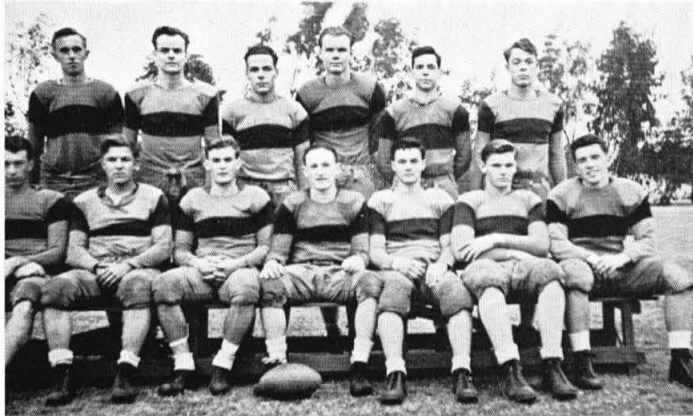
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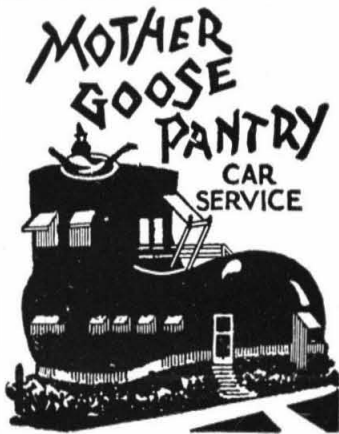
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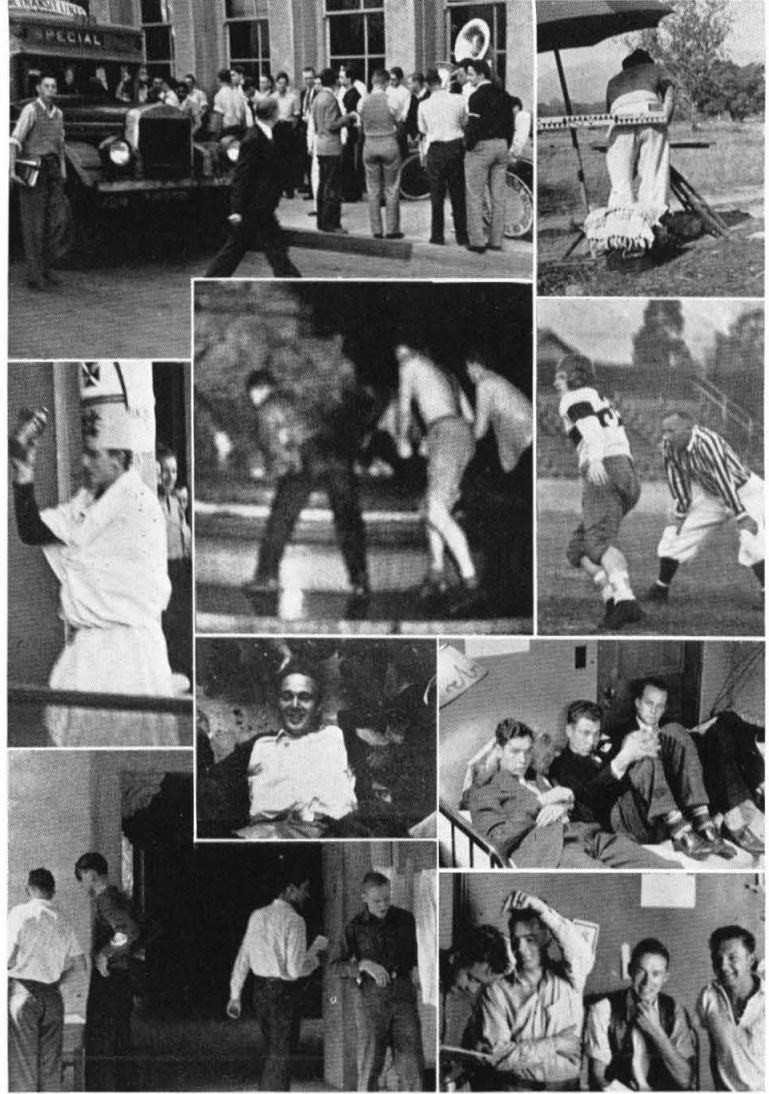
