

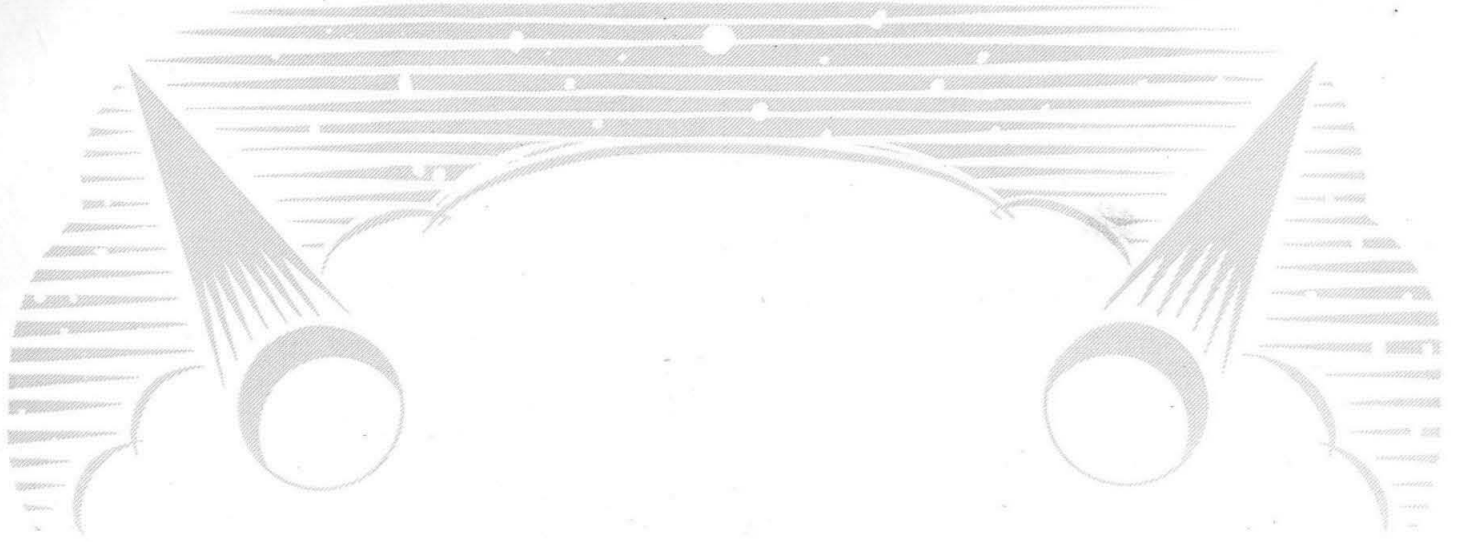
PTOLEMY



The Big T
of
1932

Volume 22

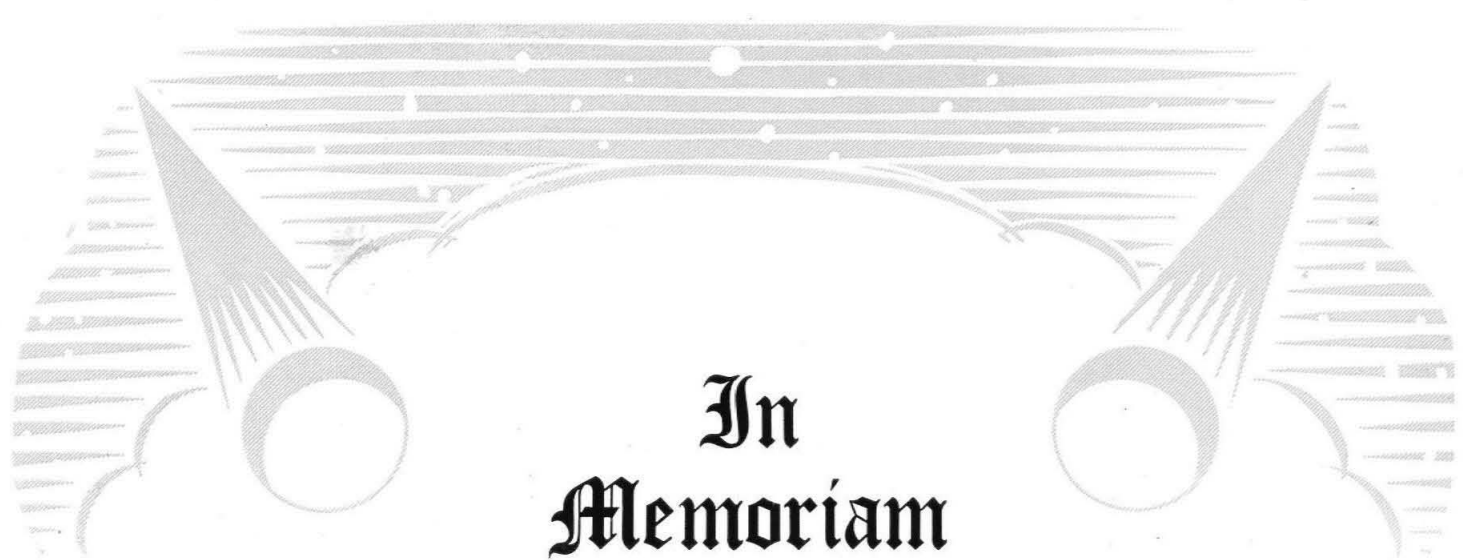
Published by
***The Associated Students of the
California Institute of Technology
Pasadena, California***



F O R E W O R D

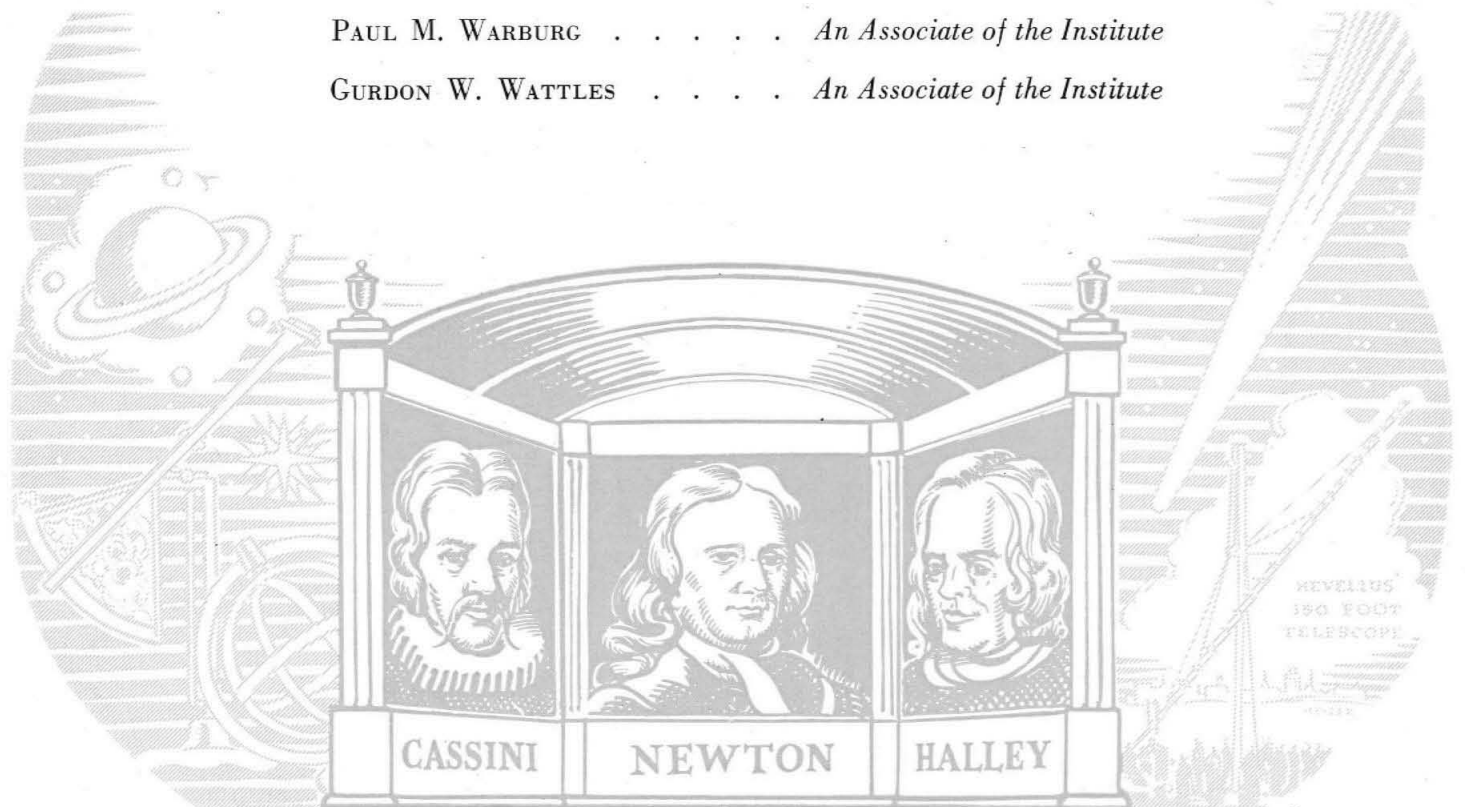
THIS volume is not only a record of the scholastic, social and athletic achievements and activities of the past year, it is more than that; it is a chapter in the history of a great institution. Just as each picture on these opening pages shows one man and his contribution towards the growing knowledge of astrophysics, so this book records but one year's activity and growth of the California Institute.

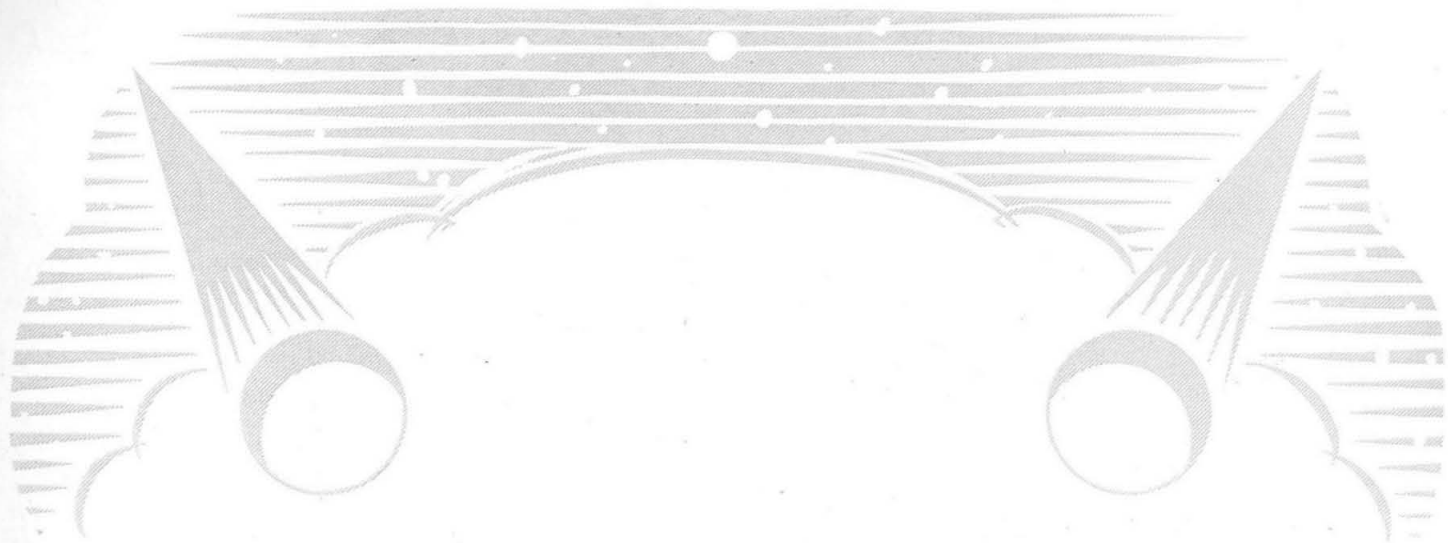




In Memoriam

- F. C. AUSTIN *An Associate of the Institute*
DR. KARL JOSEPH BELAR . . *Research Associate in Biology*
R. R. BLACKER *A Trustee of the Institute*
ELMER W. CLARK *An Associate of the Institute*
DONALD R. DICKEY *An Associate of the Institute*
DR. HERMAN E. DOLK . *Assistant Professor of Plant Physiology*
MRS. ELDRIDGE M. FOWLER . . *An Associate of the Institute*
FRANK P. HIXON *An Associate of the Institute*
SAMUEL MATHER *An Associate of the Institute*
JOHN B. MILLER *An Associate of the Institute*
PAUL M. WARBURG *An Associate of the Institute*
GURDON W. WATTLES *An Associate of the Institute*





D E D I C A T I O N

THIS volume is dedicated to that spirit which urges men on in the unending quest for greater knowledge. Especially is it dedicated to those men who have so ably displayed this spirit in the realm of Astrophysics and from whose achievements the decoration of this volume is drawn.





CONTENTS

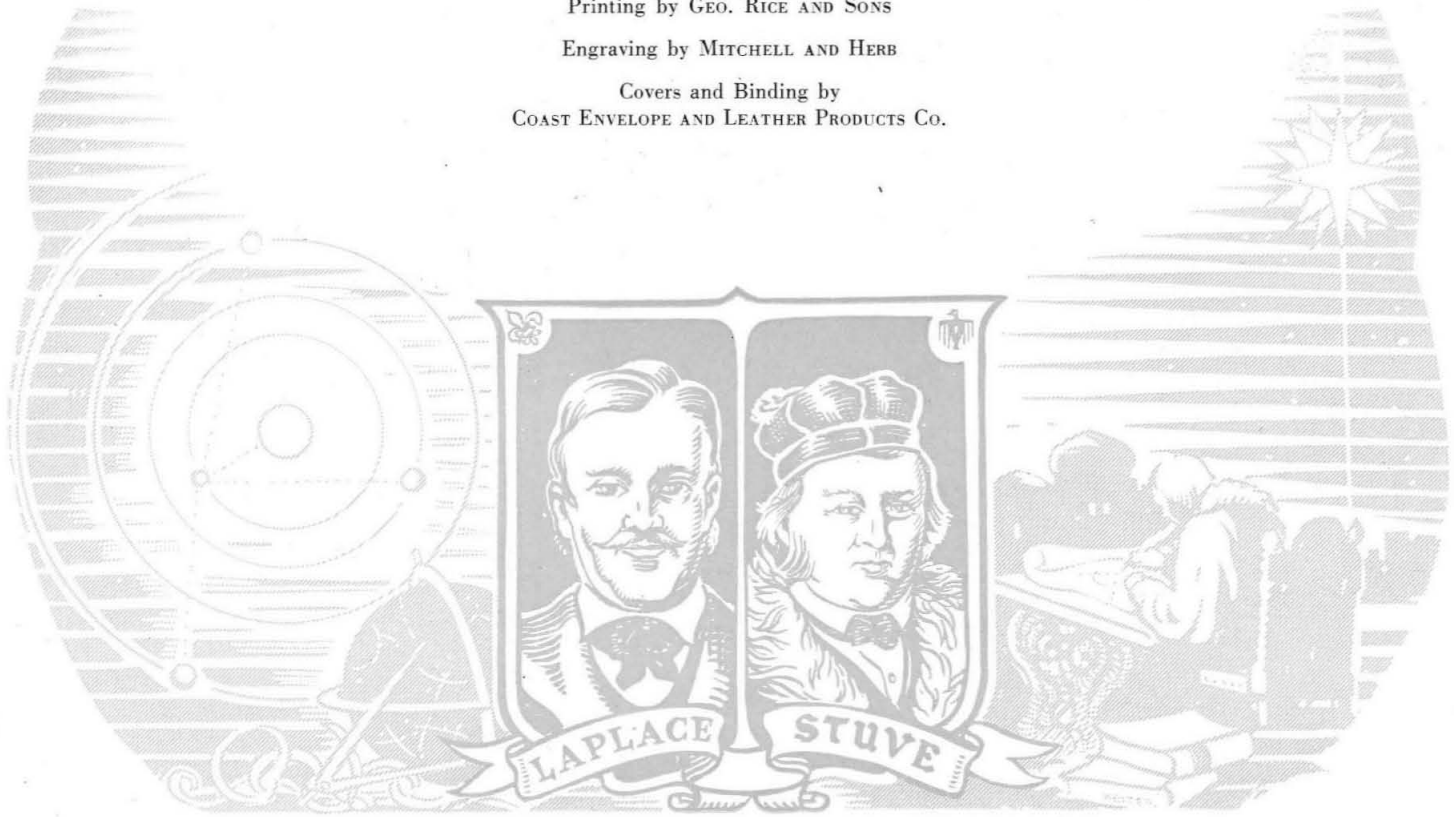
Book I	The Institute
Book II	Athletics
Book III	Activities
Book IV	Humor

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by

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ROBERT O. FORT, *Business Manager*

Art Work by CLARENCE HEIZER
Photography by AUSTIN STUDIOS
Printing by GEO. RICE AND SONS
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T H A L E S

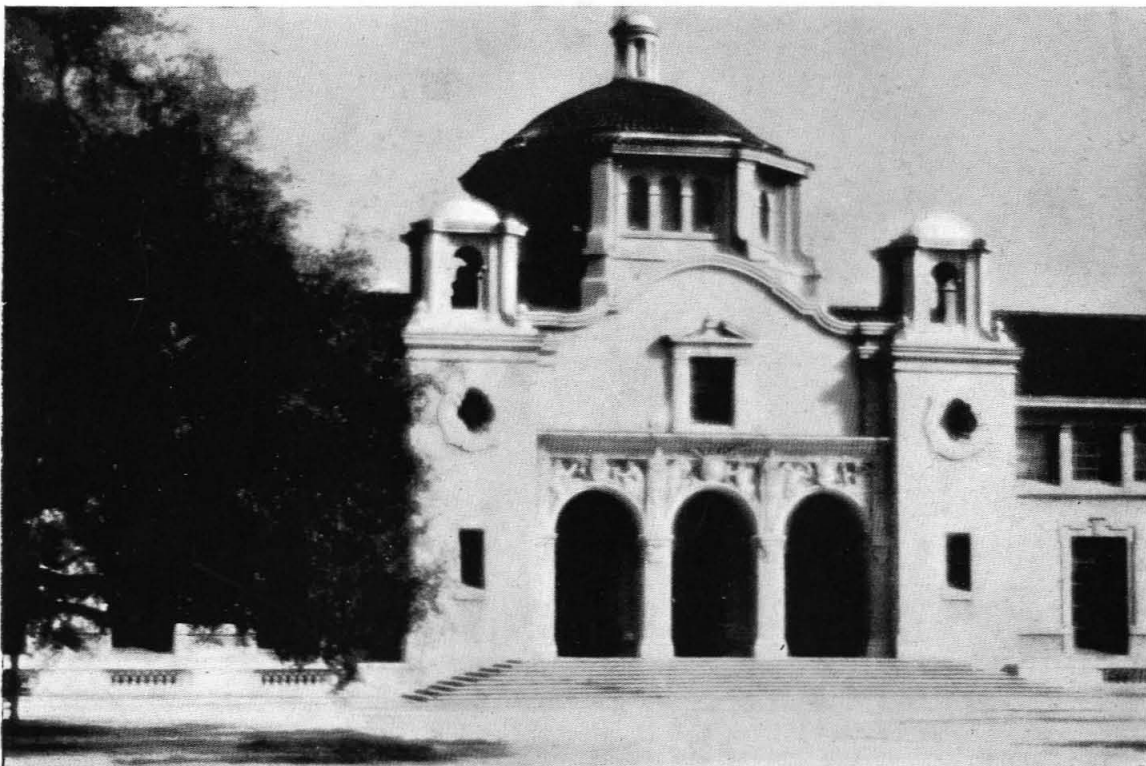
The study of astronomy is as ancient as the history of man. Yet during all the thousands of years since man's beginning, little was known, and the stars were as mysterious as the Gods themselves. Thus we pay the greatest of tribute to Thales, for it was he who took it out of the realm of the unknowable, and proved that it, like other phenomena of nature, was governed by natural laws. Little is known of this great astronomer who lived over 2500 years ago.

The mathematical feat of predicting an eclipse of the sun was remarkable for that early time. Thales did not, of course, predict it with modern precision, for he had neither tools, nor the materials for making those tools. Yet he was keen enough to employ a periodicity in eclipses (the Saros) which he had discovered, to predicting the time and place of future eclipses. Thus the eclipses of B. C. 585 has gone down through all history as a memorial to that great astronomer who made astronomy a science.





Faculty Administration

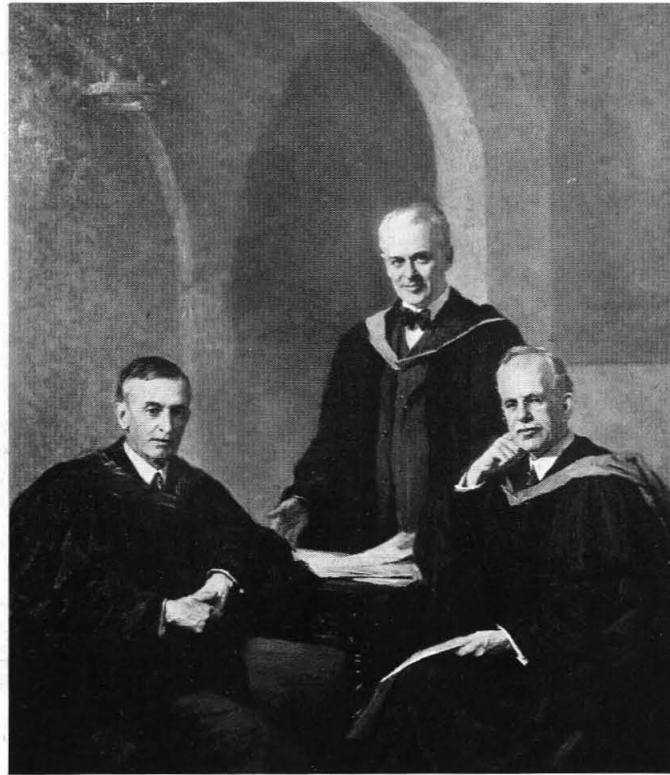


The Trustees

The Administrators

The Departments

ADMINISTRATION



A few years ago, Mr Seymour Thomas completed this picture of the three men who have been most instrumental in the organization and growth of the California Institute of Technology. This group, consisting of Dr. A. A. Noyes, Dr. R. A. Millikan, and Dr. George E. Hale, is highly representative of the scientific atmosphere which pervades the campus and stimulates the activities of the Institute's instructors and students.

The artist has depicted Dr. Millikan giving a lecture in a hall, while his two associates, Dr. Noyes and Dr. Hale, watch the effect of the great scientist's words upon the audience. This well-executed painting is exhibited in the Athenaeum.

ADMINISTRATION



GILLIS
HONNOLD
CHANDLER

DABNEY
GATES
ROBINSON

WADSWORTH
RICKETTS
MEYER

The Board of Trustees

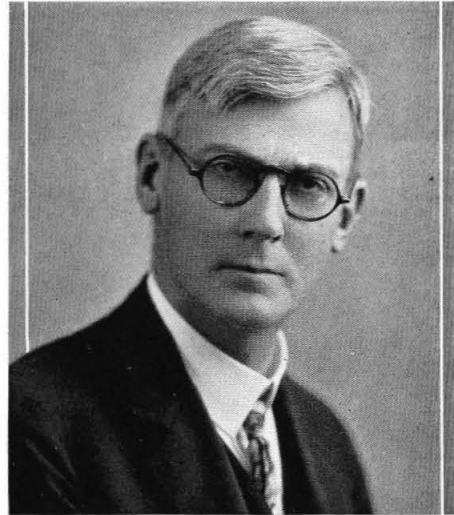
Hiram W. Wadsworth
Arthur H. Fleming
George E. Hale
Charles W. Gates
Henry M. Robinson
R. C. Gillis
Harry Chandler
Henry W. O'Melveny
Allan C. Balch

Louis D. Ricketts
Joseph B. Dabney
William L. Honnold
Harry H. Bauer
Ben R. Meyer
Harvey S. Mudd
Russell H. Ballard
James R. Page

Dean of Upper Classmen

The distinctive event in undergraduate life on our campus this year, I think, has been the coming of the Student Houses. The opportunity for social development which these houses afford should be most carefully fostered by us all. The men of 1932 have left their imprint on the customs and characters of the four houses. Their successors, the seniors of 1933, and indeed, men of all the other classes who live in the houses, will gradually mold either for better or worse, what I may call the spirit, the heart, of the house,—that intangible something which includes the friendliness, the hospitality, the homelikeness, the intellectual acumen, the honor of the house. To make this spirit of the finest quality, requires the cooperation of all. Each man should contribute, purposefully and positively, his best to the common good.

—FREDERIC W. HINRICHS, JR.
Dean of Upper Classmen

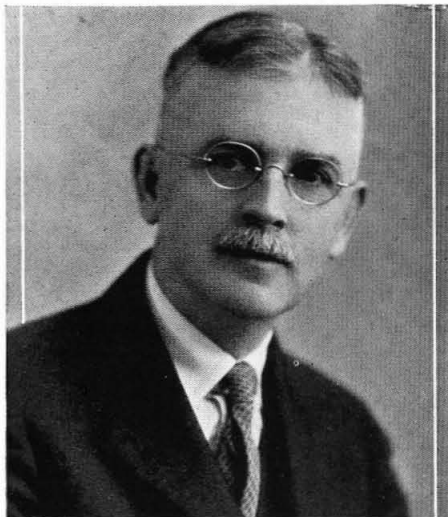


FREDERIC W. HINRICHS, JR.

Dean of Freshmen

There is probably no class more seriously affected by the depression than that of the college man. And yet the nation will continue to need college graduates; though, for the time being at least, not so many of them. Those who are chosen will be the well-trained and thoroughly disciplined, with good academic records, personality, social training, and character. It is only men with these qualifications that institutions of higher learning will feel justified in recommending for positions. The students who have been patronizing the side-shows instead of the main performance, who have felt that other things besides study are of equal importance with it, who have cut classes frequently or have come to them tardily or poorly prepared, who have been inconsistent in their work or have not taken it seriously—such are not for these times which demand men rather than playboys.

J. R. MACARTHUR,
Dean of Lower Classmen



DR. JOHN R. MACARTHUR

ADMINISTRATORS



EDWARD C. BARRETT

Secretary

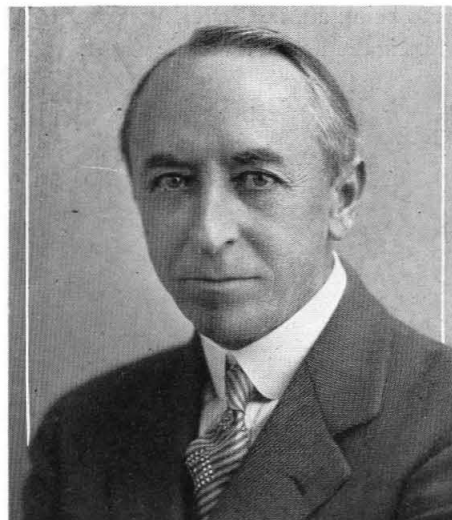
Mr. Edward C. Barrett as Secretary of the Institute has had an extraordinarily busy year. Aside from his duties as Secretary, Mr. Barrett also acts in the capacity of Assistant Treasurer, and, because of the demands of the present depression, is having an extremely busy time. The Business Office under the care of Mr. Barrett has been of great material benefit in enabling many students to continue the pursuit of their studies who would otherwise have been forced to drop out by reason of financial difficulties.

A visit to the Institute on Registration Day would have convinced anyone of the numerous difficulties under which the Secretary has been forced to work this year. The fact that he personally interviews students and obtains aid for them is of creditable note. Mr. Barrett has gained the popular approval and respect of every person with whom he has come into contact on the campus.

Registrar

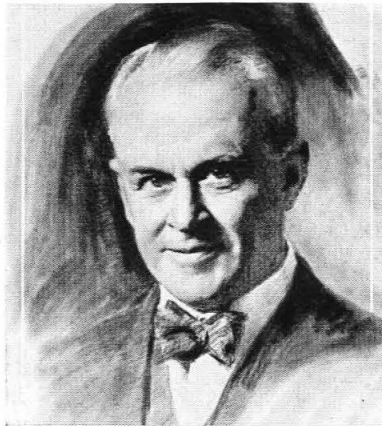
No man takes a greater interest in the Institute, both officially and personally, than the college Registrar, Professor Harry C. Van Buskirk. Few can fully appreciate the vast amount of work which must be done throughout the year in the Registration Department. Besides carrying the responsibilities of this office, Professor Van Buskirk teaches mathematics at the Institute. Cal Tech is distinguished by many who have served long terms, but few can exceed the twenty-eight years of faithful service of this conscientious official.

Many students have come to know Professor Van Buskirk very intimately because of the various problems which bring them in contact with him. Time has shown that the Registrar has dealt most fairly and considerately with the students' difficulties. He is never too busy to listen to anyone's troubles. It is due to the faithful service and integrity of Professor Van Buskirk and the splendid cooperation of his efficient staff that the Institute is able to function.



HARRY C. VAN BUSKIRK

DEPARTMENTS



DR. ROBERT A. MILLIKAN

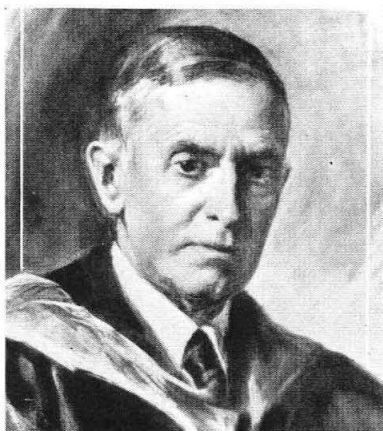
The Department of Physics

A great percentage of the distinction of the California Institute of Technology is due to the marvelous organization and work of the Norman Bridge Laboratory of Physics. The attainment of this position of honor the Institute owes to the genius and super-human ability for organization, research, and development of Dr. Robert A. Millikan, Director of the Norman Bridge Laboratory of Physics, and Chairman of the Institute Council. Dr. Millikan is one of the foremost scientists of the world today. His latest work, in which he is being assisted by Dr. Carl Anderson, is the investigation of the Cosmic Ray.

The visits of the past two years of Dr. Albert Einstein to the Institute are of note. Not only is Dr. Einstein well known in the field of theoretical physics for working out a new gravitational theory, but he is also known as a man of excellent judgment and common sense. It is hoped that he will make his coming to the Institute an annual event.

The research work in progress at the present time includes an extensive investigation of the physics of solids, X-ray work, and study of molecular and atomic structure.





DR. ARTHUR A. NOYES

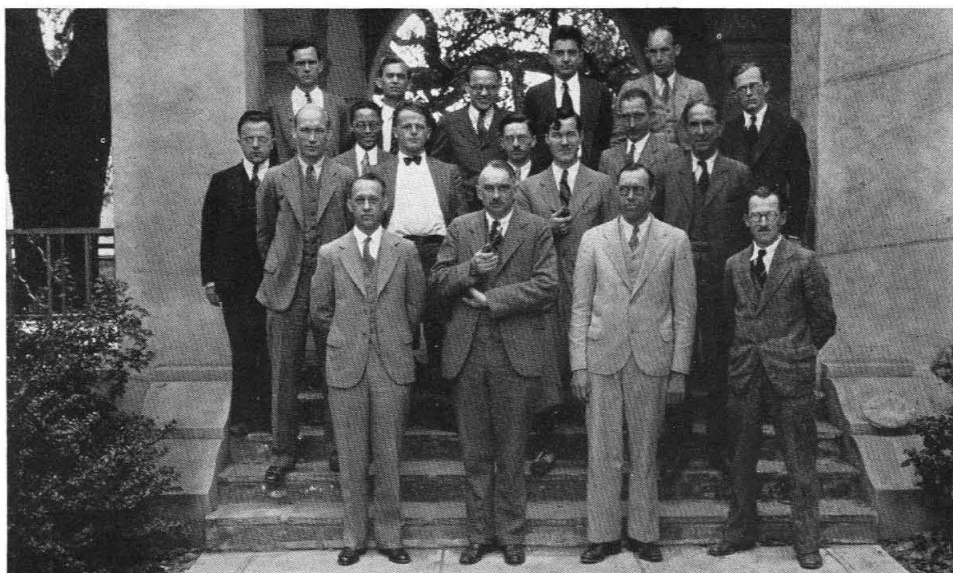
The Department of Chemistry

Much of the renown that has come to Tech may be attributed to the Division of Chemistry and Chemical Engineering. This division ranks second only to the Physics Division in size of personnel and importance of research projects carried on. The head of the division, Dr. Arthur A. Noyes, is one of the outstanding chemists of the country, and is a recognized authority on the subject of qualitative analysis, particularly of the rare elements.

Many special research problems are being investigated by members of the graduate division. The courses of the graduate seminars are

directed by graduate students, professors, or outside authorities on the subject under discussion. Many of the industrial problems of individual chemical industries are being solved at the Institute by graduate students.

The supervision of the research work of graduate students is distributed among the whole staff of the Division of Chemistry. Each staff member takes charge of only three to five students who desire to work in his special field, so that each student receives a large amount of attention.





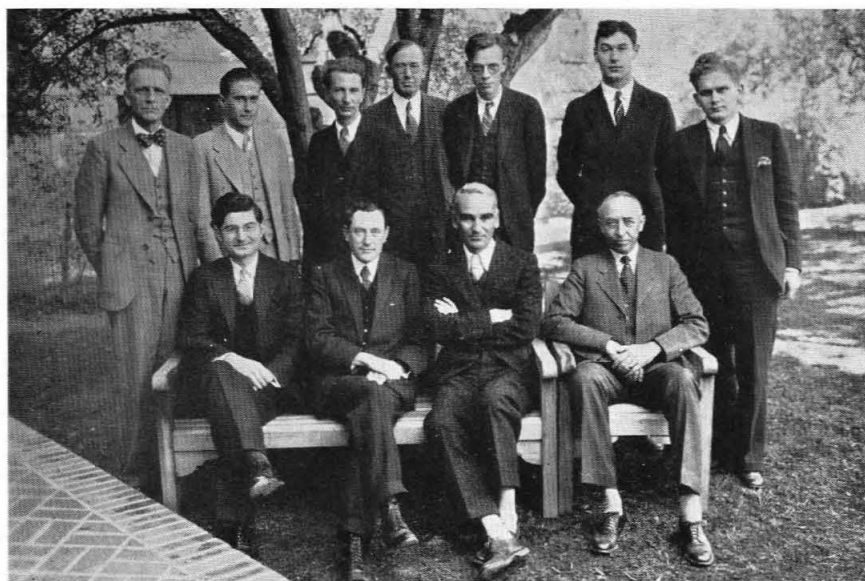
DR. HARRY BATEMAN

The Department of Mathematics

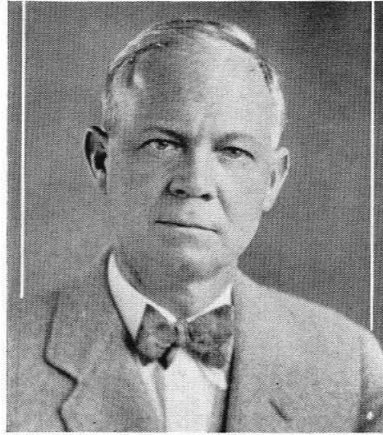
The Institute is now prepared to offer to competent students advanced study and research in pure mathematics. Owing to the exceptional status of the Institute in theoretical and mathematical physics, it is expected that students specializing in mathematics will desire to devote some of their attention to the modern applications of mathematics, even when their first interest is in pure mathematics, in order that they may acquire a well-rounded view of the entire field. On the other hand, specialists in theoretical physics find much that is useful for

their work in the advanced courses in mathematics. It is one of the aims of the Mathematics department of the Institute to provide definitely for such a liaison between pure and applied mathematics by the additions of instructors whose training and interests have been in both fields.

An effort is made to guide the research students in the direction of their own interests and abilities. As enrollment at the Institute is limited, it is possible for the staff to take an individual interest in the research students.



DEPARTMENTS

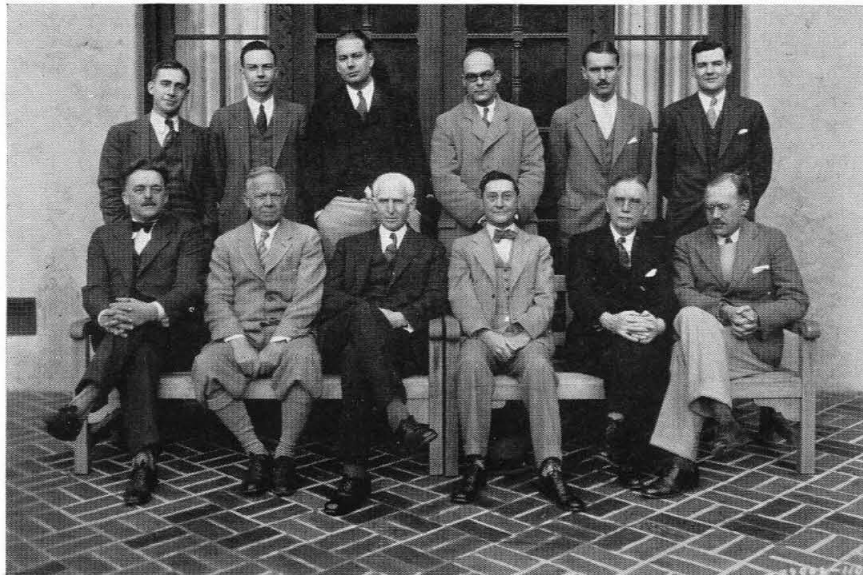


PROFESSOR C. K. JUDY

The Department of Humanities

The Institute is known for its work in the Humanities, as well as for its work in the sciences. Because of its close relationship to the Huntington Library, many eminent men doing work at the Library are secured to give courses at Tech. From the Library, this year, Dr. Max Farrand, Dr. Godfre Davies, and Dr. Avery O. Craven are giving courses in history. In the field of literature, Dr. Louis B. Wright, of the University of North Carolina, and Dr. Hardin Craig, of Stanford, have given instruction.

Two of the most important events of the year were the series of lectures given by Dr. Charles A. Beard and Dr. Jacob Gould Schurman. These two series were given during the second term under the auspices of the division. Dr. Beard, well known historian, gave ten lectures on "Representative Government During a Technological Age." Dr. Schurman, formerly President of Cornell, Minister to China and Ambassador to Germany, gave lectures on various important topics in International Relations.



DEPARTMENTS



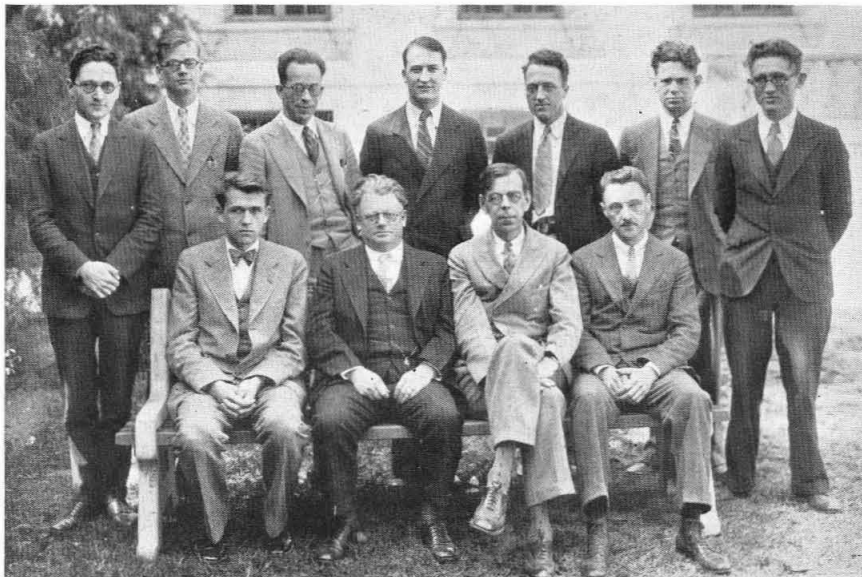
PROFESSOR ROYAL W. SORENSEN

The Department of Electrical Engineering

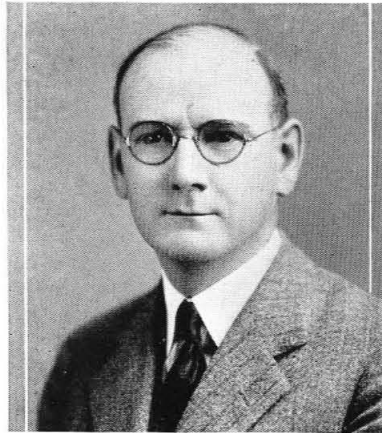
The science of electrical engineering has, due to advances in physics and its applications, reached a status such as to demand electrical engineers qualified to conduct researches involving a knowledge of mathematics, physics, and electrical engineering far in excess of that obtainable in an undergraduate engineering course. With this end in view, the graduate school provides advanced work in the application of mathematical analysis and physical laws to mechanical and electrical problems incident to electrical design and research.

Some of the lines of research are: the study of losses in synchronous machines, high voltage arcs with special reference to switching, power distribution, vacuum tube work, and cooperation with the physics department in X-ray work.

With the completion of the Kellogg Radiation Laboratory, the Electrical Engineering staff has been able to move into better offices and have acquired six much needed, additional rooms for research. This move has added much to the efficiency and homogeneity of the department.



DEPARTMENTS



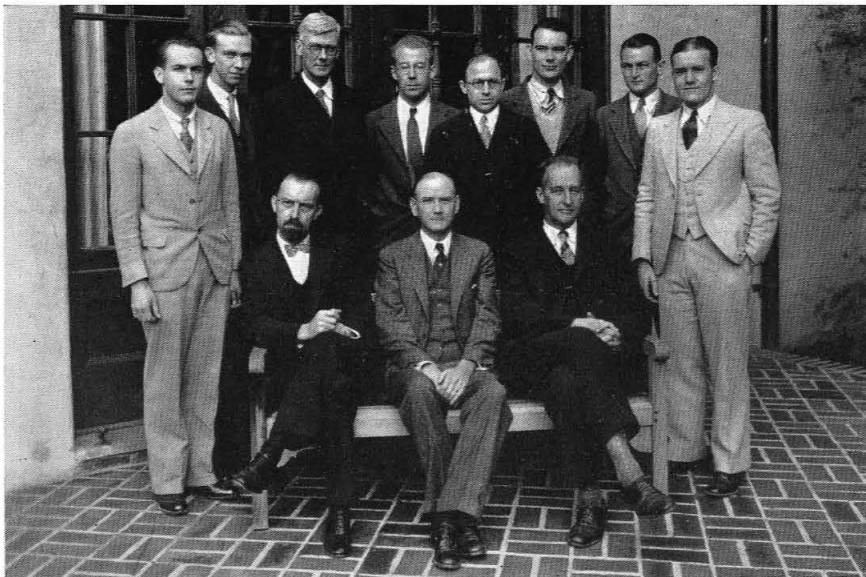
PROFESSOR FRANKLIN THOMAS

The Department of Civil Engineering

More and more opportunities are to be had in the Civil Engineering department for research in structural engineering, irrigation, power development, highway engineering, dam construction, and the like due to the increased facilities of the department, and the capability of the staff of instructors. Professor Franklin Thomas, head of the Civil Engineering department, is Vice-Chairman of the Board of Directors of the Metropolitan Water District of Southern California. Professor Romeo R. Martel, professor of Structural Engineering, is es-

pecially interested in the effect of earthquakes on structures.

One of the men of the department is working on a new form of shaking table for investigation of the effect of vibration upon buildings and building frames. This research is being carried on with the view of finding an index of both the nature of the stresses that develop in frames under vibration, and a quantitative measure of the stresses themselves. There has just been completed an extensive investigation of the rate of percolation of water in stream beds.





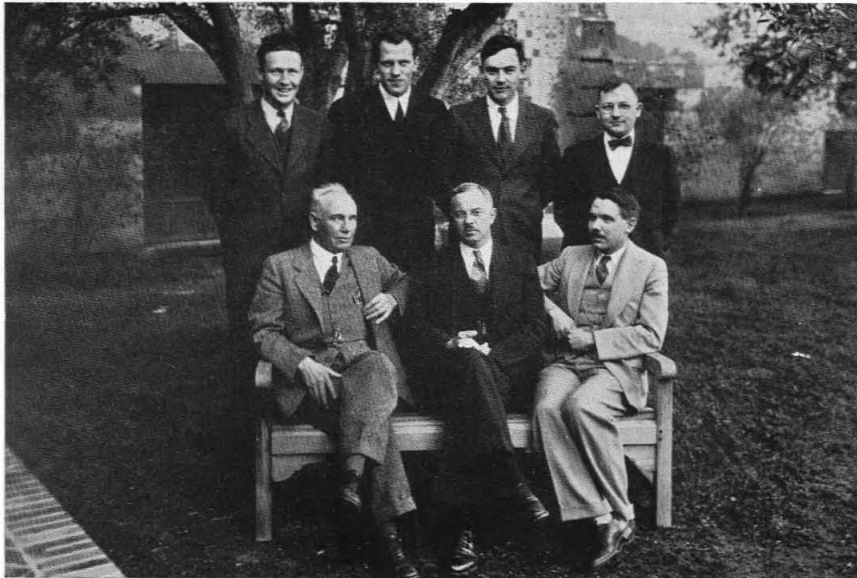
PROFESSOR ROBERT L. DAUGHERTY

The Department of Mechanical Engineering

The Mechanical Engineering department, under the supervision of Professor Robert L. Daugherty, has as its aim to give work, both in theory and practice. It is the practice of the department to arrange for tests to be made outside of school in industrial plants, and other places, in order to give practical knowledge to those taking the work.

There is extensive research being carried on in a number of lines this year. The following investigations are being conducted: experimental investigation of induced turbulence in annular tubes; investigation of the characteristics of

a centrifugal pump under abnormal conditions; development of an optical type of differential pressure gauge; investigation of new methods for determining instantaneous velocities in liquids moving at relatively high speeds; a study of relative properties of commercial automotive lubricating oils; diffusion of manganese in iron; effect of rapidity of breaking on the energy required; and elongation and contraction of tensile test specimens. It is interesting to note the variety of the researches that are being conducted, and most of them are of practical importance.





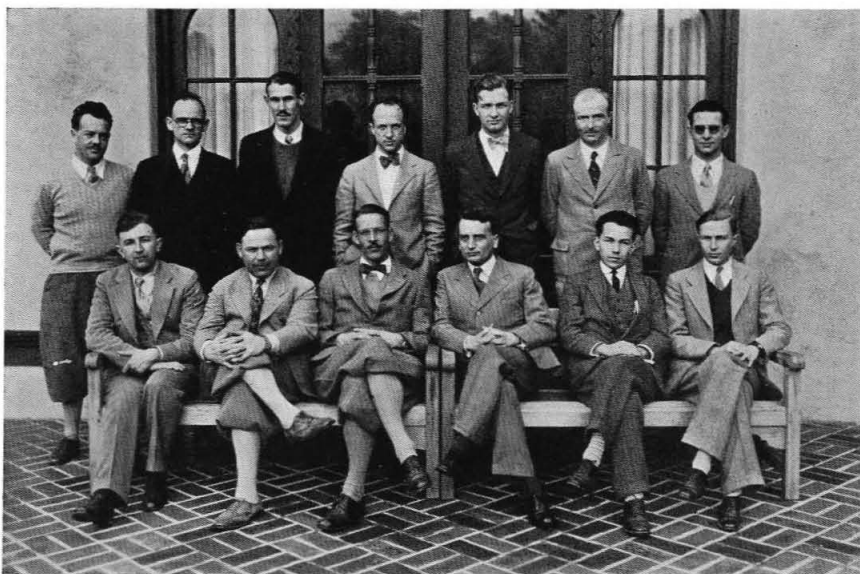
PROFESSOR VON KARMAN

The Department of Aeronautics

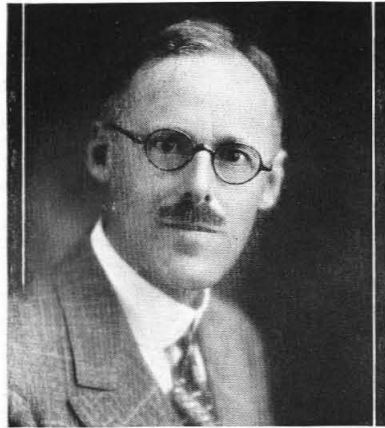
With the aid of the Daniel Guggenheim Fund for the Promotion of Aeronautics, the California Institute of Technology has established a Graduate School of Aeronautics and has constructed the Daniel Guggenheim Laboratory of Aeronautics, containing the ten foot high-speed wind tunnel. Recently the Daniel Guggenheim Fund provided funds for the Airship Institute, which is located at Akron, Ohio. This laboratory contains a six foot wind tunnel and other experimental facilities for lighter-than-air research, so that the Institute will carry on theoretical and experimental work in the lighter-than-air field

both at Pasadena and Akron. Both laboratories are under the direction of Dr. T. von Karman, who is in charge of the experimental and theoretical researches.

Experimental and theoretical researches are conducted on the basic problems of flow in real fluids, with regard to the scientific foundations of technical hydro and aerodynamics. The basic problems of applied mechanics, which relate to the properties of materials and the theory of elasticity, and practical problems in aerodynamics and structures, are also included in the research conducted by the department.



DEPARTMENTS



DR. JOHN P. BUWALDA

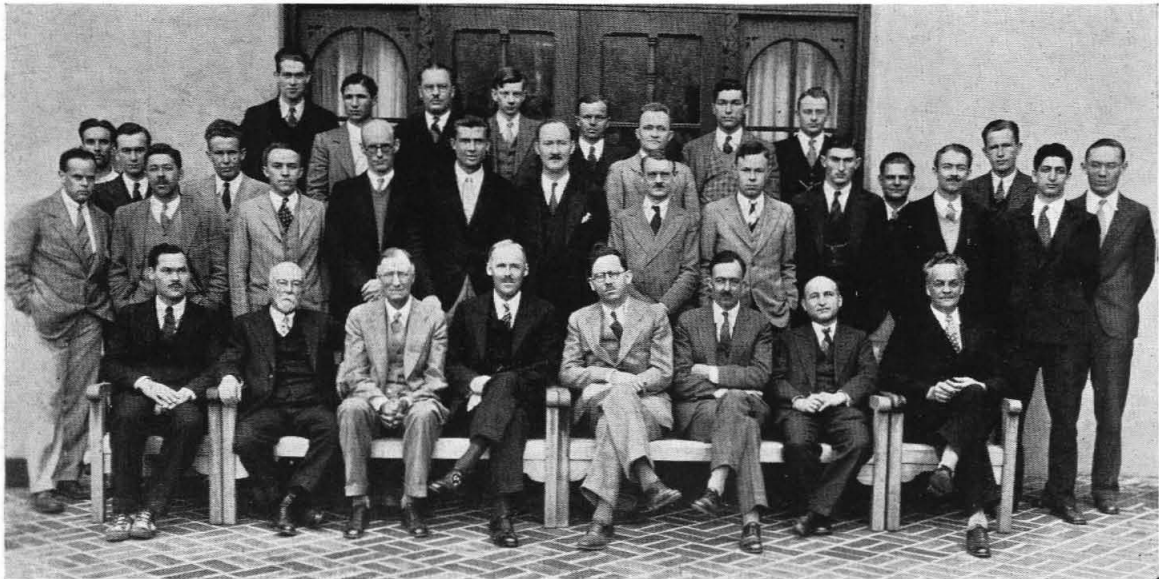
The Department of Geology and Paleontology

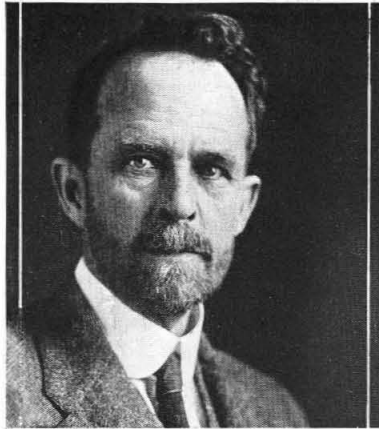
Within convenient reach of Pasadena occurs an almost unrivaled variety of rock types, geologic structures, and physiographic forms. Stratigraphic and faunal studies may be pursued in the Cenozoic and Mesozoic sedimentary rocks of the Southern Coast Ranges, and in the Mojave Desert Region. There remain many regions to be explored and, also, there are many problems inviting critical investigation. To those interested in economic geology the oil fields, Portland cement plants, and the various metaliferous and gem producing regions of Califor-

nia, Arizona, and Nevada offer excellent opportunities for visit and research.