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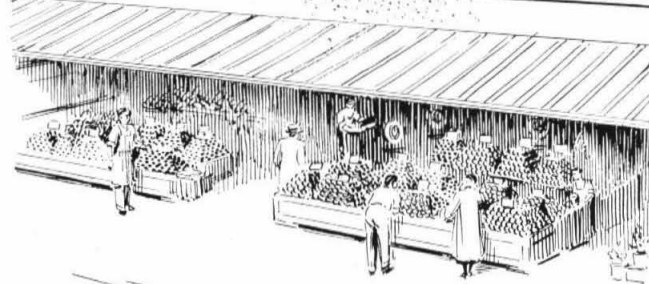
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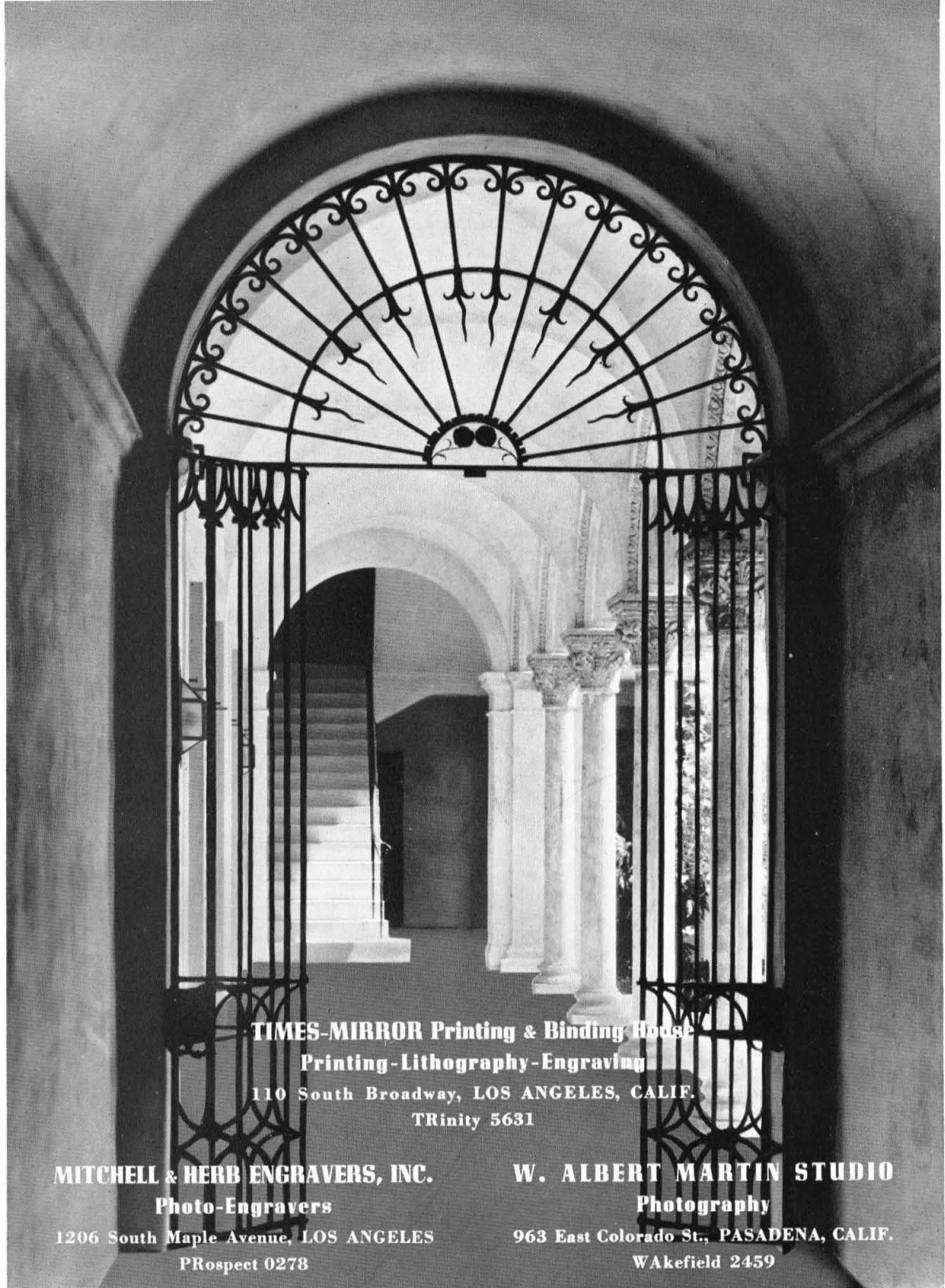
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