A fully equipped Seismological Research Laboratory, situated on the west side of the Arroyo Seco, is devoted to researches in seismology and to the development of the instruments used in a seismological laboratory.

Collections from many invertebrate and vertebrate faunal horizons in the sedimentary record of western North America permit the student interested in paleontology to secure an intimate knowledge of the history of life.





DR. THOMAS H. MORGAN

The Department of Biology

Under the enthusiastic leadership of one of America's greatest authorities in this field, Dr. Thomas H. Morgan, as chairman of the Division of Biology, research is being conducted in the biological laboratories in the related fields of biology. A Division of Biology, rather than the traditional departments of Botany and Zoology, has been established, in order to emphasize the unity of the phenomena of living organisms rather than their manifold diversities. That there are many properties common to the two great branches of the living world has become abundantly manifest in recent years.

For example, the same principles of heredity that obtain among flowering plants apply also to human traits, and in their response to light, animals and plants conform to common laws of physics. It is true that, at what may be called the biological level, an immense diversity of form and function manifests itself, but enough insight has already been gained to make evident that this diversity is in large part due to permutations and combinations of relatively few fundamental and common properties. It is in the search for these properties that the zoologist and botanist may profitably pool their interests.



DEPARTMENTS

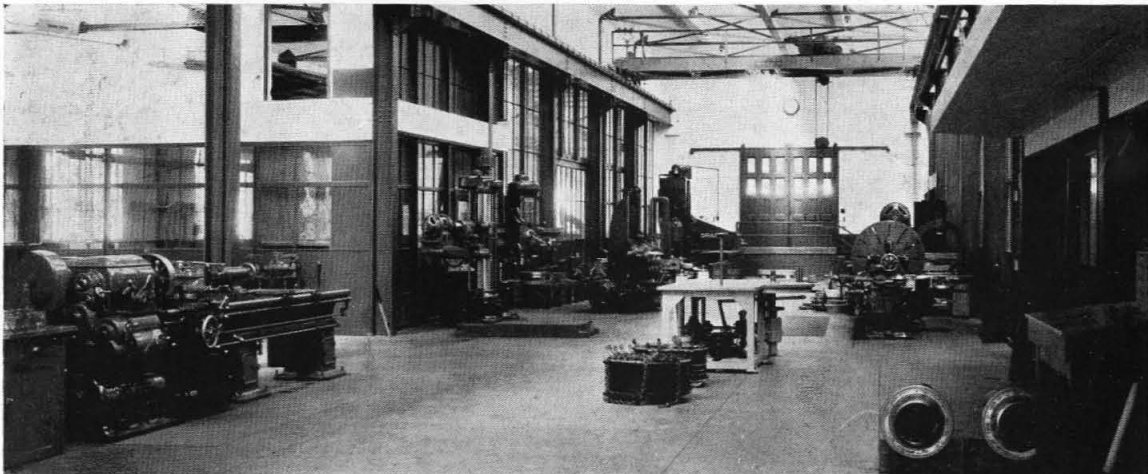


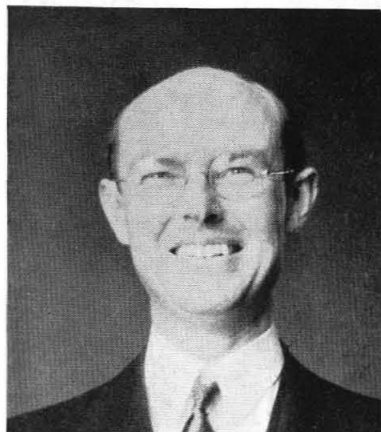
RUSSELL W. PORTER

The Department of Astrophysics

The new Astrophysical Observatory, provided for by the International Education Board, and to be constructed by the Institute, will consist of two main features. One of these will be the 200 inch telescope, with its building, dome, and auxiliary equipment, to be erected on the most favorable high altitude site that can be found within effective working distance of Pasadena. The other is the Astrophysical Laboratory, now nearing completion, which will serve as the headquarters of the Observatory. The Astrophysics Machine Shop, located on the campus, is engaged in the development of new instruments and the construction of equipment for the laboratory.

Dr. John A. Anderson, of the Mount Wilson Observatory, as Executive Officer of the Observatory Council, is in direct charge of design and construction. The problems connected with the design of a large telescope such as this necessitate long study. Two substances, fused silica and Pyrex glass, have been under investigation for some time; they are especially suitable for mirror disks because of their low coefficient of expansion. The work of putting the mirrors in finished form will be done in an optical shop to be constructed adjacent to the Astrophysics Machine Shop.





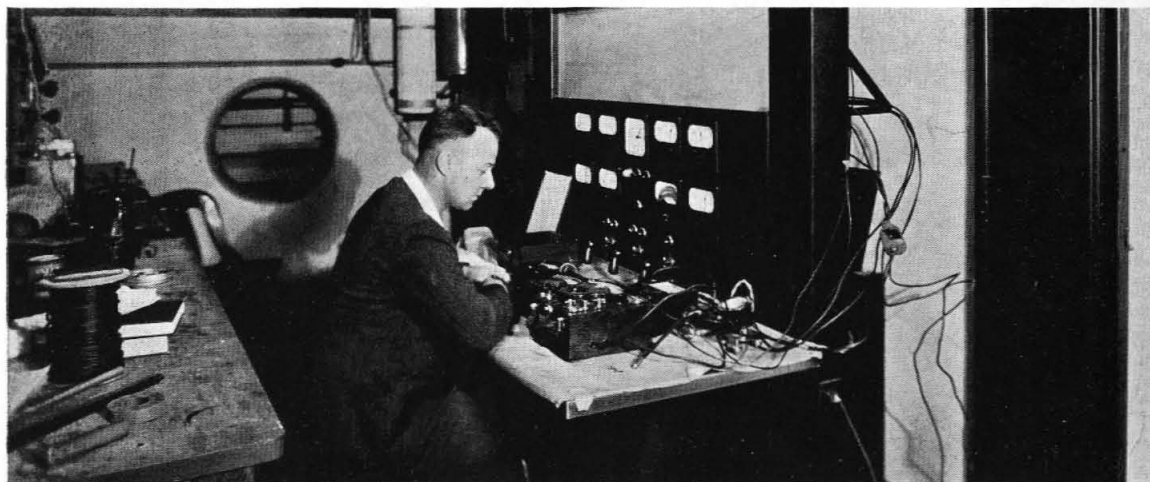
DR. SEELEY G. MUDD

The Department of Radiation

The facilities for research in the field of radiation have been greatly increased by the erection of a building designed and equipped especially for high potential X-ray work. The tube to be used, designed by Dr. Lauritsen of the Institute, is expected to operate in the neighborhood of a million volts. The two transformers, one located on the bridge, and the other in the pit, are each made up of five units of 140,000 volts, giving all a mean square voltage of 1,400,000, with a peak of about 2,000,000. The treatment room extends out into the transformer room, and the giant tube goes through it. Before any treatments are given, a

number of physical tests and calibrations have to be made. In addition to the therapeutic studies, physical work will be carried on.

Under the direction of Dr. Seeley G. Mudd, the laboratory is making observations of the action of short wave X-ray on deep seated malignant tumors. Data for the research records of the Institute has been obtained by a group of physicians especially interested in the work, and includes routine history, physical examination, etc. No miracles have occurred, and none are expected. It will be a matter of years before any definite statement of results can be given.



VIEWS



Student Administration



Executive Committee

Board of Control

Publicity Committee

Exhibit Day Committee

STUDENT ADMINISTRATION



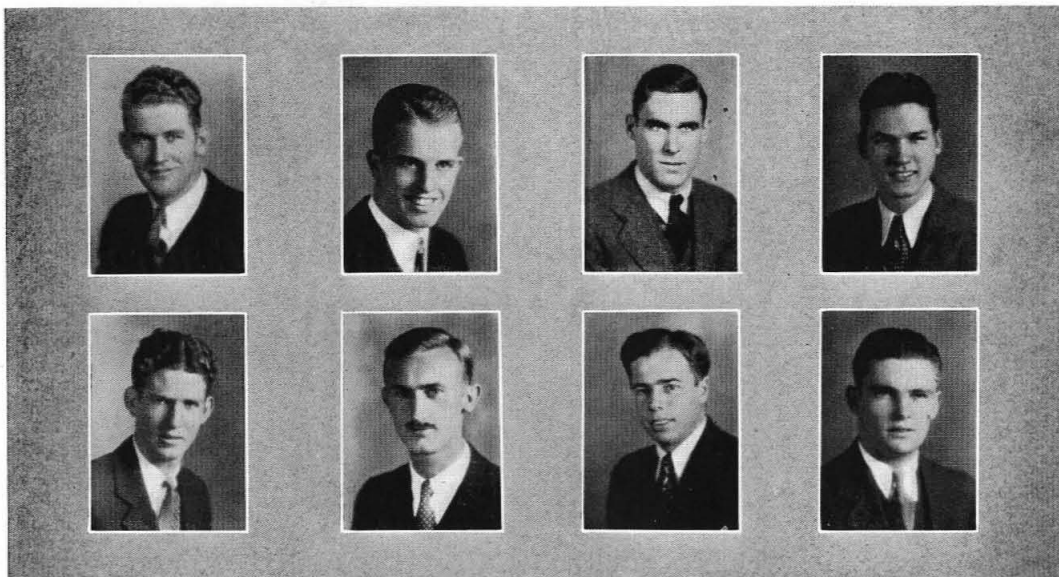
PHILIP SCHOELLER

Executive Committee

Behind the busy stream of student activities which we have witnessed on the campus during the current year, the guiding hand and watchful eyes of the Executive Committee have been constantly on the alert to insure the smooth running of all the working parts. Members of the committee for this year were Philip Schoeller, stu-

dent body president; Robert Freeman, vice-president; Paul Parsons, secretary; Paul Arnerich, treasurer; Don Graff, athletic manager; James Bradburn, publicity manager; and Art Mathewson and Walter Scholtz, representative-at-large.

The functions of this committee include all the ordinary executive and legislative duties in general student body affairs.



SCHOELLER (PRES.)
BRADBURN (PUB. MGR.)

FREEMAN (V.P.)
GRAFF (ATH. MGR.)

PARSONS (SEC.)
SCHOLTZ (REP.)

ARNERICH (TREAS.)
MATHEWSON (REP.)

STUDENT ADMINISTRATION



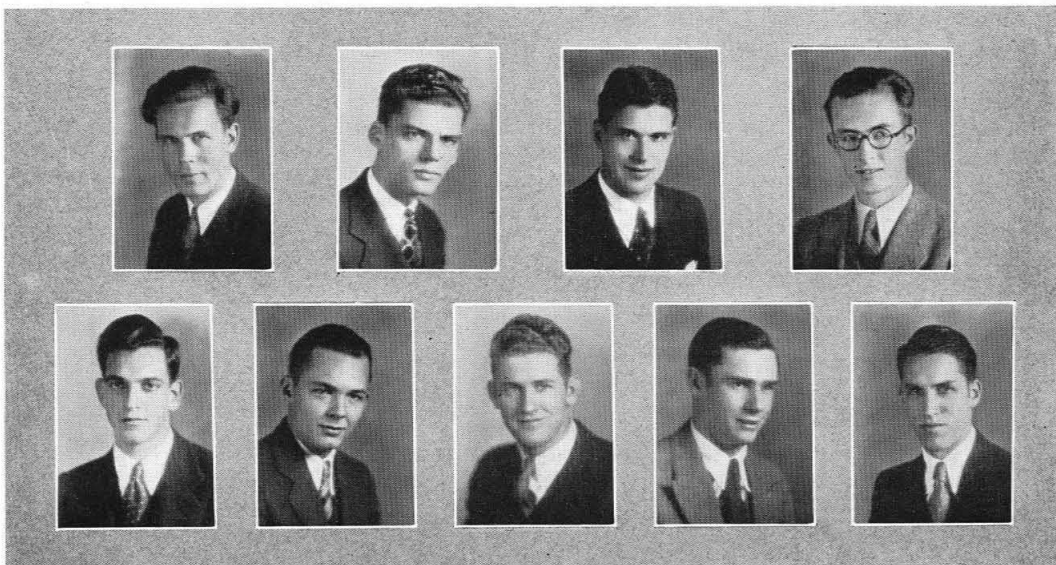
ROBERT B. FREEMAN

Board of Control

The voting members on the Board consist of four seniors, of whom one is the President of the Student Body, three juniors, two sophomores, and one freshman. The Vice-President of the Student Body acts as Chairman of the Board, with the Secretary of the Student Body acting as Board of Control Secretary. This year these two men were, respectively, Bob Freeman and Paul Parsons. The ten voting members were Philip Schoeller, Bruce Rule, Jack Chambers, Bill Berg-

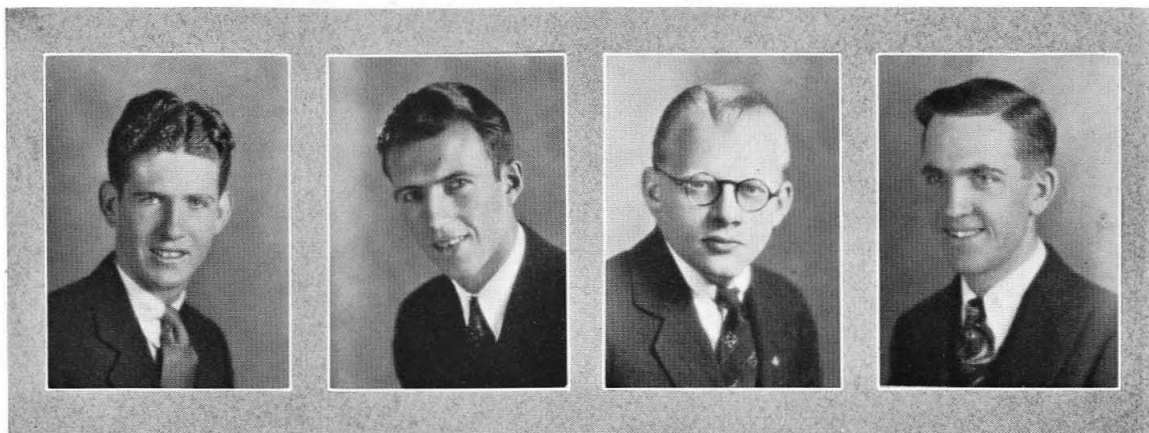
ren, Ed Crawford, Bob Fletcher, Dave Clarke, Bob Sharp, John Pearne, and Bill Harris.

It is safe to say that the thing most Tech men are the proudest to possess is the Honor System. Its results are immediately apparent to anyone visiting the campus. Means of stimulating higher interest in the System are sought and discussed by the Board of Control, which then seeks to put them into effect.



BERGREN, CHAMBERS, CLARK, FLETCHER
HARRIS, PEARNE, SCHOELLER, SHARP, RULE

STUDENT ADMINISTRATION



BRADBURN

SMITH

LIEN

WHERRITT

Publicity Committee

One of the least known of the various groups on the campus, but one of the utmost importance, is the Publicity Committee. This committee, which during the past year has consisted of Jim Bradburn, chairman; Elvin Lien, Sid Smith, and Bob Wherritt, has the thankless job of keeping all activities, debate, sports, etc., before the eyes of the public, by placing the events and the date of their happening at the disposal of the various daily newspapers and periodicals.

During the third term of 1931 the committee helped tremendously in the advertising of the annual Exhibit Day, working in cooperation with the regularly appointed Exhibit Day advertising committee. The result was one of the largest Exhibit Days in the history of the Institute.

Perhaps the greatest amount of work for the Publicity Committee came during the football season, when football programs were edited,

published, and placed. The entire writing of the programs, including the procuring of the names and pictures of the contestants, the selling of advertising space, and the final selling of the books at the games, is handled by this group. In this same general line is the matter of placing posters advertising the various games throughout the season in the local area. The football programs produced through the past season were as good as any in the Southwest.

Throughout the second term this year, the chief duties of the committee consisted of obtaining intercollegiate writeups of the various track meets and baseball games in the local and Los Angeles newspapers.

Under the new regime in the third term this year, the first important work of the committee, headed by Gregory Hartmann, was the successful advertising of the 1932 Exhibit Day.

Exhibit Day

Exhibit Day is an annual affair at the Institute. It is held principally for two reasons; to give prospective students from the high schools in Southern California a chance to visit the school at a time when everything is open, and to give the students at the Institute an opportunity to show the school to their relatives and friends.

With the above objectives in view, the Exhibit Day Committee worked very hard in an endeavor to present demonstrations which would not only interest the public, but which would also give them an elementary understanding of the principles behind the experiments.

In electrical engineering the high tension laboratory was the center of attraction. An insulation puncture, long arc, and corona were shown. The Kellogg Radiation Laboratory also held the attention of visitors and students.

Because of the vast number of people who have been unable to see the liquid air demonstrations in previous years, these lectures were held in Culbertson Hall this year. They were presented by the students themselves, and the

properties of liquid air shown in a striking way. Another object of major interest in physics was the phonoscope, with the admirable demonstration of sound analysis.

Biology gave an opportunity of viewing the fertilization of eggs of the marine annelid *Urechis caupo*. Additional exhibits presented the processes of development of chick embryos. By observing these demonstrations a very good idea of the growth of an animal from conception to birth was obtained.

Those who went into the Guggenheim Aeronautical Laboratory saw the wind tunnel and the five automatic balances which measure the forces on a model while it is being tested. The action of these balances, as well as the actual method of operating the wind tunnel when in use were described. A scale model of the new Navy dirigible "Akron" received much attention.

Although the living houses were not open to the general public, members of the various houses entertained their friends with a buffet supper on Friday evening.



HARTMANN
VENERABLE

HUTCHISON
GOULD

FINNEY, *Chair.*
LIND

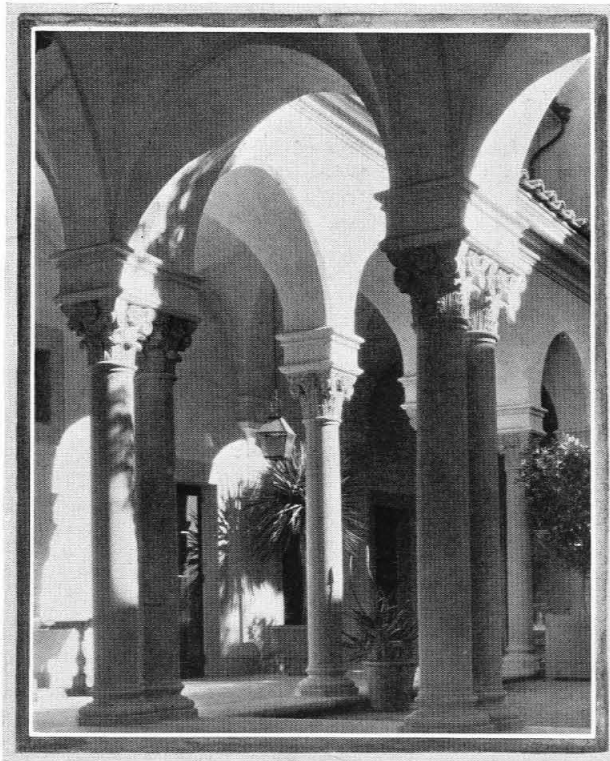
BERGREN
MCFADDEN

SCHULTZ
HARSHMAN

VIEWS



Views



Courtesy Hiller Studios

Our Growing Campus

VIEWS



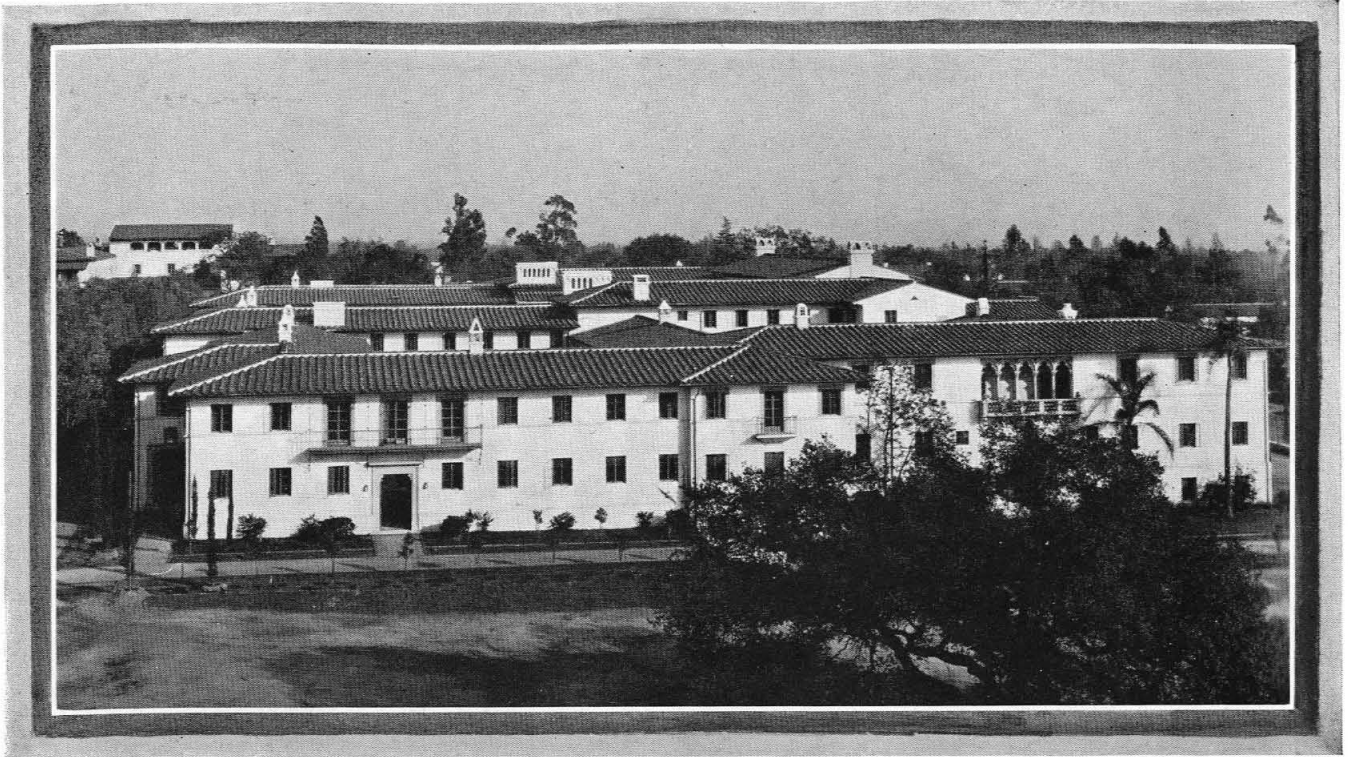
THE WISHING WELL IN RICKETT'S COURT

VIEWS



A SHADED WALK NEAR THE ATHENAEUM

VIEWS



THE RESIDENCE HALLS



SUNLIGHT THROUGH THE COLONNADE

VIEWS



ATHENAEUM—CAMPUS ENTRANCE



DOWN THE AVENUE OF OLIVES

VIEWS

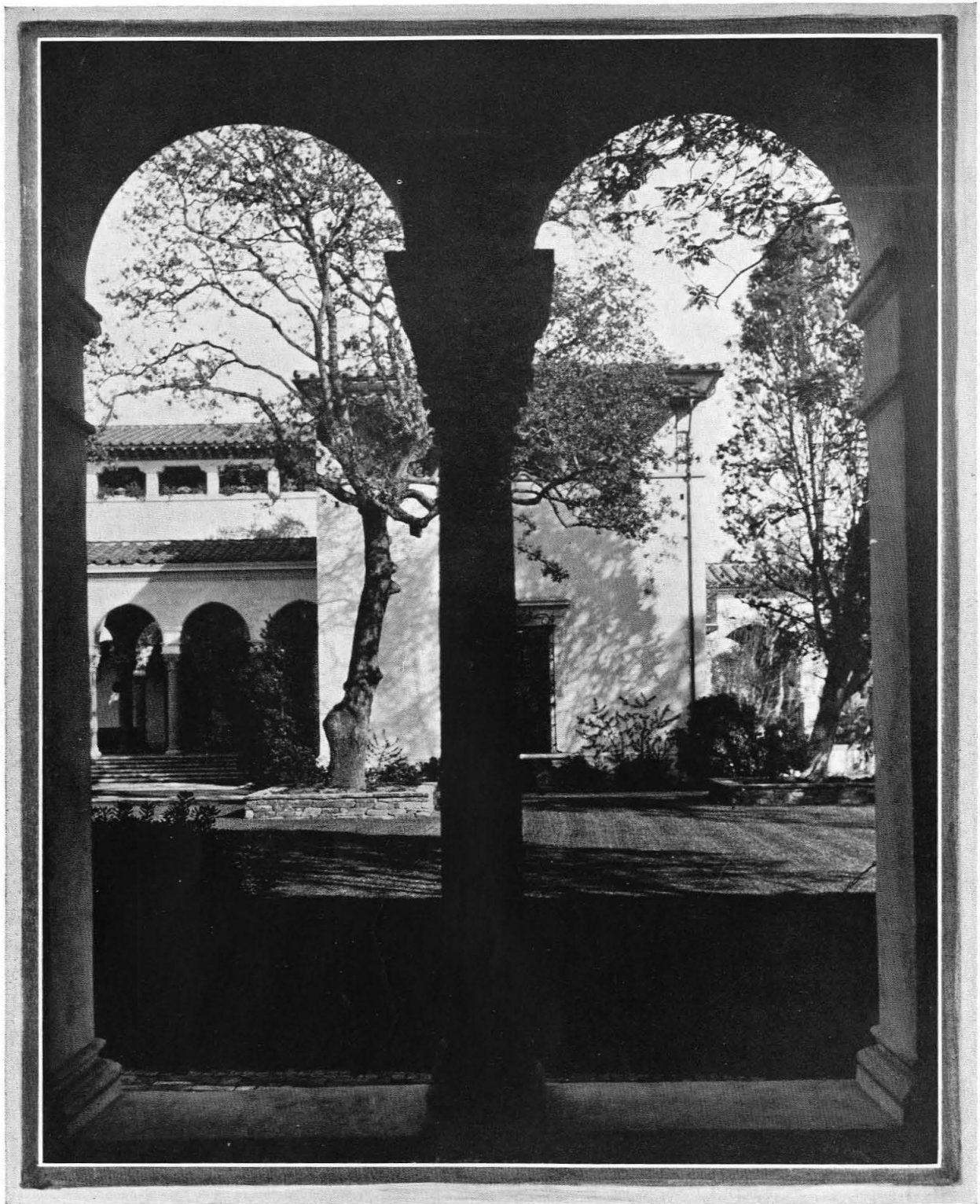


DOWN THESE STEPS COME NEW ALUMNAE EACH JUNE



FANTASY IN SHADOWS

VIEWS



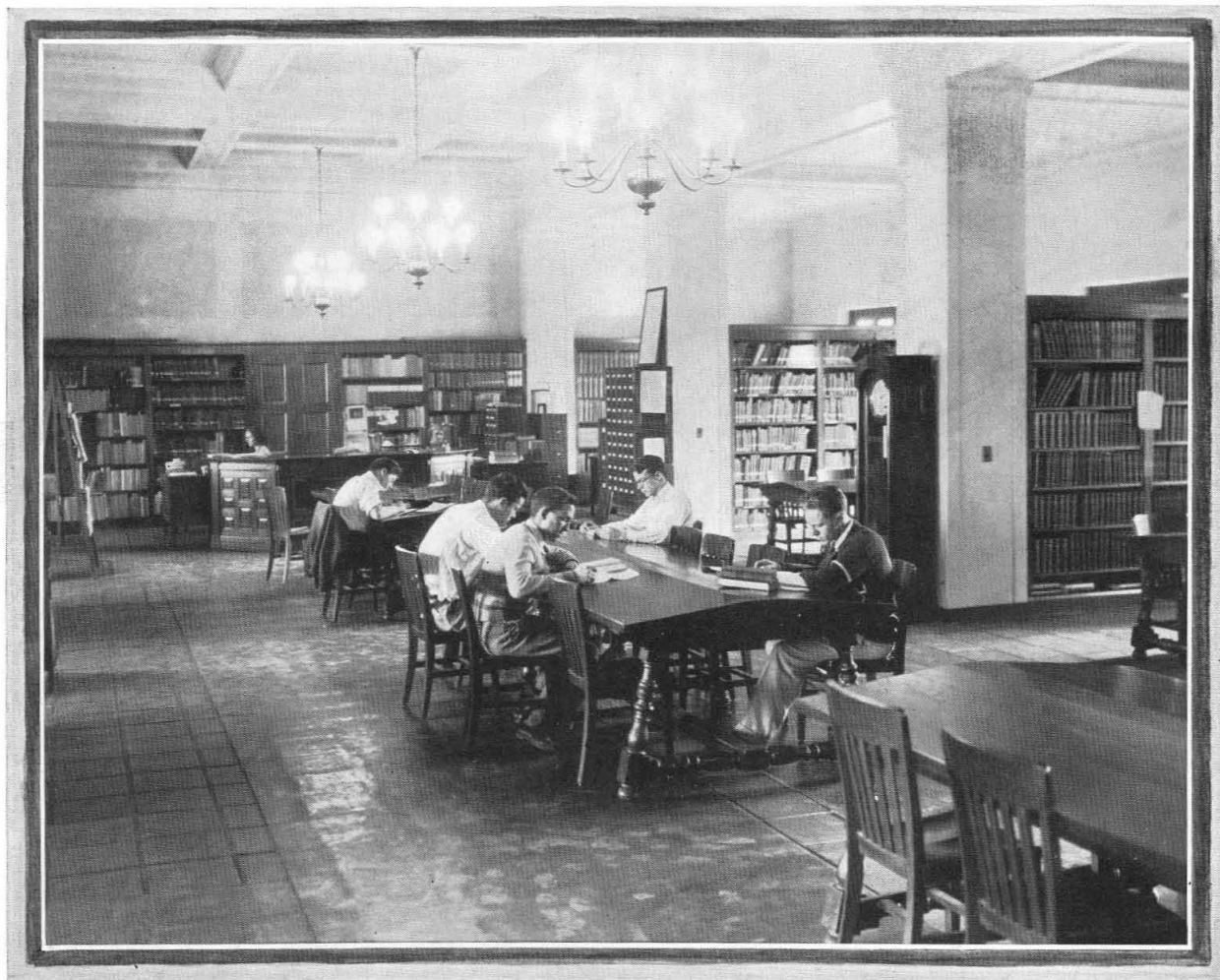
A GLIMPSE THROUGH THE ARCHWAY

VIEWS



THE PATIO OF BLACKER HOUSE

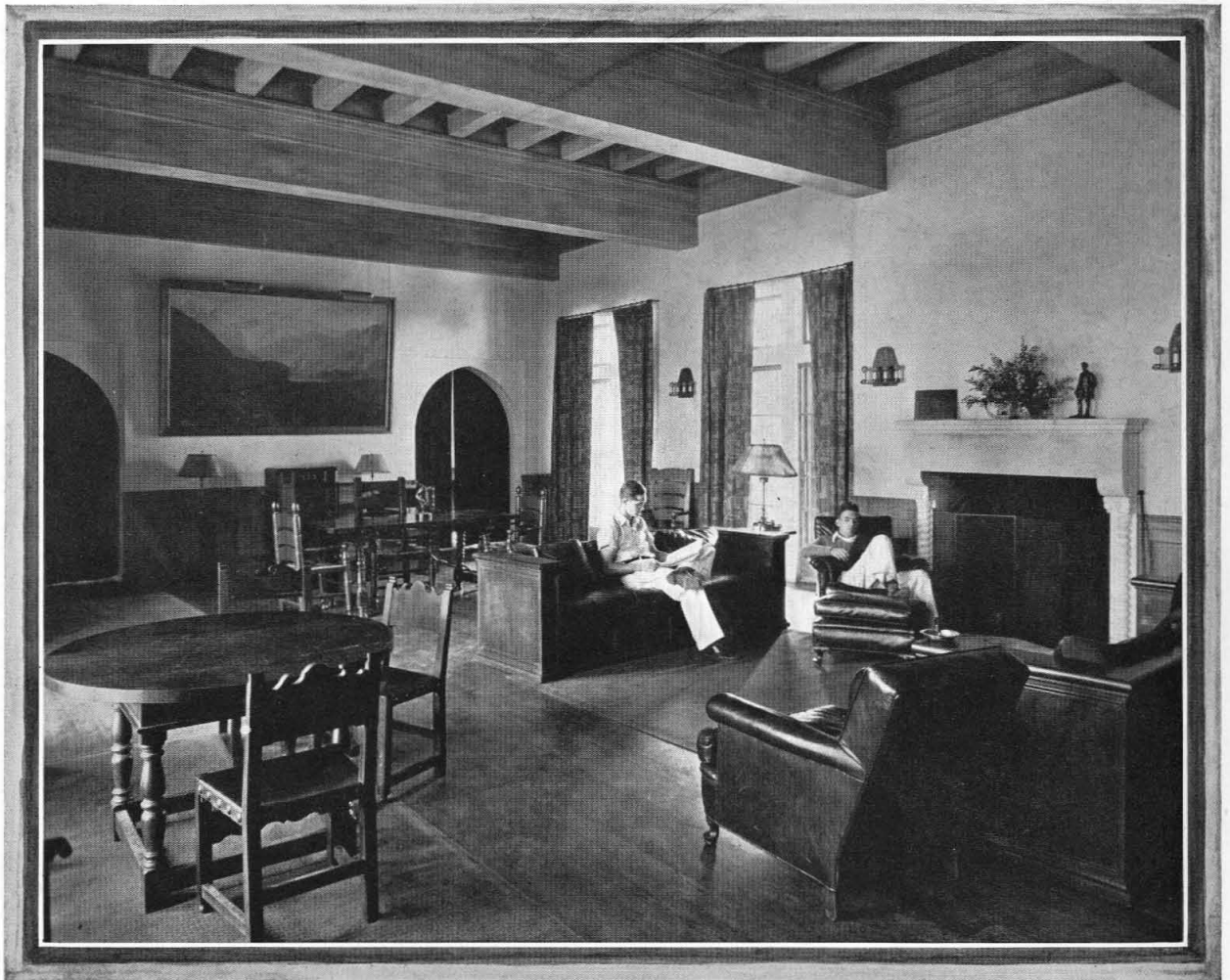
VIEWS



The main library is a pleasant and oft frequented place of study. Its files of technical periodicals is very complete.

VIEWS

The lounges of the various houses form the nuclei of student life. Here the men may entertain their guests, meet their fellow students, and pass many idle moments.

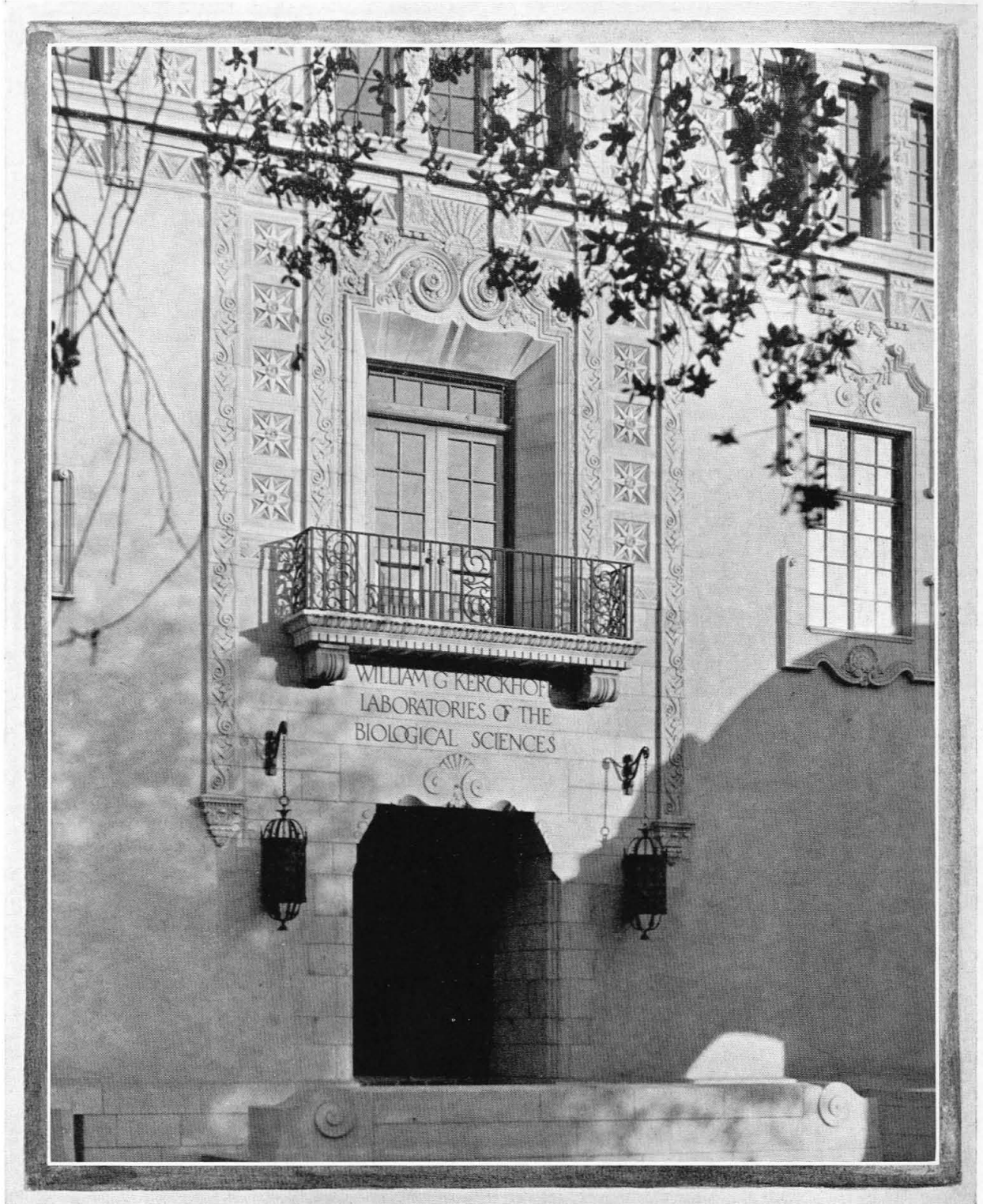


VIEWS



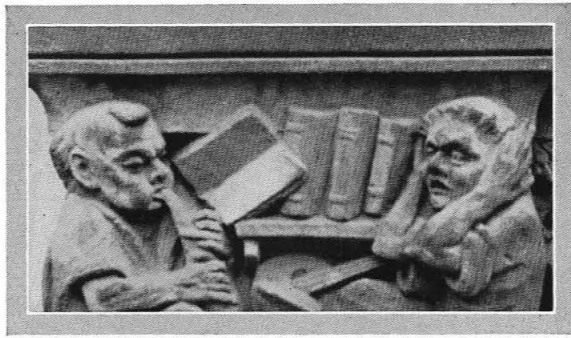
THE ENTRANCE OF GATES CHEMICAL LABORATORY

VIEWS



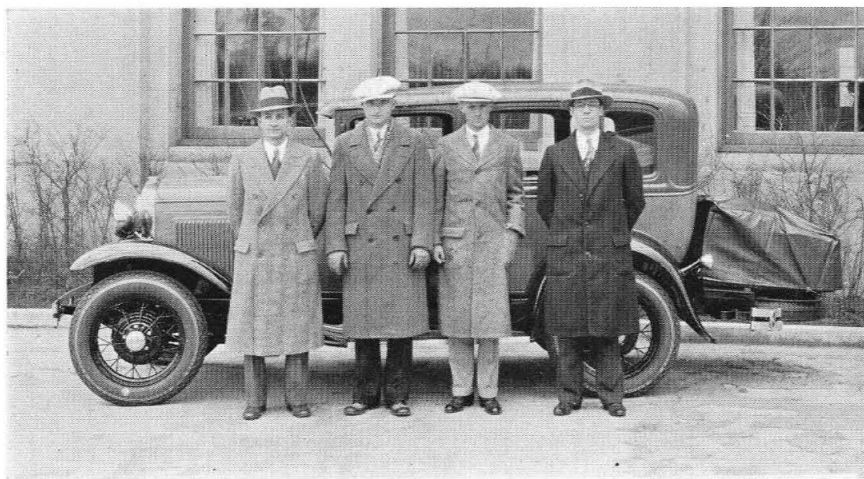
AN ENTRANCE TO THE BIOLOGY BUILDING

VIEWS



SCHOLARSHIP

Scholarship



OFF FOR EUROPE

*Scholastic Achievement
The Travel Prize Trip*



Honors and Scholarships

In order to reward the extra-ordinary scholastic efforts of the prospective members of the freshman, sophomore, and junior classes, prize scholarships are awarded to those students whose excellent work has merited distinctive honor. Sixteen freshmen scholarships carrying \$150 or \$300 are awarded by the Institute upon the basis of a competition open to properly qualified male students in the senior classes of high schools or college preparatory schools. These scholarships are given on the basis of all the information available in regard to the applicants—the results of their examinations, their high school records and recommendations, the statements submitted as to their student activities and outside interests, and the results of personal interviews.

The awards will be made without reference to financial need but any successful student with adequate resources may relinquish the money payment in favor of the next most deserving competitor, while retaining the scholarship as an honorary recognition. The winners of these scholarships will be designated Blacker Scholars or Drake Scholars, in recognition of the donors,

Robert R. Blacker and Nellie Canfield Blacker, or Mr. and Mrs. A. M. Drake.

With the aid of funds recently received the Institute has established about thirty new scholarships known as the Sophomore and Junior Prize Scholarships. These scholarships, which carry half tuition, are awarded at the end of each school-year to those students who as a result of their work, during the freshman and sophomore years, were granted honor standing on the basis of their scholastic records. Any holder of such a scholarship who in any subsequent term fails to maintain a scholastic standard set by the Committee automatically loses his honor standing and scholarship for the remainder of the year.

Honor standing entitles the student to special privileges and opportunities, such as excuse from some of the more routine work, instruction in "honor sections," and admittance to more advanced subjects and to research work. To those students of high standing and in need of financial assistance who have not been awarded one of the prize scholarships, the Committee on Honor Students is authorized to award a smaller number of tuition grants.

SCHOLARSHIP



Two Travel Prizes, each carrying an award of \$900, have been established through the liberality of anonymous donors, in order to emphasize the educational value of travel as a means of broadening the student's cultural and professional viewpoints. Both of these prizes are awarded, at the end of the second term of each

year, to the two most worthy students in the junior class upon the basis of a competition open to twelve to sixteen men receiving honor standing at the end of their sophomore year.

The following is a list of those students who have been awarded the prizes described above.

JUNIOR SCHOLARS:

HARRISON STOUT BACKUS
DAVID FULMER BENDER
EUGENE MITTELL BRUNNER
RALPH EDWARD BYRNE, JR.
CHARLES DUBOIS CORYELL
TRENT RAYSBROOK DAMES
RUBIN HAROLD FRIEMAN
GREGORY KEMENYI HARTMANN
JAMES STANLEY JOHNSON
SAMUEL YORKS JOHNSON
L. JACKSON LASLETT
JOHN DALE MENDENHALL
WILLIAM A. MERSMAN
WESLEY WALTER NELSON
JOHN ROBINSON PIERCE
CHARLES EMIL TILLMAN
WILLIAM THORNTON WHEELER
MOSES WIDESS

SOPHOMORE SCHOLARS:

ROBERT CARRON ANDERSON
ROBERT DEVORE BOCHE
DONALD LEROY CLEVELAND
EDWARD BUSHNELL DOLL
JAMES NATHANIEL GREGORY

HOWARD E. GULICK
ERNEST RUSSELL HOWARD
ROBERT A. HOWARD
FORD LAWRENCE JOHNSON
PAUL LOUIS KARTZKE
CHARLES VERNON NEWTON
NELSON PERRY NIES
HERBERT SPENCER RIBNER

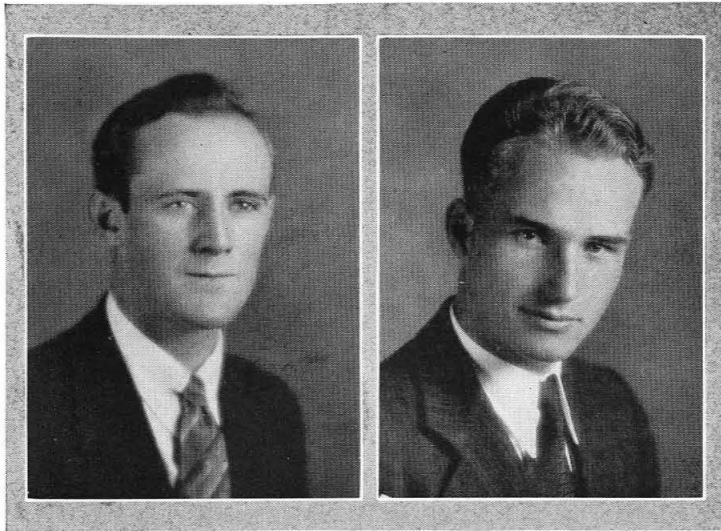
BLACKER FRESHMAN SCHOLARS:

WARD WILSON BEMAN
WYCHE DEAN CALDWELL
JAMES HENRY JENNISON
ROBERT LINCOLN KRAMER
MAX FRANKLIN MILLIKAN
EDMOND F. SHANAHAN

DRAKE FRESHMAN SCHOLARS:

WILLIAM GORDON COX
ROBERT HENRY DOURSON
RICHARD H. JAHNS
LEONARD SEARLES PATTERSON
KENNETH SANBORN PITZER
JOHN RUDOLPH ROSSUM
ROBERT COLLETT WARNER
VICTOR WILMER WILLITS
DONALD LAURENCE YOUNG

TRAVEL PRIZE



PICKERING

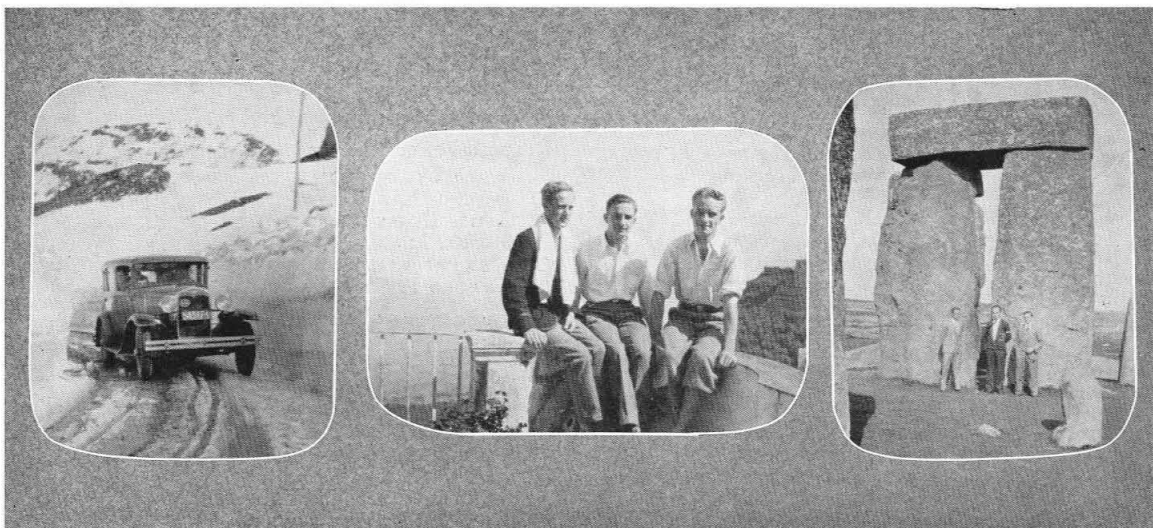
JONES

The Travel Prize Trip—1931

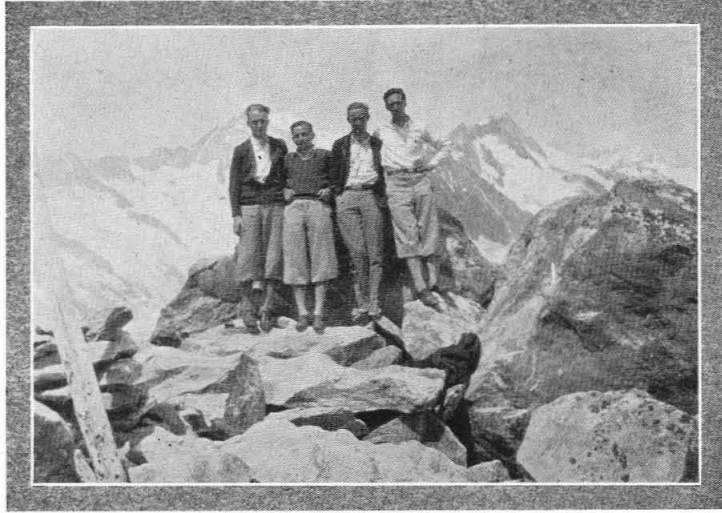
Little more than a year ago four young men from Tech set out on a glorious six months of travel and adventure. Two of them, William H. Pickering and Charles W. Jones, had been awarded the Travel prizes; the others, Charles M. Harsh and Charles E. Kircher, were given leave of absence to travel with them. At midnight on March 26, 1931, they left Pasadena, six months later their travel stained Ford with 16,000 miles on the speedometer was parked on California Street. During those six months they had driven over Europe, south to Seville, east to Budapest, north to Edinburgh; they had passed

through thirteen different countries; they had attempted to speak seven different languages; they had peered into the very jaws of Vesuvius; they had been in a gondola by moonlight on the canals of Venice; they had climbed among the snow covered peaks of Switzerland; they had spent a week in Paris; and so on and on far into the night. If you are a good listener, and have plenty of time, just mention Europe to one of them and note his reaction.

More specifically, they tell us they got their shiny new Ford at Detroit, then drove through Washington to New York. They crossed the At-



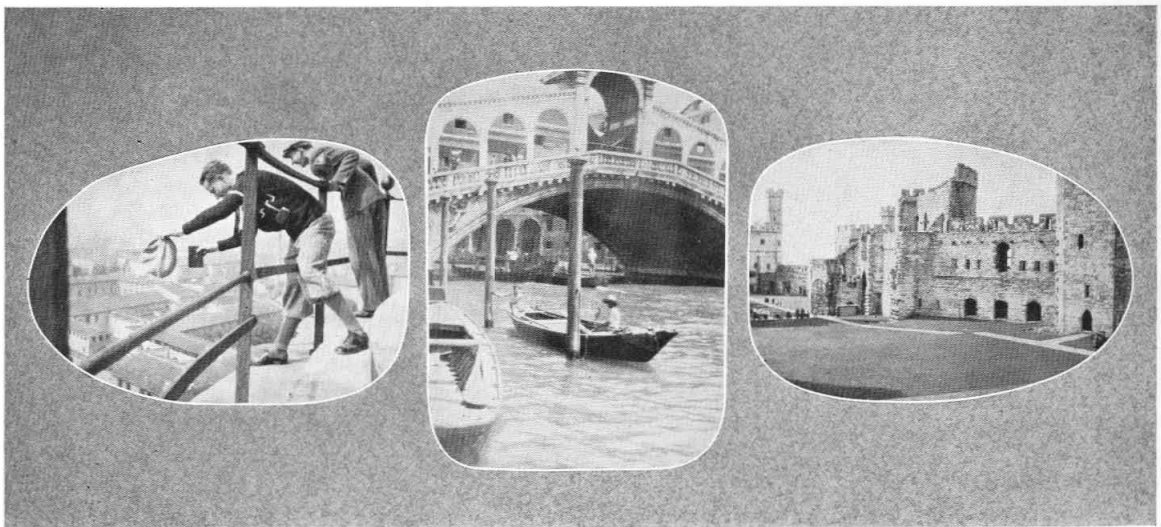
TRAVEL PRIZE



lantic on the Bremen, landed at Cherbourg and first drove South to Spain. They say they were unfortunate here in that they just missed the revolution by a few days. After seeing as much of the country as they could in two weeks they drove along the Riviera into Italy. Here they found some of the greatest works of art of the human race. Then they went north to Austria. At Vienna they parked the car for a few days and took an enjoyable trip down the Danube to Budapest. Returning to Vienna they went on through Czecho-Slovakia into Germany. Finally they reached Munich and turned into Switzerland. From here their route led down the Rhine to Holland. Then they drove south through

Belgium and the battlefields of Flanders to Paris. After an enjoyable stay of about ten days they turned north again and crossed the Channel into England. They say they were immensely relieved at finding a more or less understandable language again, even though other English customs, such as driving on the wrong side of the road, were disconcerting.

They sailed from Southampton at the end of August. Returning across the United States they found time to visit and appreciate some of our tourist attractions, Niagara Falls, Yellowstone Park, Grand Canyon. They arrived home on the 21st of September. "Yes," they admitted, "it is good to be home again."

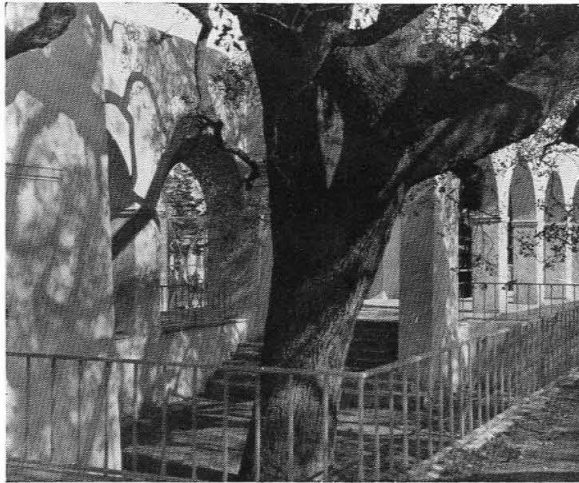


VIEWS



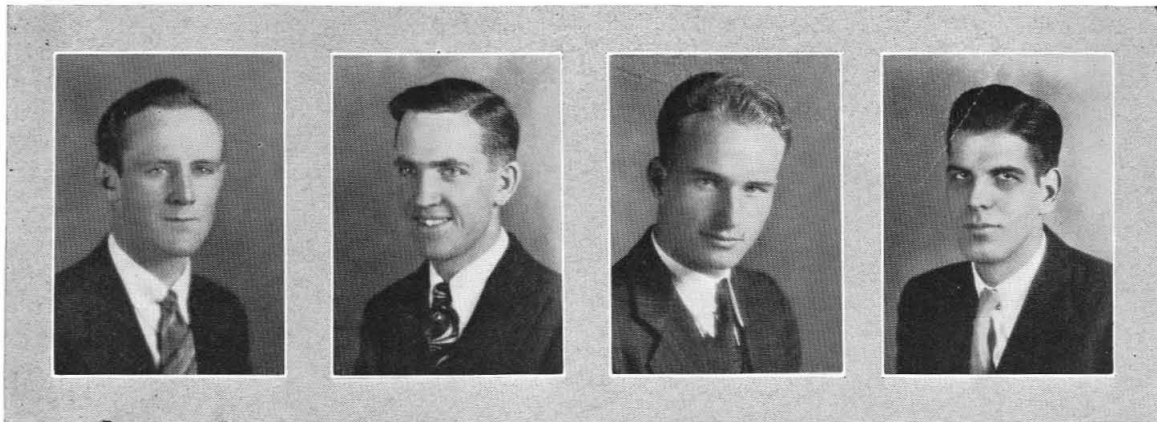
SENIORS

Seniors



1932

SENIORS



PICKERING

WHERRITT

JONES

BARTON

The Class of 1932

<i>President</i>	WILLIAM PICKERING
<i>Vice-President</i>	ROBERT WHERRITT
<i>Secretary</i>	CHARLES JONES
<i>Treasurer</i>	MILLARD BARTON

The Class of Thirty-Two began its life in September, Nineteen-Twenty-Eight, with an hundred and forty members, nearly fifty per cent of whom have seen it through to the finish. Its history is a matter for real pride, inasmuch as it embraces so much of the expansion, development, and achievement of the Institute.

For the first term, Jack Chambers was appointed Class Chairman. Later he was confirmed in the office of President. He was assisted in administration by Wengren, Goodman, and Maass. Paul Arnerich was the Social director of the Class, having had more to do with social activities than any of the three other men. Goodman and Carey rendered valuable assistance here as in many other functions. Bill Shuler heads the list of men who for four years have won and maintained the athletic supremacy of Thirty-Two. Skoog, Goodman, McLaughlin, Freeman, Adams, and Jones will be remembered for their outstanding work. The general athletic ability of the class was admirably shown by the fact that it was second only to the Seniors in the competition for the Interclass Cup in this, its initial

effort. This was the first and last time that it took second place. It is to be noted that in spite of that fact that they were mere Frosh, three of the favorite sons of Thirty-Two, Goodman, Chambers, and Arnerich earned the coveted Honor Key. This was but one of many items in which the Class proved itself greater than its would-be masters, the Sophmores.

Thirty-Two entered its second year with Carey at the helm. Parson and Ayres were added to the staff while Maass kept his job as Secretary. Other members of the Class were busy setting new track records and forwarding Tech's athletic interests. Five men earned Varsity football awards. This time Thirty-Two stood first in the Interclass Cup Competition. The Cup was held by the Class for the remainder of its sojourn at the Institute.

The Frosh that year, protected by Dr. Millikan, Dr. McArthur, and the student body President, evaded most of the chastisement which they deserved, but the Rodeo quickly put them in their place. The advantages of superior phys-

SENIORS

ique, better organization, and experience left no doubt as to the outcome of the match. What was scheduled as a pushball contest turned out to be a track meet in which the frosh took second place. This made them hosts to Thirty-Two in the traditional hop in Culbertson. As a part of the program, they were Emancipated.

Red Watson joined the Class that year, making it the greatest athletic class of all time. What a man!

The "Great" Roach, yell leader, clown, and orator, injected more pep, fun, and enthusiasm into the student body that year than anyone else we've seen.

In its third year, Thirty-Two really got into its stride. Goodman took the chair, Maass was promoted to the Vice-Presidency, Schoeller took the minutes, and Arnerich got the money. The Class gave two dances and a beach party which were greatly enjoyed, and worked with the Seniors on the Garden Party. That seems to be one tradition which has survived the axe. Traditions have had a stormy existence at Tech; they don't seem to root well in this rough soil. Every passing class destroys most of the traditions to which it falls heir. Goodman and Arnerich did the work on the dances; the El Monte gang, Shuler, Hayes, and Keeley, put on the beach party; Bowler co-operated with Jurling on the garden party.

The football team took the conference championship that year for the first time since Tech men started playing the game. Thirty-Two had a big hand in that too. Watson, Shuler, Hayes, Goodman, Bruderlin, Keeley, and Maass were there with the goods.

Cecil Killgore, orator, dramatist, and business man, emerged as another of Thirty-Two's favorite sons. He and Roach, Sheffet, and Prudames head the list of wranglers who have upheld Tech's reputation for debate, oratory, and dramatics. His work on the Tech has been epoch-making.

The Old Guard took a vacation for the last year, leaving the Class offices to be filled by newcomers to the field of politics. Pickering, gentleman, scholar, world traveler, and native

of the Antipodes, was elected president. Wherritt, of Exhibit-Day fame, became Vice President. Jones, travel prize scholar and Barton, low hurdler, filled the jobs of Secretary and Treasurer respectively. Their task has been more than usually hard this year do to the scarcity of funds. The insistent demands for economy, coupled with the difficulty of extracting dues, has forced the administration to hedge on many of the more or less traditional items of the budget. In fact, throughout the year the Class has been less strongly concerned with keeping up with the Jones's than keeping ahead of the sheriff. In spite of this, they have carried on in good shape. The social and cultural functions of the Class have not been neglected. Bradburn and his Junior-Senior-Prom committee have prepared an affair to be held at the Midwick Country Club to wind up the activities of the Class which promises to be one of the best ever.

Athletes of Thirty-Two, again and for the last time, distinguished themselves as members of the second championship football team and the basketball and track teams. Graduation removes from the rolls this year the greatest players Tech has ever known.

It is to be noted that another passing season finds the great "T" on the mountain, still free from the encroachment of the underbrush. Long may it remain so.

The completion and occupancy of the Living Houses has marked a new era at Tech. They were built as a result of the long and unstinting efforts of Tech's best friends and represent the highest ideal of undergraduate social organization. Men who for three years have lived in the Old Shanty or the neighborhood boarding houses can really appreciate the splendid equipment and facilities of the new Houses. As members of the highest ranking class at the time the Houses were occupied, men of Thirty-Two stepped into the lead in organization and administration. They have laid the foundations of tradition and activity. They have set the pace for social and athletic attainments. They have held the seats of honor and participated fully in the greatest events in the history of our Alma Mater.

EMMER J. ARNOLD

Los Angeles

Chem Club (1, 3, 4)
Glee Club (1, 2, 3)
Band (1, 2)
Newman Club (4)

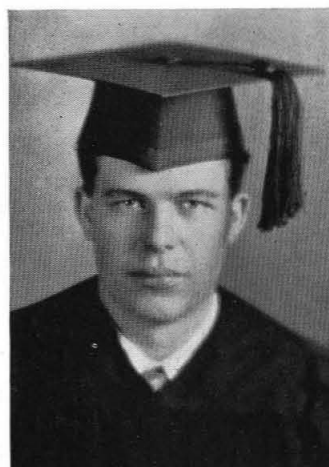
Loyola Prep School
Chemical Engineering
Asst. Yell Leader (3)
Tennis Letter (1, 2)
Cap & Gown Comm. (4)



WILLIAM A. ADAMS, JR.

Long Beach
Dabney House
A. I. E. E.
Radio Club
Glee Club (1)

Long Beach Poly High
Electrical Engineering
Football (1)
Track (1, 2)
The Tech (2, 3)



THOMAS F. ANDERSON

Glendale
Fleming House
Chem Club
Glee Club

Glendale Union High School
Chemistry
Tennis (1, 2, 4)
Sr. Social Comm. (Ch.) (4)



PAUL FRANK ARNERICH

Honor Key, Press Club, Pi Kappa Delta

Pasadena

A. S. B. Treasurer (4)
A. S. M. E.
A. I. E. E.
Glee Club (1, 2)
Debating (1, 2, 4)
Class Treasurer (3)
Exhibit Day Comm. (1)
Class Dance Comm.
(1, 2, 3, 4)

Pasadena High School
Mechanical Engineering

Y Handbook (2, 3)
Managing Ed. (2) Editor (3)
The Tech (2, 3)
Football (1)
Basketball (1, 3, 4)
Class Day Comm. (4)
Newman Club V-Pres. (4)





DAVID WILLIAM ANDERSON

Tau Beta Pi

Alhambra Blacker House	Alhambra High School Mechanical Engineering
A. S. M. E.	Baseball (2, 3)
Boxing (2, 3)	Track (3, 4)
Cross Country (1, 3, 4)	Cap & Gown Comm. (4)



MILLARD V. BARTON

Honor Key

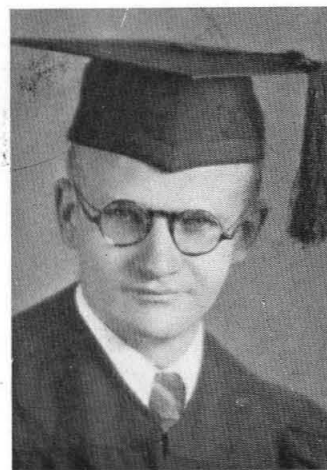
Hollywood Ricketts House	Fairfax High School Mechanical Engineering
Varsity Club	Track (1, 2, 3, 4) Letter (1, 3, 4)
Fencing Club (1) Treas.	Class Treasurer (4)
Glee Club (2)	The Tech (Accountant) (4)
Radio Club (3)	A. S. M. E.



ALBERT W. ATWOOD, JR.

Honor Key, Press Club (Sec.)

Washington, D. C. Dabney House	Redlands High School Electrical Engineering
Big T (3, 4, 5); Photo Ed. (4); Editor in Chief (5)	S. C. Intercollegiate Year Book Association (Sec.) (5)
The Tech (2, 5)	Sr. Announcement Comm. (5)
A. I. E. E.	Golf Team (4)
Chem Club (1)	
Tennis (2, 3)	



JOHN DWIGHT BASCOM

Pasadena	Pasadena High School Physics
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LEWIS B. BEHLOW

Alhambra

Alhambra High School
Civil Engineering

Tennis Letter (1, 2, 3, 4)
Capt. (3)

A. S. C. E.
Varsity Club



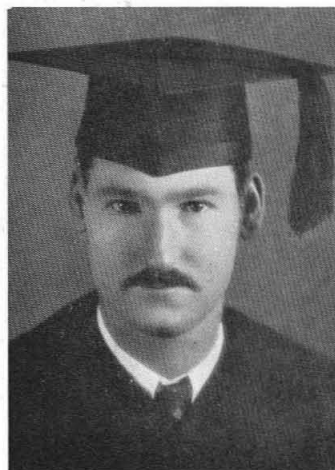
WILLIAM LADHU BERRY

New York City
Pasadena

Yonkers High School
Electrical Engineering

A. I. E. E.
Boxing Champ (1, 2)
Exhibit Day Comm. (2, 3)

Cross Country (3, 4)
Track (4)
Handball (1, 2, 3, 4)



FREDERICK WILLIAM BOWDEN

San Luis Obispo
Pasadena

San Luis High School
Electrical Engineering

WILLIAM RAYMOND BERGREN

Pasadena

Pasadena High School
Chemistry

Chem. Club (1, 2, 3, 4),
The Tech (3)
Board of Control (4)
Sr. Gift Comm. (4)

Sec. (3), Pres. (4)
Track (1, 2, 3, 4) Num. (1)
Cross Country (2, 3, 4)
Letter (3)





GORDON E. BOWLER

Tau Beta Pi, Press Club

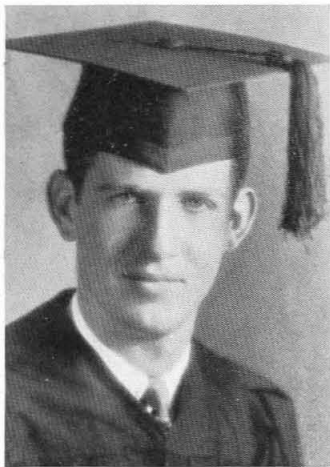
Pomona Dabney House	Pomona High School Electrical Engineering
Big T (Sr. Ed.) (4)	A. I. E. E.
Radio Club (2, 3)	Junior Sr. Prom Comm. (4)
Cosmo Club (3)	Senior Picture Comm. (Ch.)



HENRY H. BRUDERLIN

Honor Key

Hollywood Dabney House	Fairfax High School Electrical Engineering
Chem Club Sec. (2) Pres. (3)	Football (3, 4)
Rifle Club V. P. (2)	Band (1, 2, 3, 4)
Pres. (3, 4)	Orchestra (1, 2, 3, 4)
Exhibit Day Comm. (2, 3, 4)	
Senior Social Comm. (4)	



JAMES R. BRADBURN

Tau Beta Pi, Honor Key, Press Club

Los Angeles Ricketts House	Los Angeles High School Electrical Engineering
Big T (2, 3)	Track (1, 2, 3, 4)
The Tech (2, 3)	Cross Country (1, 2, 3)
A. I. E. E.	Throopers (2)
A. S. B. Publicity (2, 3, 4)	Junior Senior Prom Comm. (4) (Chair.)
Mgr. (4)	Exhibit Day Comm. (3, 4)



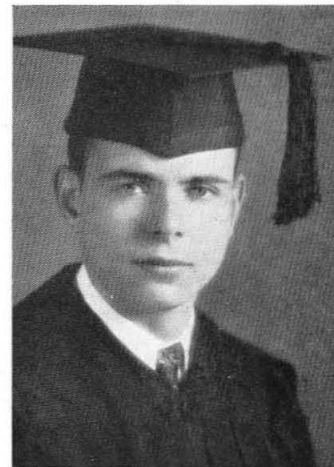
RUPERT A. BROWN

Pasadena	Pasadena High School Chemical Engineering
Chem Club (4)	Debating (4)

ROBERT V. CAREY

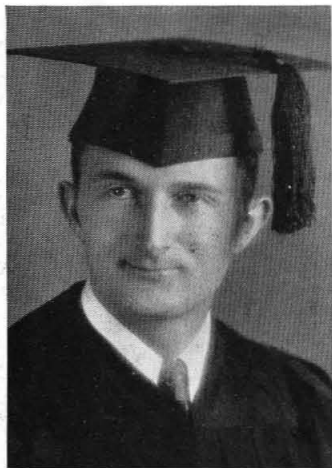
Tau Beta Pi

South Pasadena	S. Pasadena High School Mechanical Engineering
Tennis Letter (1, 2, 3, 4) Capt. (4)	A. S. M. E. Board of Control (3)
Class President (2)	Alumni Scholarship (1)



PAUL GUSTAV BURMAN

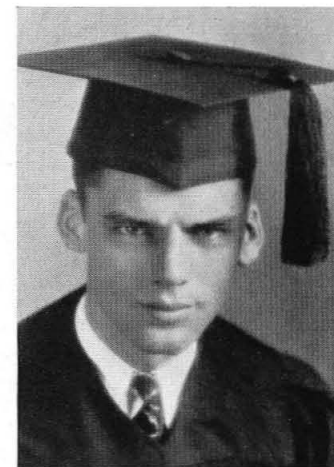
San Gabriel	Pasadena High School Mechanical Engineering
A. S. M. E. Cap & Gown Comm. (4)	Track (1, 2, 4) Cross Country (1, 2) Winter Sports (3, 4)



CLIFFORD COMER CAWLEY

Tau Beta Pi

Los Angeles Blacker House	Manual Arts High School Civil Engineering
Vice Pres. A. S. C. E. (4)	



JOHN VORIS CHAMBERS

Honor Key

Redondo Blacker House (Pres.)	Red. Union High School Civil Engineering
Class Chair. (1) Pres (1)	The Tech (1, 3, 4)
Board of Control (1, 2, 3, 4)	Basketball Mgr. (2, 3)
Throopers (3, 4)	Track (1)
Glee Club (1, 2)	Cross Country (1, 2)
A. S. C. E.	





CHARLES D. CORYELL

Tau Beta Pi

Alhambra	From Class of '33
	Chemistry
Travel Prize (3)	Student Housing Comm. (2)
Chem Club	Debating (1)
	N. S. F. A. (2)



MYRON L. CRATER

Ravenwood, Mo.	Ravenwood High School
Fleming House	Mechanical Engineering
A. S. M. E.	Basketball (1)
Big T (3)	Baseball (1)
	Ch. Senior Announcement Comm. (4)



WILLIAM H. CLAUSSEN

Tau Beta Pi—Associate Sigma Xi

Pasadena	Fairfax High School
Fleming House (Treas.)	Chemistry
Chem Club (2, 3, 4) V.P. (4)	Basketball (1, 2, 3)
Radio Club (1)	Baseball (1)
Band (1)	Cross Country (1)
Throopers (3, 4)	Sr. Social Comm. (4)
	Senior Announcement Comm. (4)



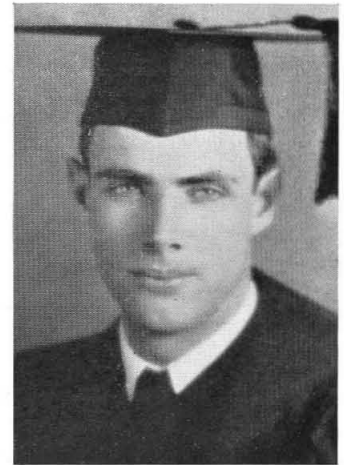
JOHN L. COX

Alhambra	Alhambra High School
Blacker House	Civil Engineering
A. S. C. E.	Exhibit Day Comm. (3)

HOWARD W. FINNEY

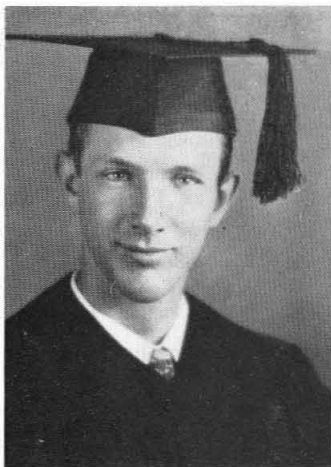
Associate Sigma Xi

Los Angeles
Fleming House
Geology Club (3, 4)
Treas. (4)
Manual Arts High School
Geology
Football (1, 2)
Ch. Exhibit Day Comm. (4)



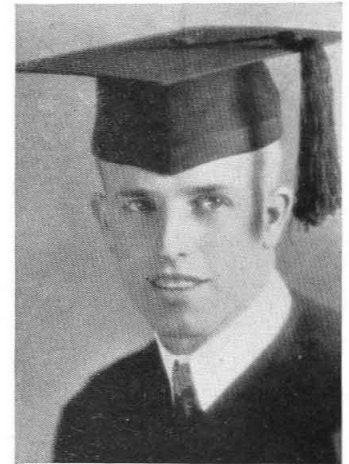
EDWIN FOSS

Rivera
Dabney House (Pres.)
The Tech (2)
A. S. M. E.
Downey High School
Mechanical Engineering
Football (1, 2, 3, 4)



BRYANT FITCH

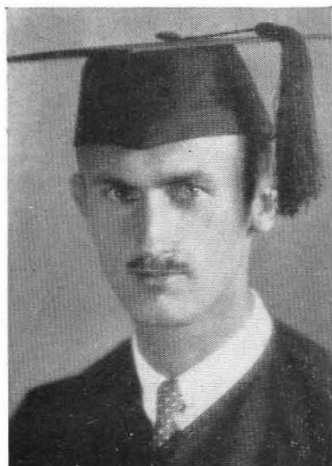
Napa
Pasadena
Fencing Club (3, 4)
Drama Club Treas. (3)
Napa Union High School
Chemical Engineering
Pres. (4) Chem Club Treas. (4)
Glee Club Mgr. (4)



ROBERT B. FREEMAN

Honor Key

Pasadena
Pasadena High School
Mechanical Engineering
Varsity Club Sec. (3) Pres (4) Rept. at Large (3)
Board of Control (3, 4) Ch. (4) A. S. B. (V. P.) (4)
Track Letter (1, 2, 3, 4) Capt. (1) A. S. M. E.
Y. M. C. A. (Pres.)



DONALD B. GRAFF

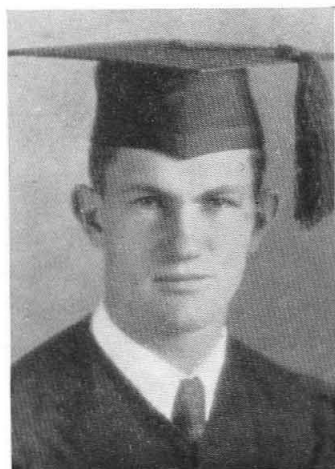
Honor Key, Press Club

Pasadena

Big T (3, 4)
The Tech (1, 3, 4, 5)
Varsity Club

Santa Barbara H. S.
Electrical Engineering

Track Letter (1, 3, 4)
Capt. (4)
A. S. B. Athletic Mgr. (4, 5)
Intramural Athl. Mgr. (4, 5)



CHARLES FREDERICK HAMLIN

San Luis Obispo
Dabney House

A. S. C. E.
Big T (4)

San Luis High School
Civil Engineering

Baseball (2)
Track (2)



CLARK GOODMAN

Tau Beta Pi, Honor Key, Press Club

Los Angeles
Ricketts House (V. P.)

Big T (1, 2, 3) Bus. Mgr. (3)
Class Sec. (1) Pres. (3)
Board of Control (2)
The Tech (1)
Debate (1)
Glee Club (1, 2)

L. A. Poly. High School
Chemical Engineering

Football Letter (1, 2, 3, 4)
Varsity Club (V. P.) (4)
Track (2)
Athletic Council (4)
Class Day Comm. Ch. (4)



R. HOWARD GRIEST

Los Angeles
Dabney House

Transfer from U.C.L.A.
Electrical Engineering

CHARLES MAXFIELD HARSH

Tau Beta Pi, Pi Kappa Delta

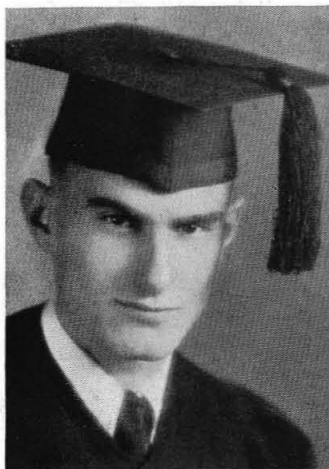
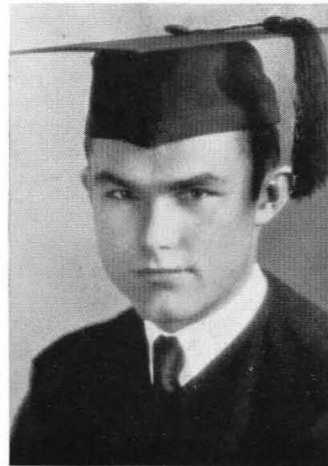
Eagle Rock
Chem Club
Greek Play (3, 4)
Glendale High School
Chemistry
Debate (1, 2, 3, 4)
Fencing (4)
Class Day Comm. (4)



KARL HEGARDT

Tau Beta Pi

Downey
Ricketts House (Pres.)
A. I. E. E.
The Tech (3)
Glee Club (1, 2, 3)
Downey High School
Electrical Engineering
Y. M. C. A. Treas. (4)
Baseball (1, 2, 3)



E. NELSON HARSHMAN

Los Angeles
Geology Club (2, 3, 4)
Sec.-Treas. (4)
Varsity Club
Belmont High School
Geology
Track (1, 2, 3, 4)
Cross Country (1, 2, 3, 4)
Senior Ditch Day Comm. (4)



BENARTHUR C. HAYNES

Press Club

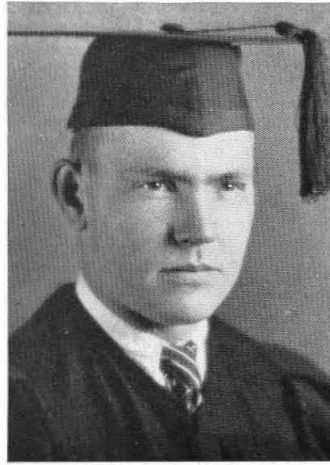
Santa Fe, New Mex.
Dabney House
Big T (3, 4) Photo Ed. (4)
Band (1, 2)
A. S. M. E.
Exhibit Day Comm. (3)
Santa Fe High School
Mechanical Engineering
Greek Play (3)
Dramatic Club (3, 4)
Pres. (4)
Aero Club (2, 3)



JOHN A. HUTCHISON

Abilene, Texas
Dabney House
A. I. E. E.
Football (3, 4)

Transfer from Texas A & M
Electrical Engineering
Sr. Announce. Comm. (4)
Exhibit Day Comm. (4)



WALTER P. HUNTLEY

Tustin
Pasadena
A. I. E. E.

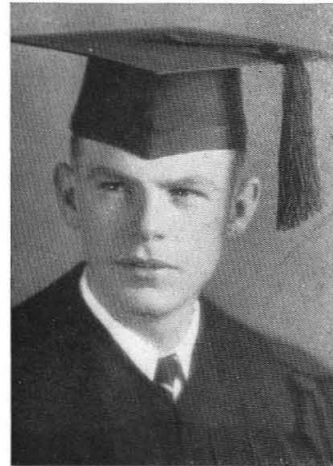
Tustin High School
Electrical Engineering
Baseball Num. (1)
Track (1)



FRANK JOHN HIBBS, JR.

Los Angeles
Blacker House
Big T (4)
A. S. M. E.
Athletic Council (4)

Manual Arts High School
Mechanical Engineering
Track Mgr. (2, 3, 4)
Football Mgr. (4)
Football (1)



MILLS SCHUYLER HODGE

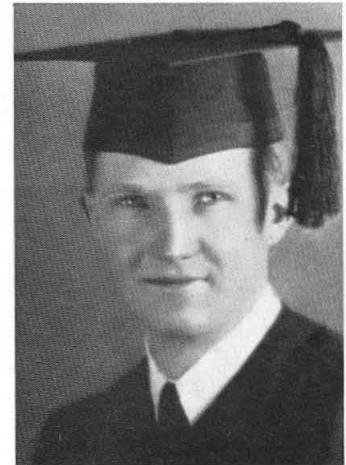
Pasadena

Pasadena Jr. College
Electrical Engineering
A. I. E. E.

WILLIAM L. KENT

Covina
Blacker House
Chem Club (4)
The Tech (1)

Covina Union High
Chemistry
Football Mgr. (2, 3, 4)
Baseball Mgr. (1)



EDWARD CHESTER KEACHIE

Bridgewater, Mass.

Bridgewater High School
Electrical Engineering

Drama Club (Pres.)
Greek Play (2)
The Tech (4)

A. I. E. E.
Drama Club Play (3, 4)
Garden Party (4)



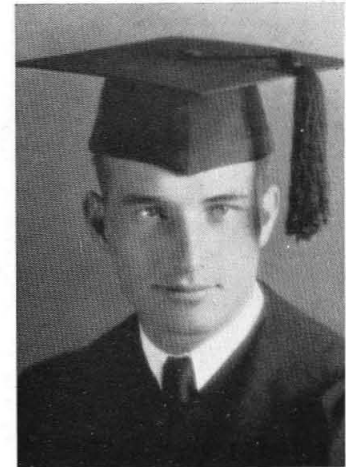
TETSUO IWASAKI

Los Angeles

L. A. High School
Electrical Engineering

A. I. E. E.
Varsity Club

Cross Country (1, 2, 3, 4)
Baseball (1, 2, 3, 4)



CHARLES WRIGHT JONES

Tau Beta Pi (Pres.), Assoc. Sigma Xi

Long Beach
Pasadena
Travel Prize (3)
A. S. M. E.
Varsity Club
Class Sec. (4)

Long Beach Poly. High
Mechanical Engineering
Track Letter (1, 2, 3, 4)
Football (1)
Student Housing Comm. (3)





JAMES E. LIPP

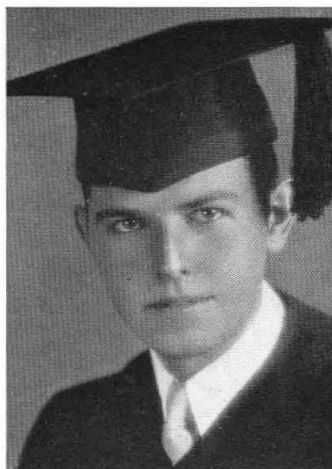
Tau Beta Pi

Los Angeles Manual Arts High School
Aeronautical Engineering
Rifle Club (1, 2, 3, 4) Sec. (3, 4) A. S. M. E.



CARL F. LIND

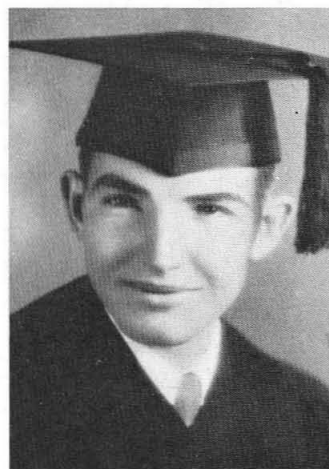
Los Angeles Jefferson High School
Electrical Engineering
Track (1)
Cross Country (1)
Exhibit Day Comm. (3)
Chem Club (1)
Big T (3, 4)
The Tech (2, 3)
A. I. E. E.
Glee Club (3, 4)



CECIL LLOYD KILLGORE

Pi Kappa Delta, Honor Key, Press Club
(Pres.) (V. P.)

Hollywood Ricketts House
The Tech (3, 4)
Bus. Mgr. (4)
Big T (3)
A. I. E. E.
Yell Leader (3)
Hollywood High School
Electrical Engineering
Football (1)
Basketball (1, 2)
Baseball (2, 3, 4)
Exhibit Day Comm. (3)
Debate (2, 3, 4)



PATRICK B. LYONS

Hollywood Non Res. Club (Sec.)
Transfer from U. C. L. A.
Electrical Engineering
Chairman A. I. E. E. (4)

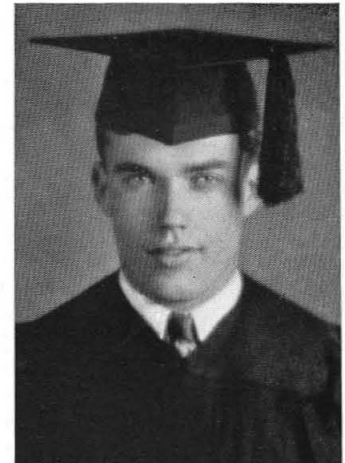
JAMES PATRICK McLAUGHLIN

Redondo Beach
Fleming House

Board of Control (1)
Varsity Club
Baseball (1)

Redondo Union High School
Electrical Engineering

Football (1, 4)
Basketball (1, 2, 3)
Letter (2, 3)



RANDAL MAASS

Anaheim
Fleming House

Band (1, 2)
Orchestra (1, 2)
Varsity Club

Anaheim High School
Chemical Engineering

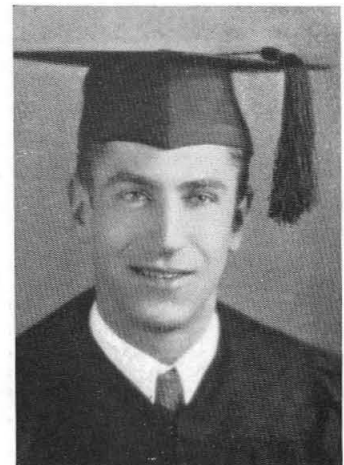
Football Letter (2, 3, 4)
Basketball (1, 2)



WILLIAM C. McFADDEN

Fullerton
Ricketts House

Fullerton High School
Aeronautical Engineering



THOMAS EDWIN MATHEWS, JR.

Glendale
Ricketts House

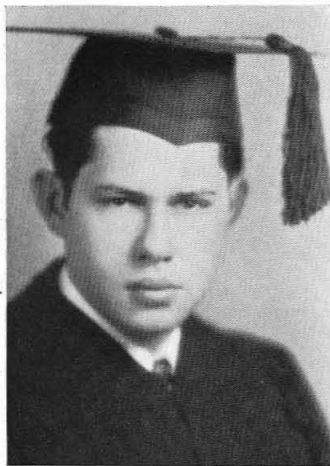
Big T (3)
The Tech (3, 4)
Glee Club (2, 3)
A. I. E. E.

Glendale High School
Electrical Engineering

Track Letter (1, 2, 3, 4)
Football (1, 2)
Varsity Club
Baseball (1)

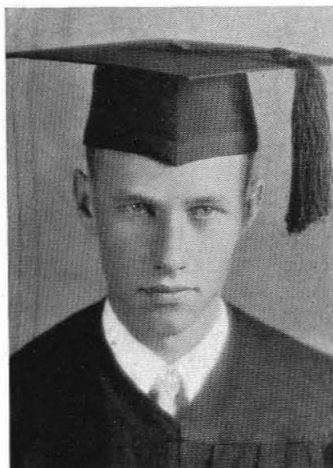
Junior Senior Prom Comm. (4)





THOMAS DIXON OULTON

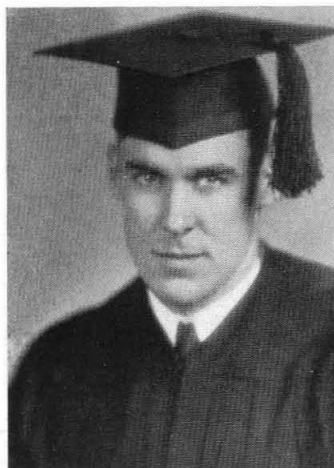
Pasadena Pasadena High School
Biology
Band (1, 2) Orchestra (1, 2, 3, 4)
Glee Club (3, 4) Pres. (4)
Exhibit Day Comm. (3)



RAY OELSCHLAGER

Tau Beta Pi

Kaweah Hollywood High School
Pasadena Aeronautical Engineering
A. S. M. E.
Stage Mgr. Drama Club and P. K. D. Plays (2, 3)



PAUL GATES PARSONS

Honor Key, Press Club (Pres.)

Alhambra Redondo Union High School
Blacker House Civil Engineering
Press Club Treas. (3) Track (1, 2, 3, 4)
Pres. (4) Basketball (1, 2, 3)
A. S. B. Sec. (4) The Tech (2, 3, 4)
Big T (2) A. S. C. E. (Pres.) (4)
Class V. P. (2) F. S. Relations Comm. (4)
Newman Club (2)



GLEN MILLER

Pasadena Transfer from U.C.L.A.
The Tech (3, 4) Editor (4) Electrical Engineering
Debating (3, 4)

EDWIN MOTT PRUDAMES

Pi Kappa Delta

Los Angeles	L. A. High School
Fleming House (Sec.)	Civil Engineering
A. S. C. E.	Debating (1, 3, 4)
Glee Club (2, 3, 4)	P. K. D. Pub. Mgr. (4)



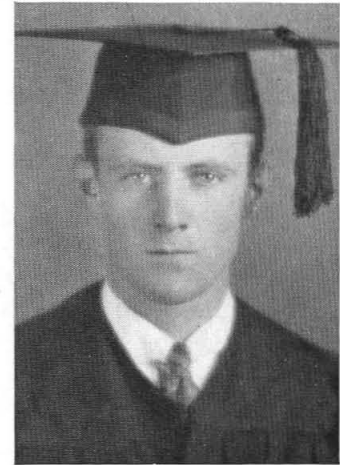
HENRY B. POWNALL

Santa Monica	Calif. Prep. School
Dabney House	Mechanical Engineering
The Tech (2, 3)	A. S. M. E.
Bus. Mgr. (3)	Band (1,2)



WENDELL R. POLK

Los Angeles	El Monte High School
	Mechanical Engineering
A. S. M. E.	Football (1, 2, 3)
	Track Num. (1)



WILLIAM H. PICKERING

Tau Beta Pi—Associate Sigma Xi

Christchurch, New Zealand	Canterbury College, N. Z.
Dabney House	Physics
Class Pres. (4)	Cross Country (Letter)
Travel Prize (3)	(2, 3, 4)
Radio Club (2, 3, 4)	Track (2, 3, 4)
Pres. (3, 4)	Varsity Club
Cosmo Club (2, 3, 4)	Student Housing Comm. (3)
Pres. (3)	





WORRELL FRANZONI PRUDEN

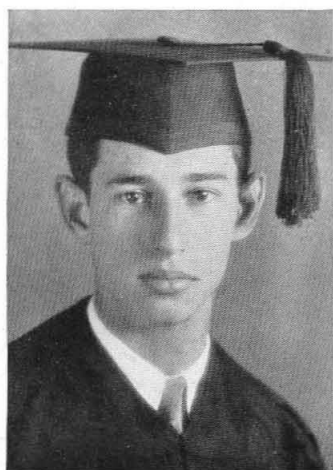
Tau Beta Pi (V. P.)

Pasadena	Hollywood High School
Dabney House	Civil Engineering
A. S. C. E. Treas. (4)	Football (1, 2, 3)
Aero Club Sec. Treas. (4)	Track Mgr. (3)
Exhibit Day Comm. (3)	



WILLIAM C. RAU

Las Vegas, Nevada	Las Vegas High School
Pasadena	Chemistry



HAROLD ROACH

Honor Key, Press Club, Pi Kappa Delta

Los Angeles	L. A. Poly. High School
	Civil Engineering
Big T (1, 2, 3, 4)	Yell-Leader (2, 3)
Managing Ed. (3, 4)	Intramural Sports Mgr. (3)
The Tech (1, 2)	Basketball (1)
Glee Club (2, 3, 4) Pres. (4)	Debating (1, 2, 3, 4) Mgr. (4)
Greek Play (1, 2)	Dramatic Club (1, 2, 3, 4)
A. S. C. E.	Pub. Mgr. (3) Treas. (4)
Exhibit Day Comm. (2, 3)	



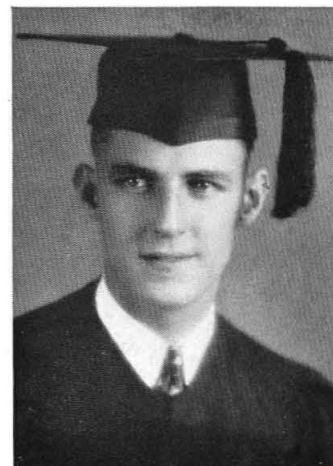
JAMES T. REILLY

Pasadena	Pasadena High School
	Geology
Geology Club	Chem Club

JAN GERARD SCHAAFSMA

Honolulu
Fleming House
Chem Club
Glee Club (2)

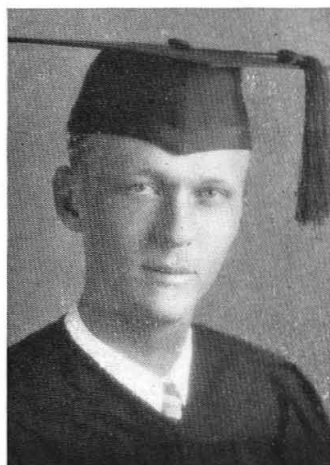
Punahou High School
Chemistry
Swimming (1, 2, 3)
Letter (1, 2)
Cross Country (1)



W. CURTIS ROCKEFELLER

Salt Lake City
Dabney House (Treas.)
A. S. M. E.
Aero Club (2)

Westminster College
Mechanical Engineering
Golf Team (3, 4)
Rifle Club (2)



WILLIAM H. SAYLOR

Covina
Dabney House
Band (1, 2, 3)
A. S. C. E.

Citrus High School
Civil Engineering
Orchestra (1, 2)



BRUCE H. RULE

Tau Beta Pi

Los Angeles
Dabney House
A. I. E. E.
Glee Club
Senior Gift Comm. (4)

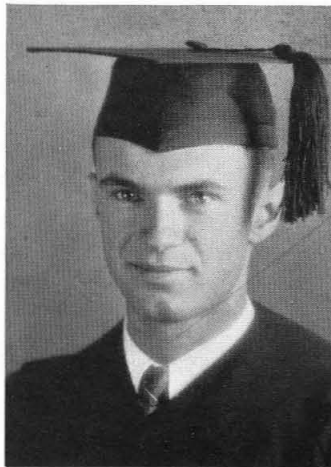
Lincoln High School
Electrical Engineering
Exhibit Day Comm. (3)
Board of Control (4)





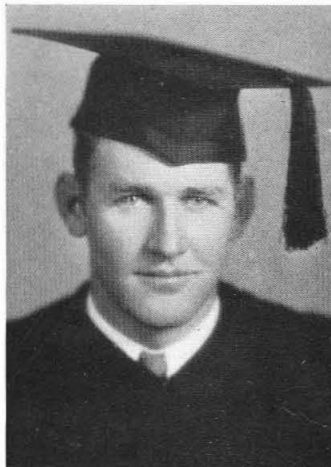
WILLIAM F. SCHULTZ

Omaha, Nebraska	Manual Arts High School
Fleming House	Mechanical Engineering
The Tech (3)	Football (1, 2, 3, 4)
A. S. M. E.	Track (1)
Exhibit Day Comm. (3)	Baseball Mgr. (3)



MERVIN ARNO SCHUHART

Pasadena	Dalhart, Texas, H. S.
	Electrical Engineering
A. I. E. E.	Football (1, 3, 4)
Chem Club (1)	Basketball (1, 3)



CHARLES PHILIP SCHOELLER

Honor Key

Palmdale	Lancaster High School
Fleming House	Civil Engineering
A. S. B. Pres. (4)	A. S. C. E.
Stud. Housing Comm. (3)	Ch. Interhouse Comm. (4)
Pres. So. Cal. Student Body	Pres. Assn. (4)



RICHARD ALLEN SEARLE

Los Angeles	Transfer from U.C.L.A.
	Electrical Engineering

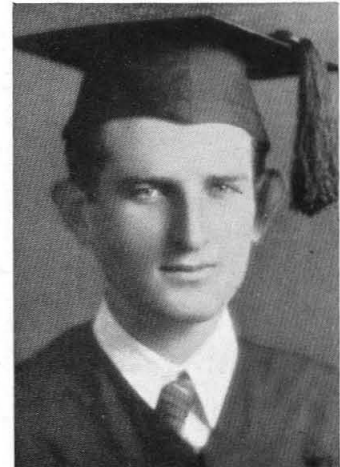
JOSEPH SHEFFET

Tau Beta Pi (Sec.), Pi Kappa Delta

Venice
Pasadena

Venice High School
Civil Engineering

Debating (1, 2, 3, 4)



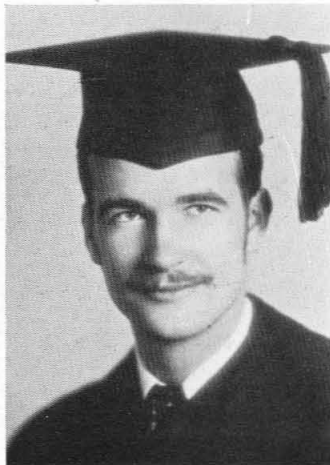
ROBERT L. SHERMAN

Portland, Oregon
Pasadena

Jefferson H. S., Portland
Aeronautics

Drama Club (2, 3, 4, 5)
Fencing Club (3, 4, 5)
Big T (1)

Cross Country (1)
Greek Play (2)
Drama Club Play (1, 2)
Pub. Mgr. (2)



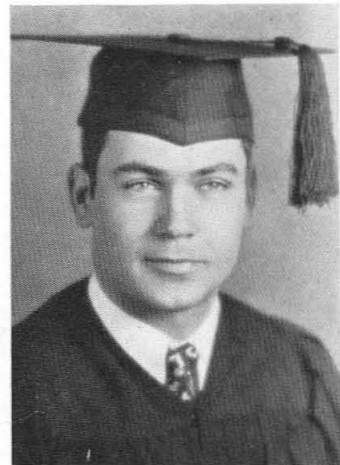
WILLIAM SHOCKLEY

Tau Beta Pi

Hollywood
Blacker House

Hollywood High School
Physics

Fencing Club (1, 2, 3) Pres. (2, 3)



WILLIAM R. SHULER

El Monte

El Monte High School
Electrical Engineering

Football Letter (1, 2, 3, 4)
Capt. (1)

Baseball (1)
Varsity Club

Track Letter (1, 2, 3, 4)

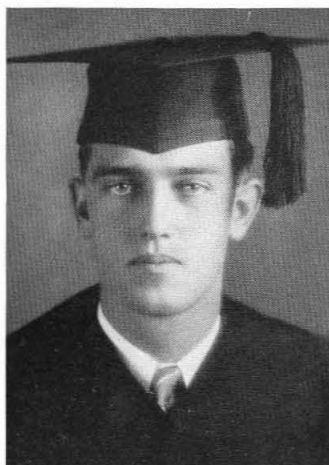




GEORGE ORVAL SHULL

Tau Beta Pi

Los Angeles Jefferson High School
Chemistry
Chem Club (1, 2, 3, 4, 5) Cosmo Club (3, 4, 5)



BRIAN O. SPARKS

Los Angeles Transfer from U.C.L.A.
Dabney House Physics
Assembly Pianist (3) Track (4)
Exchange Prog. (3) Exhibit Day Comm. (3)
Rifle Club (4) Class Day Comm. (4)



FOLKE KARL SKOOG

Alhambra Alhambra High School
Chemistry
Varsity Club Track (1, 2, 3, 4) Capt. (4)
Cosmo Club Cross Country (1, 2, 4)
Chem Club Capt. (1, 4)



HYMAN S. SOLOMON

Los Angeles Roosevelt High School
Physics

*Sparks
133*

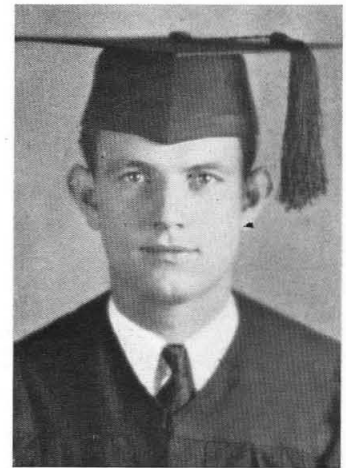
ROBERT W. ST. CLAIR

Glendale

A. I. E. E. (Sec.)

Glendale High School
Electrical Engineering

Debating (1)

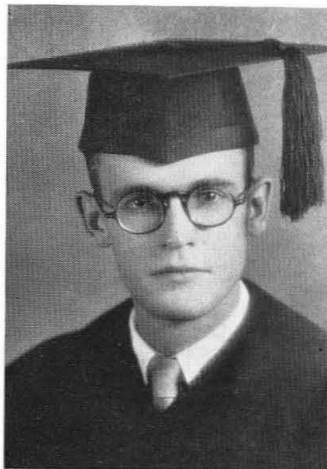


KENNETH HAYES SWART

Riverside
Blacker House

Cross Country (3)

Transfer from Riverside J. C.
Mechanical Engineering



CARL L. THIELE

Hollywood

West Des Moines H. S.
(Des Moines, Iowa)
Theoretical Physics

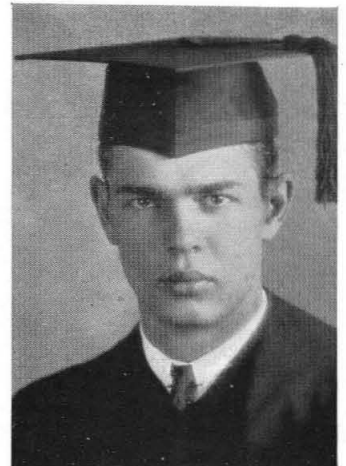
RICHARD NOTLEY THOMAS

Riverside
Blacker House

A. S. C. E. (Sec.)

Riverside High School
Civil Engineering

Cross Country Num. (1)





WILLIAM J. THOMAS

Los Angeles

Fairfax High School
Chemical Engineering

Big T (1)
Basketball Mgr. (2)

Chem Club (2, 3, 4) Sec. (4)



ALVIN J. TICKNER

Pasadena

Pasadena High School
Physics

Chem Club

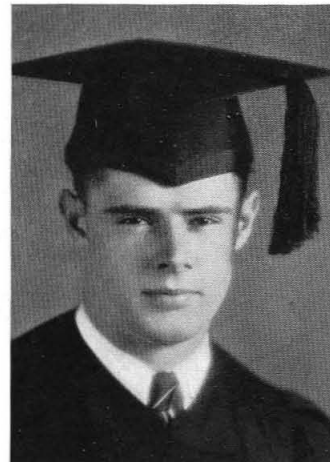


GRANT DELBERT VENERABLE

Kansas City
Pasadena

Transfer from U.C.L.A.
Civil Engineering

Cosmo Club (2, 3, 4) Pres. (4) Track (3, 4)
A. S. C. E. Canadian Student Christ.
The Tech (3, 4) Conf. (3)
Y. M. C. A.



MABRY VAN REED

San Diego
Blacker House
A. S. M. E.

San Diego High School
Mechanical Engineering
Track (1, 3, 4)

GEORGE GILBERT WATSON

Honor Key

Torrance
Fleming House (Pres.)
Varsity Club
Rep. at Large (3)
A. S. M. E.

Torrance High School
Mechanical Engineering
Football Letter (2, 3, 4)
Capt. (4)
Track Letter (2, 3)
Basketball Letter (2, 4)



DAVID YUE-KWONG WONG

Canton, China
Pasadena
A. S. C. E.

Trans. U. of Redlands
Civil Engineering
Cosmo Club



CHESTER E. WILSON

North Hollywood
Chem Club

Hollywood High School
Chemistry



WAYNE BERTRAND WHITE

Spokane, Wash.

Fremont High School
Chemistry





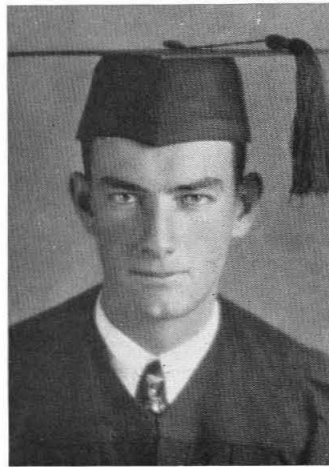
ROBERT C. WHERRITT

Los Angeles

Lincoln High School
Mechanical Engineering

A. S. M. E. (Ch.)
Exhibit Day Comm. (2, 3)
Ch. (3)
Board of Control (3)
Winter Sports (3, 4)
Vice P. Class (4)

Baseball Num. (1)
Glee Club (2, 3, 4)
Publicity Comm. (4)
Sr. Gift Comm. (4)



HALLEY WOLFE

Porterville
Pasadena
A. I. E. E.

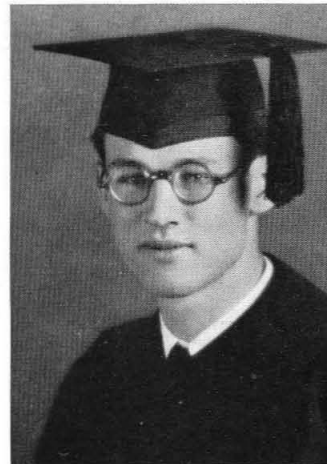
Porterville Union H. S.
Electrical Engineering

THOMAS WILLIAM BELL

GEORGE HENRY BOWEN

JACKSON GREGORY, JR.

GLEN MYERS, JR.



H. S. ZUCKERMAN

Berkeley
Blacker House

Mathematics

Casualties

CHARTER MEMBERS

Ayers, John K.
Baba, Komao N.
Bates, Dana B.
Bayley, Rupert M.
Belford, James W.
Blossom, Howard C.
Bowles, Weston W.
Brakesman, Gordon J.
Brewer, Robert T.
Clagett, William H.
Cline, Franklin J. (Jr.)
Cogen, Sol
Dean, Arthur M.
Elconin, Victor
Evans, William M.
Feely, Martin G.
Fox, John M.
Frick, William O.
Gates, Ellis H.
Gelber, Murray S.
Gould, Laurence K.
Grieger, John M.
Griswold, Edward A.
Groat, William

Guiberson, Samuel A.
Hastings, Allen
Hayes, Edward A. -33
Hill, James W.
Johnson, Harold B.
Josenhans, John F.
Kanegae, Masami
Keeley, Kedric V.
Lani, Leslie V.
Lemon, George T.
Mason, Frank M.
McCord, Charles J.
McKinley, John D.
McKinney, John E.
Moore, Lewis W.
Moore, Ross R.
Morgan, Richard D.
Morse, Bernard A.
Nicholson, Hunter (Jr.)
Noble, Robert J.
Packer, Walter H.
Paulson, Walter H.
Pelzel, Robert E.
Persson, Sture H.

Polley, Allison B.
Rhyner, Lewis A.
Rossall, Kenneth B.
Schultz, Behrend C.
Schultz, Henry W.
Schultz, William O.
Seavey, Walter K.
Secord, Grover M.
Shaul, Donald R.
Simpkinson, Arthur A.
Skaredoff, Nicolai N.
Smith, Alvin J.
Stamps, Roy K. (Jr.)
Telford, Robert C.
Thornburg, Harold B.
Vander Goot, Herbert
Van Marter, Claude
Van Wingen, Nico
Warfel, John S.
Wengren, Frank E.
Willis, Prentice F.
Wilson, William W.
Wofford, George
Woods, Robert A.

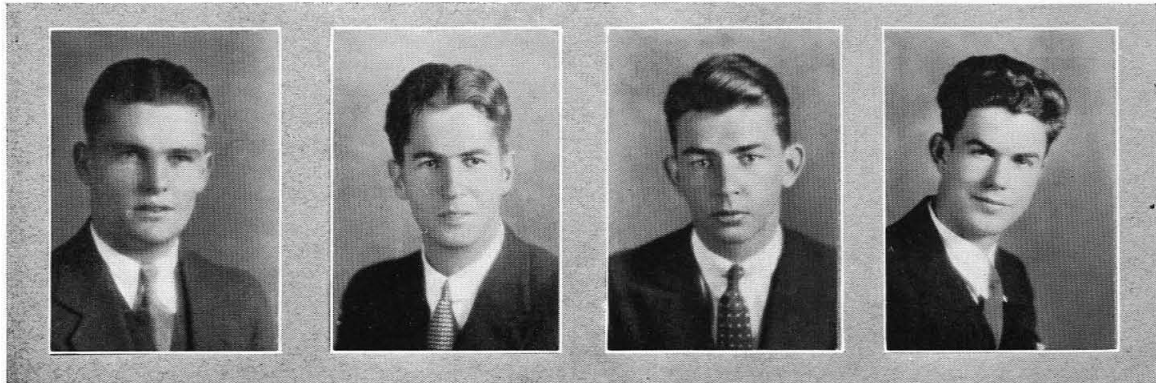
LOST RECRUITS

Beckman, Harold P.
Bennett, Elliot P. -38
Bonner, James F.
Bonner, Lyman G.
Braasch, Albert C.
Falls, Theodore F.
Freeman, Orville W.
Giddings, Sylvester N.
Gussenhoven, Eugene W.
Hanson, Henry F.

Harmon, Cliver
Haymaker, Herbert E.
Horn, Aubrey
James, George H.
Love, James H.
Maes, Alvin J.
Miller, Bertram F.
Muller, Victor
Page, Hollis B.
Pier, Everett H.
Ritter, John

Sass, Otto
Seitz, Frederick
Sparling, Jack N.
Strauss, Ferdinand E.
Taylor, James B.
Wheeler, George
Wilde, Thomas B.
Wilking, Arnold P.
Williams, Raymond N.
Wright, Eldon E.

CLASSES



MATHEWSON

TERRILL

DAVIS

LEWIS

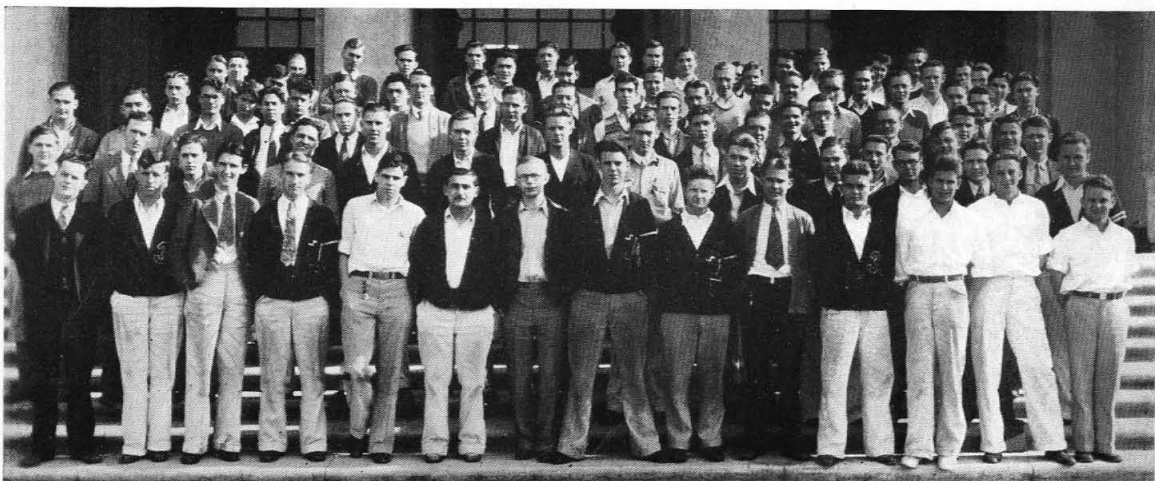
The Junior Class

The class of 1933 has shown exceptional willingness to cooperate with the student body and the new house plan by actively responding to the requests made of them. This is clearly indicated in the way in which the Juniors presented the first program on the new Friday Assembly plan. This is the sort of spirit which has prevailed for the last three years, and which will be transmitted to the student body next year, when, as seniors, they will become the leaders in student activity.

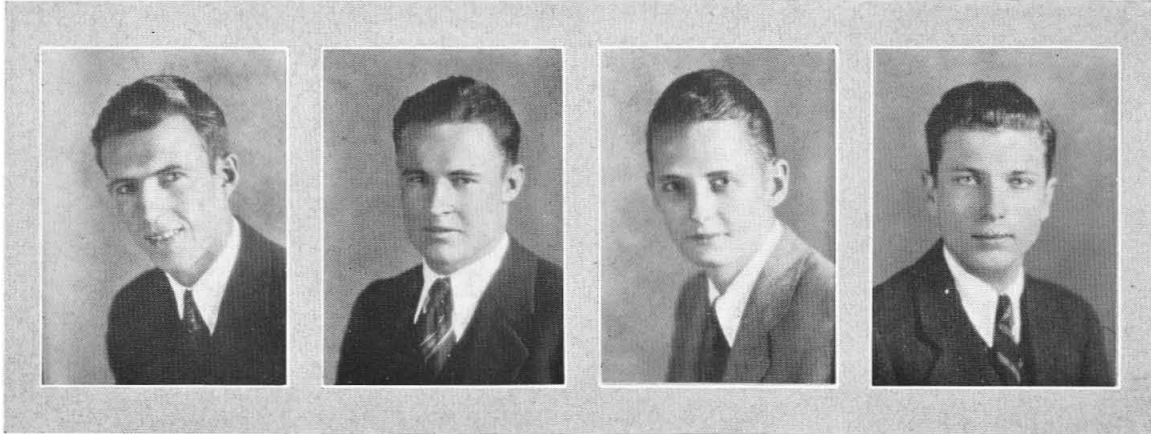
By electing Arthur Mathewson president for the second year, the class showed its confidence in his splendid leadership. Those who so ably assisted him during the past year were: Tom Terrill, vice president; M. T. Davis, secretary; and Wyatt Lewis, treasurer.

Although there were no interclass sports this year, the Junior class was able to show its enthusiasm in other fields. Their first public appearance was in a Friday Assembly program which was very well done and received with pleasure by the whole student body. This was immediately followed by the Junior Class Social which was held in Dabney Lounge, February 19th. The Juniors closed the school year with one of the best Junior-Senior Proms held in several years.

There is every indication that this class will be as strong as ever next year. If the present good work is kept up, the out-look for next year will be promising for the student body.



CLASSES



SMITH

HANNAY

CRAIG

CRUTCHFIELD

The Sophomore Class

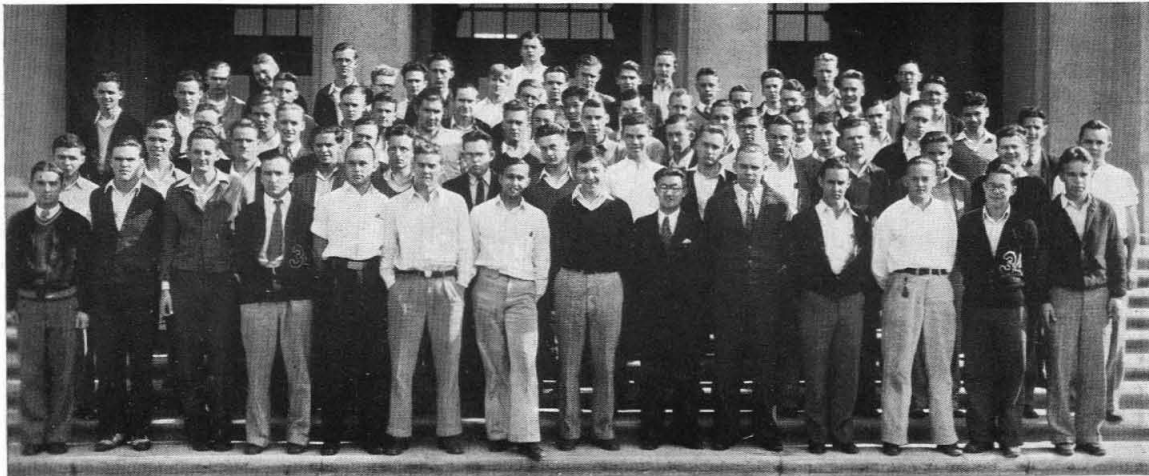
Innovating the non-hazing program, the class of 1934 entered Tech two years ago without the usual educational chastisement by over-enthusiastic Sophs. For the first time the new men, unhampered by traditional mistreatment, were able to take a free part in student activities. Although some of the more sportsome spirits complained of the lack of hazing, no tears were shed by the Freshmen.

As Sophomores, the class of '34 had a new problem with which to contend—that of subduing the Frosh amidst the luxury of the new living houses. Active warfare soon broke out; numbers of first year men were taken for rides; and more than one Soph was put "on the spot." Such

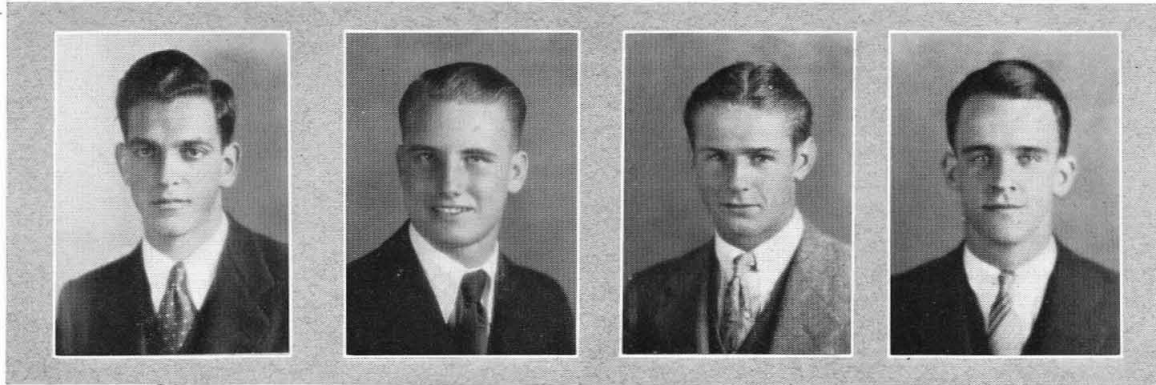
racketeering methods were followed by numerous nocturnal brawls with several Frosh and one Soph being "dunked" in the icy depths of the physics pool.

The Rodeo was a true battle of the century with the Sophs finally grabbing the honors. The Frosh, however, pulled a fast one by kidnapping Sid Smith and Pat Hannay and forcing them to languish in the tunnel while the contest was in progress.

The Sophomores closed the second term of the year with a dance for the student body at the Biltmore Hotel. The affair was a notable success, attesting the good spirit and taste of the Class of 1934.



CLASSES



HARRIS

KING

RAY

MILLIKAN

The Freshman Class

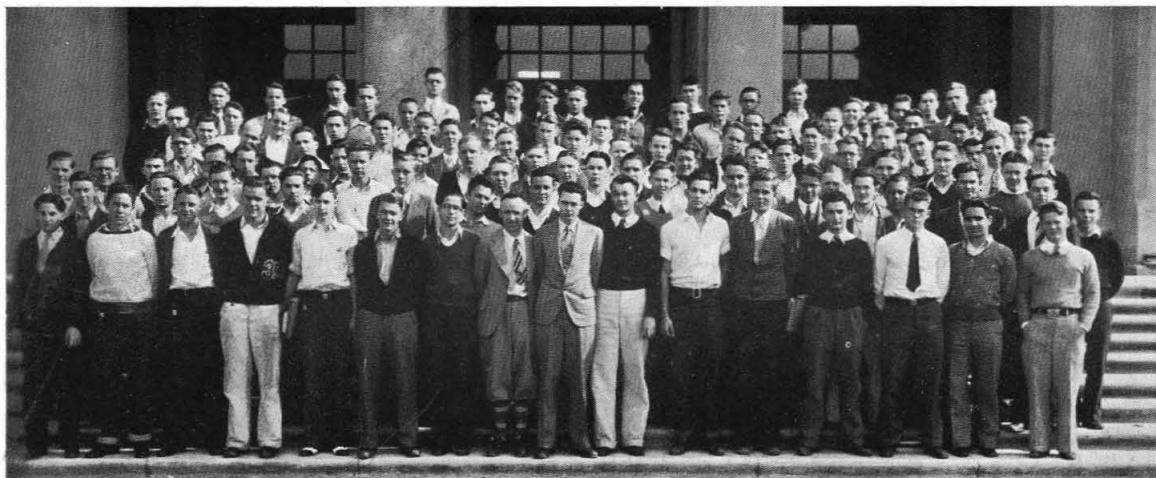
It was Registration Day at the California Institute. Some one hundred and sixty bewildered looking youths wandered about the campus, vaguely filling out cards, writing checks, and standing in long lines. So this is Caltech! But the sweet illusions the Freshmen had built in their imaginations were rapidly dispelled, at first, by the upperclassmen and, then, by their instructors.

Bill Harris, who was appointed chairman early in the term, led the class through its first enterprise with flying colors. Much to the dismay of sundry grocers, packers, and fruit stand owners, a bonfire was built such as the natives had not

seen for some time past. Classes were cut, meals were forgotten, and sleep was lost in order that the great work might go on.

Later on in the season, the Frosh lost the Rodeo despite their many clever tricks to cast dismay and consternation into the ranks of the Sophomores.

Everyone stepped up two or three years in age in time for the Freshman Student Body Dance. This annual affair was given at the close of the first term in the immense ballroom of Pasadena's new civic auditorium. Good punch, excellent music, and the unique feature of plenty of room made the dance a success.

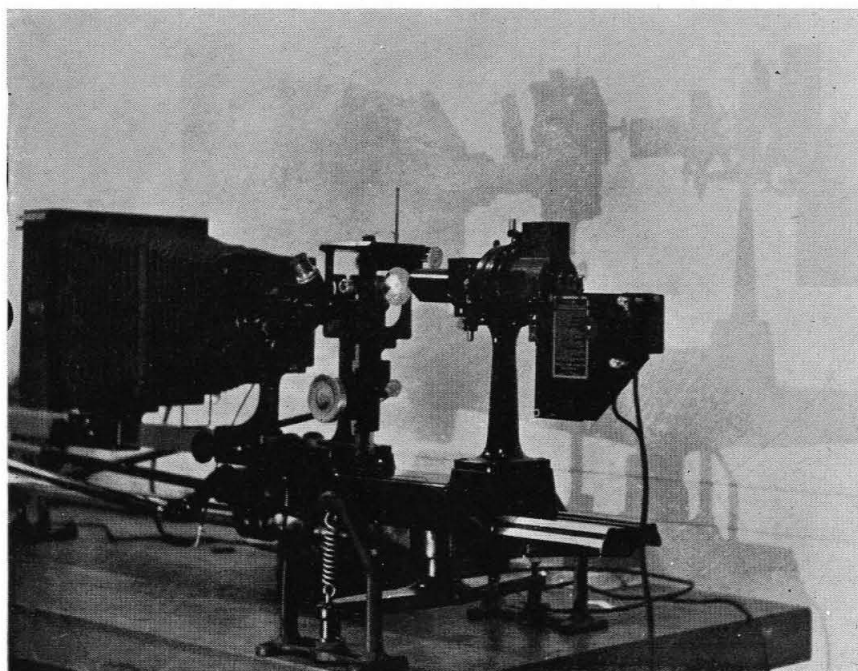


VIEWS



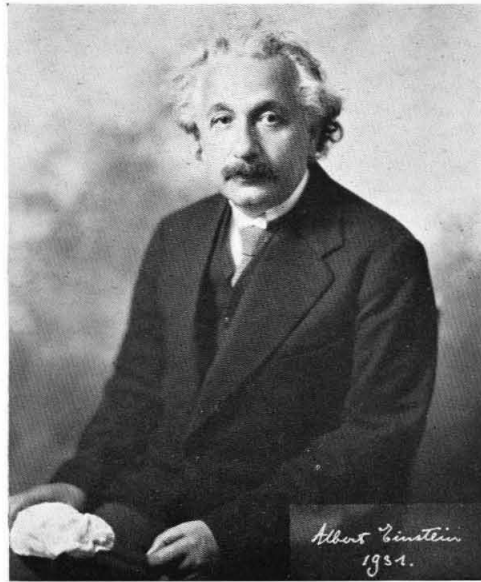
PIONEERS

Pioneers in Science



Pioneers
Million Volt X-Ray Tube
Astrophysics
Two Hundred Inch Telescope
Aeronautical Research

PIONEERS



DR. ALBERT EINSTEIN

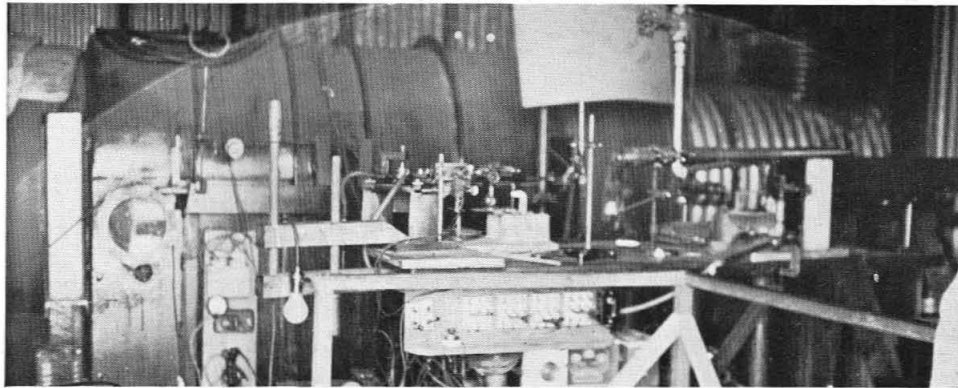
Pioneers

Our great scientists are pioneers, pioneers in the field of human thought and knowledge. Like the old pioneers they have that rugged spirit which urges them on, ever on, into unknown fields.

Among the pioneers in the field of science to visit our campus has been Dr. Albert Einstein who is one of the best known scientists living today. His work in formulating the theory of Relativity is perhaps the best known if not the most important part of his pioneering.

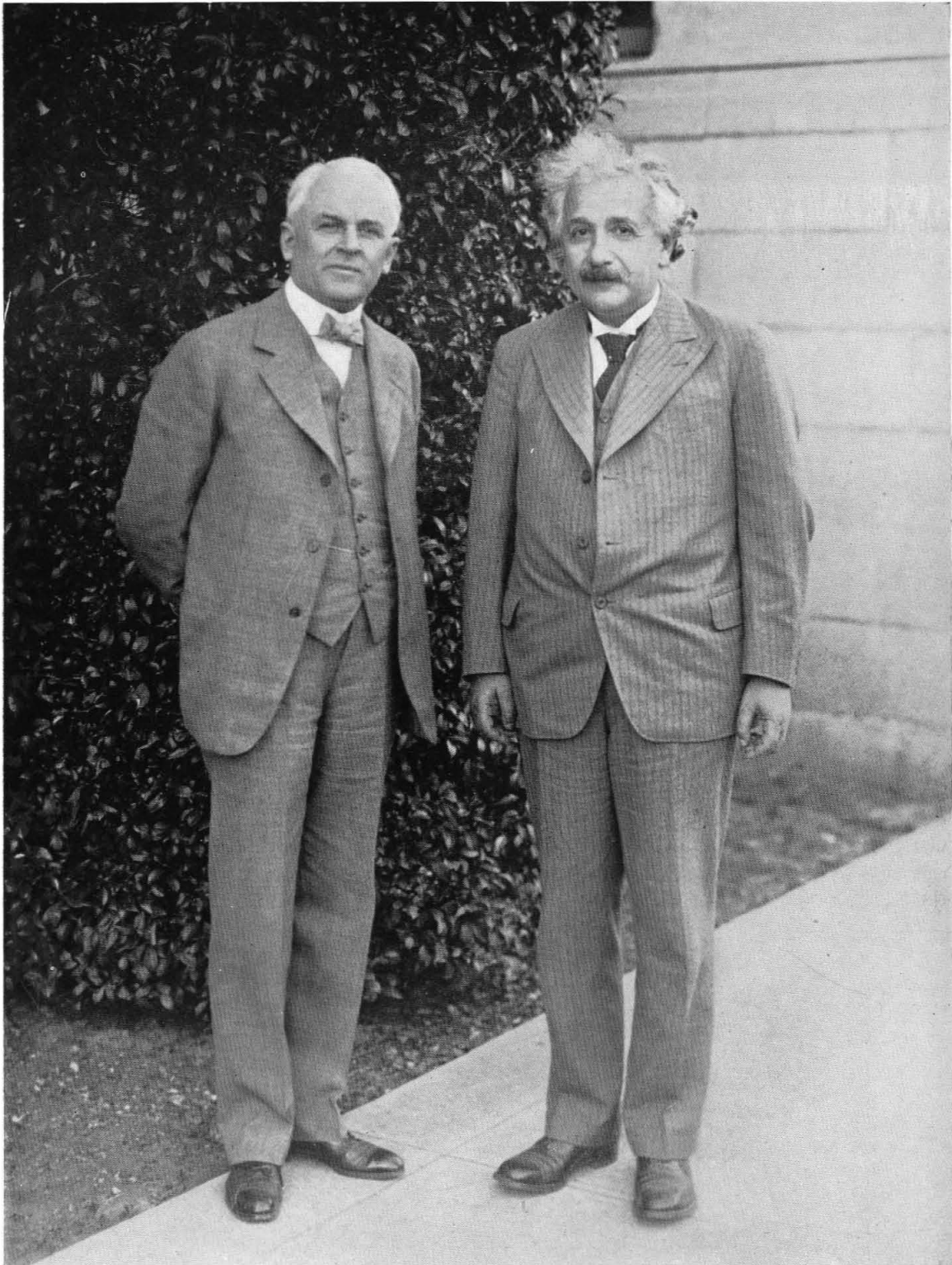
After having been awarded the Nobel Prize for his work on the photoelectric effect, Professor Einstein pushed on to new frontiers, formulating new theories leading onto the theory of Relativity and more recently to his Unified Field Theory.

The purpose of his visit to our campus was to investigate new data concerning his theories and to meet with other prominent men of his field who congregate here. The Mount Wilson Laboratory, which is closely allied with the Institute furnished data that occupied much of his time.



DR. MICHELSON'S LIGHT MEASUREMENT APPARATUS

PIONEERS



DR. ROBERT MILLIKAN AND DR. ALBERT EINSTEIN
THE INSTITUTE'S TWO NOBEL PRIZE WINNERS



DR. C. C. LAURITSEN

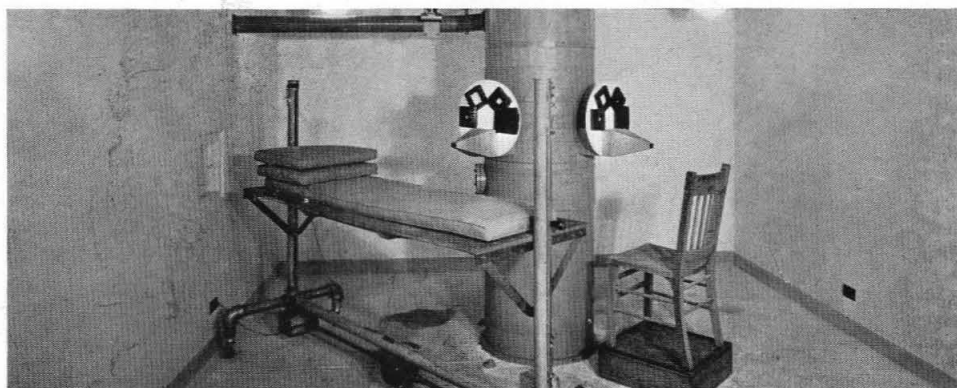
The Million Volt X-Ray Tube

Pioneer work in the field of high potential X ray tubes has been carried on at the Institute by Dr. C. C. Lauritsen. Tubes were designed and built to operate at potentials of 500,000 volts. This work has been carried on in the High Tension Laboratory. With the completion of the Kellogg Radiation Laboratory work was begun on a new tube to operate at potentials of 1,000,000 volts and higher. This tube will be used in carrying our research in Physics as well as for extensive pathological treatments.

This new tube is unique in its construction

being of the double ended type which makes it appear as two tubes. By designing the tube in such a manner that the operating potentials to ground are but half the total voltage a great saving of space and apparatus has been effected. The tube is built up of sections of glass tubing and is pumped continuously to maintain the high vacuum necessary.

While a great deal of work has been done, Dr. Lauritsen and his associates have but touched the frontier and are pushing ahead to new discoveries.

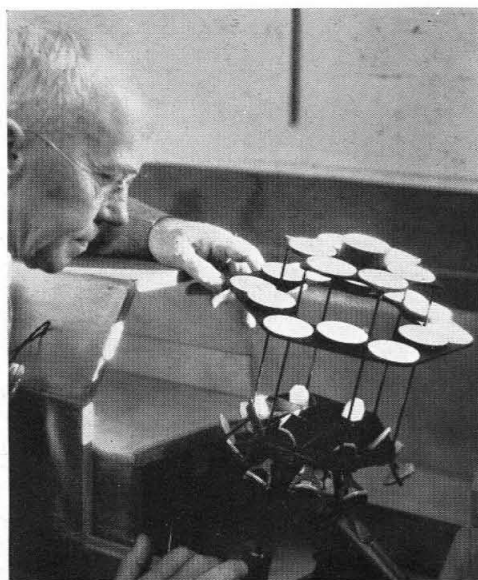


THE OPERATING ROOM OF THE NEW X-RAY TUBE



DR. LAURITSEN AND DR. MUDD STANDING BENEATH
THE NEW MILLION VOLT X-RAY TUBE

PIONEERS



MR. PORTER EXAMINES MODEL OF SUN FURNACE

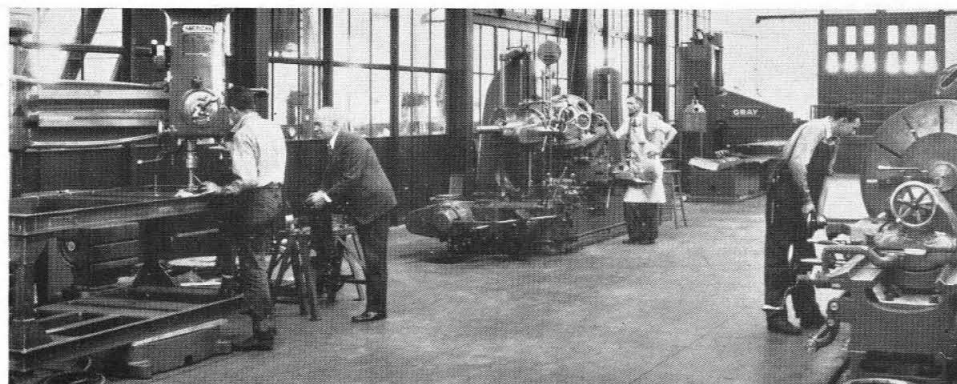
Astrophysics

Since man first began to scrutinize the tiny specks of light which he saw in the evening skies, he has been studying the stars. Time has passed; much has been learned; hypothesis have been formulated, many discarded; yet, today, that part of astronomy which is known to us is as nothing when compared to the limitless regions of the unknown.

As in other fields of science, the California Institute of Technology is taking the lead among the pioneers in this vast field. The new Astrophysics Building is only the first step in the

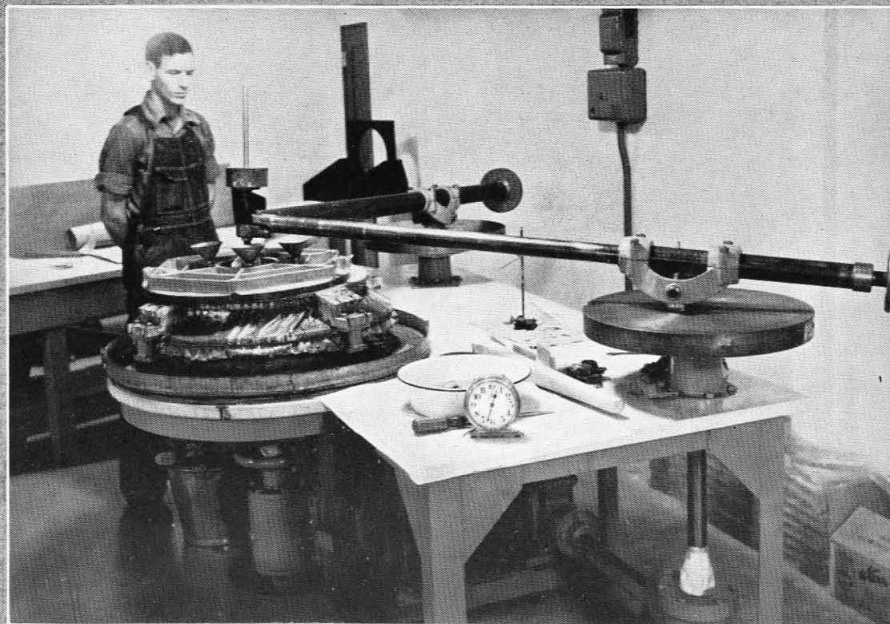
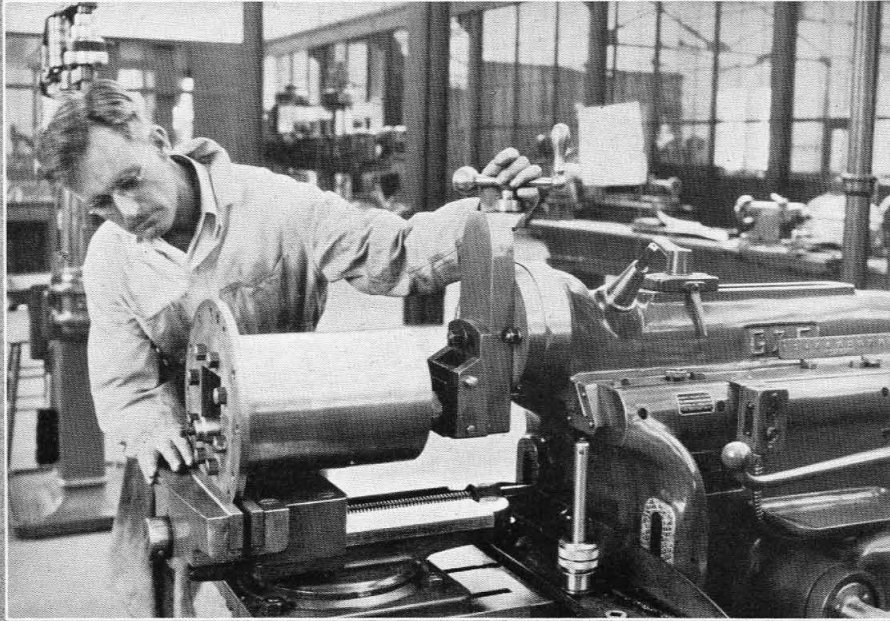
plans of the Institute. The next few years will see the completion of a huge 200-inch telescope, the largest in the world, which will be situated upon a nearby mountain peak and operated in conjunction with our astrophysics department.

Much work is being done here on the campus in preparation for the huge lens. The accompanying illustrations give views in the new Astrophysics Machine Shop. Much machinery and equipment has been installed for work on the huge lens and to supplement the new telescope.



AT WORK IN THE MACHINE SHOP

PIONEERS



HIGH PRECISION IN SHAPING A SQUARE HOLE
GRINDING A QUARTZ LENS IN THE MACHINE SHOP



DR. ELIHU THOMPSON

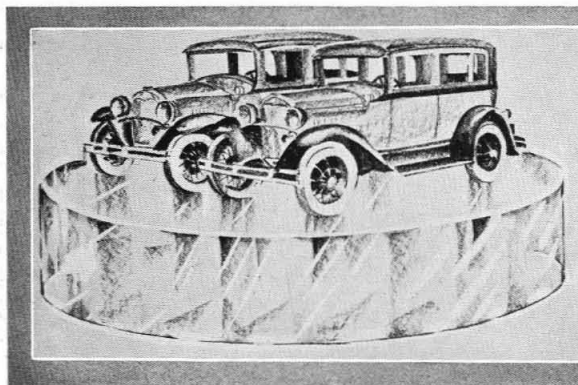
The Two Hundred Inch Telescope

This telescope has been made possible by the generous gift of the International Education Board and the splendid cooperation of the General Electric Company. Under the direction of Dr. Elihu Thomson of the General Electric Company, the 200-inch lens is now in process of construction at West Lynn, Massachusetts in the Thomson Research Laboratories.

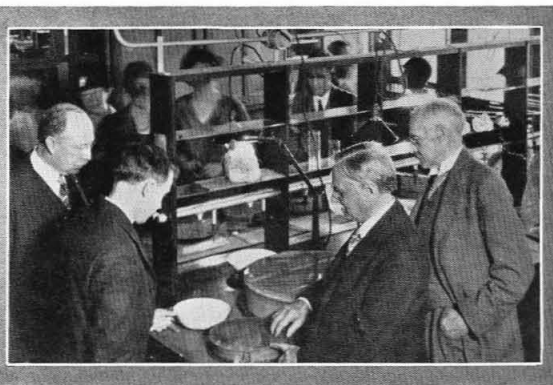
Many difficulties have been encountered in the making of this lens. The question of making one slab 200 inches in diameter from either glass or quartz has not been solved. Much work has

been done with small quartz lenses, which are made by the spraying of a "sleet" of molten quartz upon a surface; but no method for making such a large disk has yet been found. There are likewise many difficulties in the making of and the using of a glass lens of such dimensions.

The site for the 200-inch telescope has not yet been selected, but it is known that it will be located near Pasadena. With the cooperation of the Mount Wilson Laboratories, the new telescope is expected to further to a great extent our knowledge of the universe.

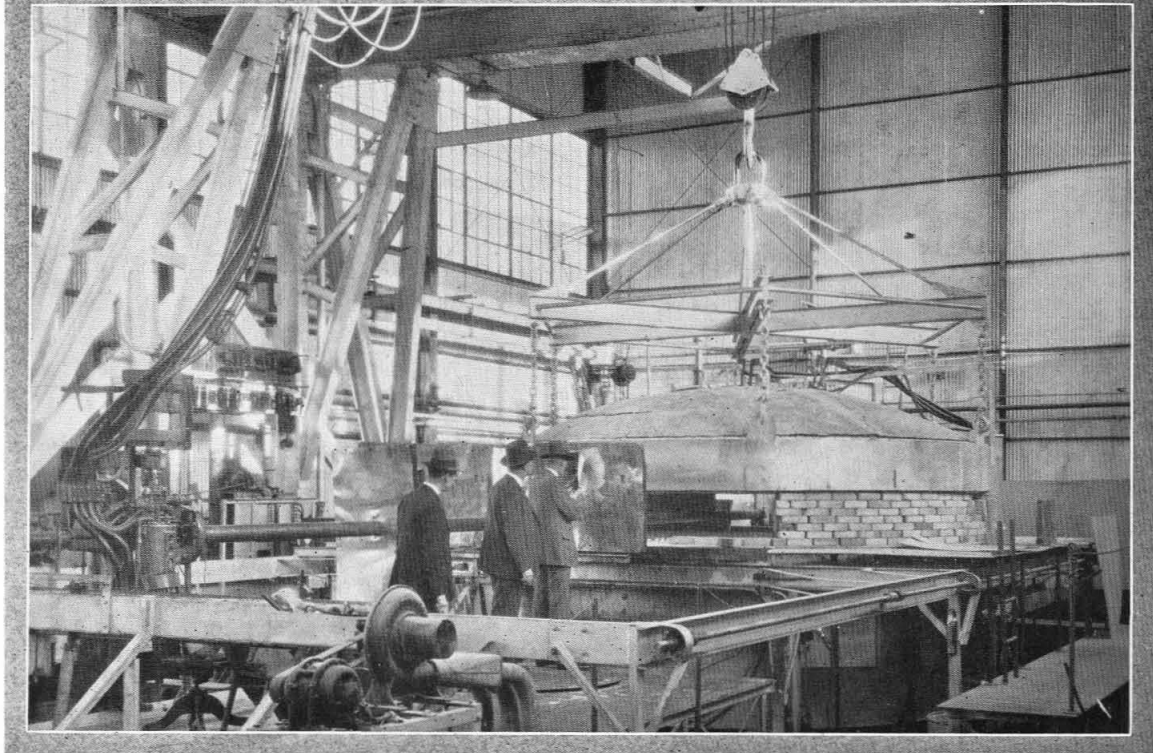
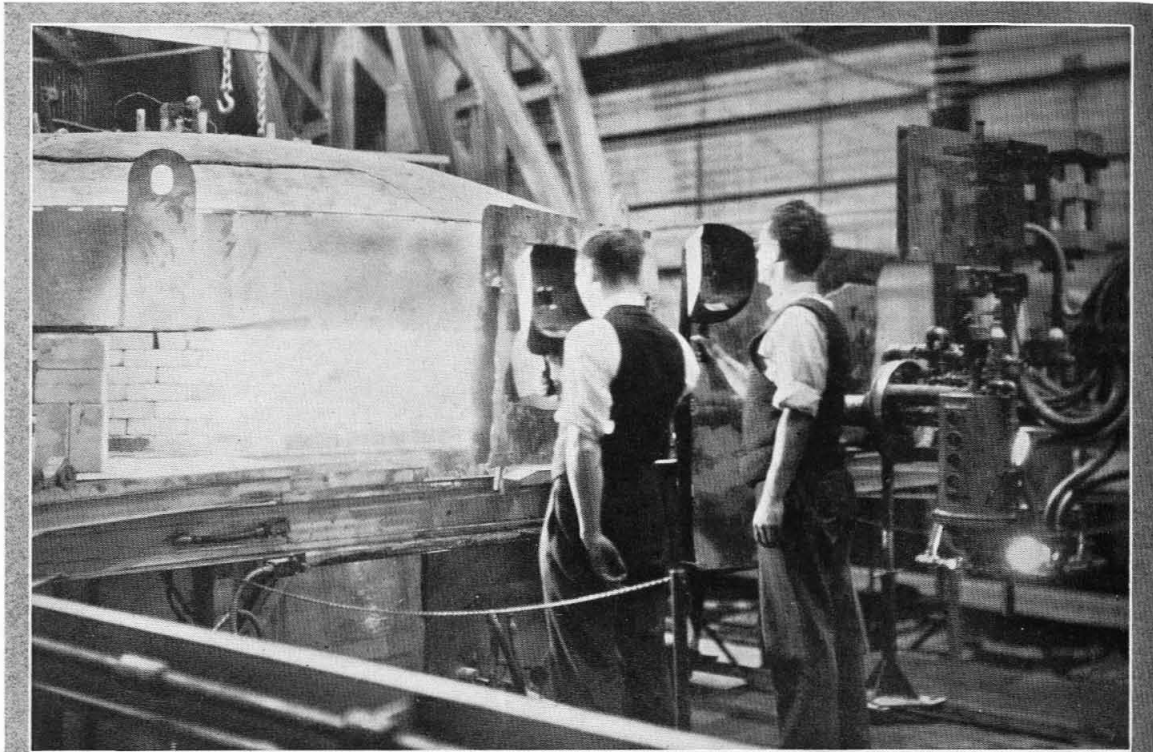


200 INCHES—A COMPARISON



DR. THOMPSON EXHIBITS SMALL DISK

PIONEERS



WATCHING THE PROGRESS OF SPRAYING ON THE QUARTZ
THE FURNACE FOR SPRAYING THE 60-INCH QUARTZ DISK

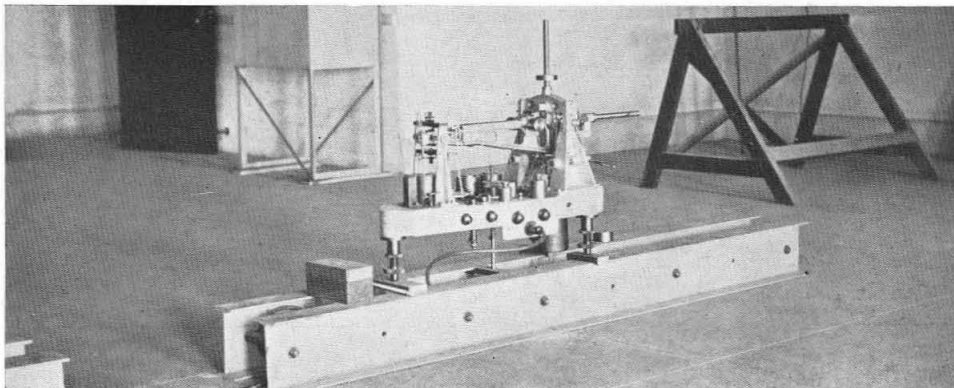


DR. VON KARMAN

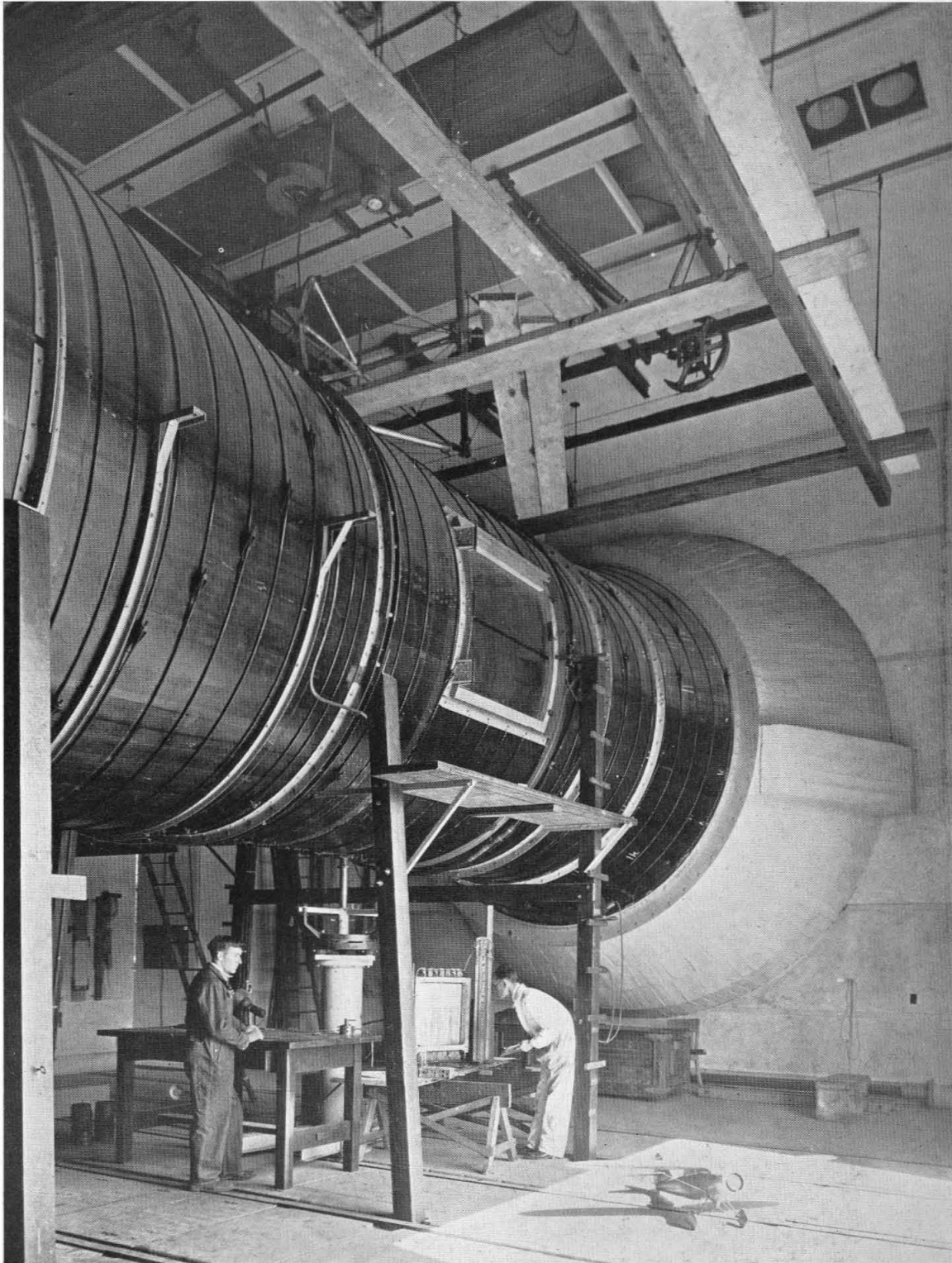
Aeronautical Research

The aeronautics department, under the direction of Dr. Theodor von Karman, consists of four units: theoretical aerodynamics, experimental aerodynamics, wind tunnel, and structures. Men in the first group are working on such problems as the prediction of stability of airplanes and of performance (landing speed, high speed, rate of climb, ceiling, range, etc.) the motion of dirigibles through gusts, and the resistance of projectiles moving with supersonic velocities. The experimental aerodynamicists are concerned chiefly with fundamental researches on turbulent motion of air. The huge wind tun-

nel plays an important part in developing and testing models of dirigibles, especially the new Navy ships, for stability, drag, etc. A model airplane is being built with a power plant installed, so that actual conditions with propellor running are simulated as nearly as possible. The structures group is working on theoretical and experimental problems connected with monocoque construction, and has developed machines for testing, bending and buckling in thin-walled structures; a photoelastic laboratory has been established for the study of stresses in various elements of aircraft structure.



THE HIGHLY SENSITIVE AERO BALANCE



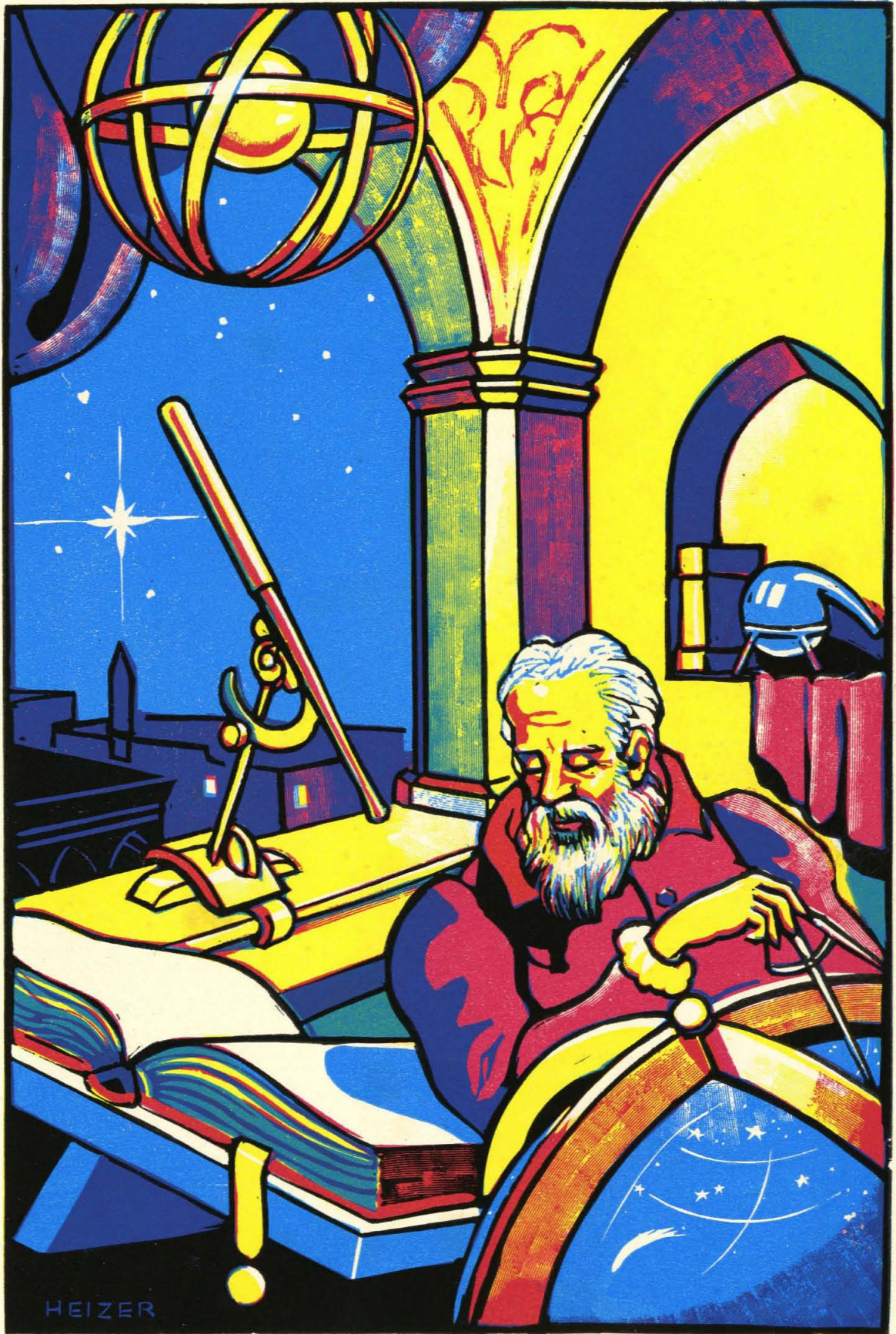
THE TEN FOOT WIND TUNNEL IN WHICH VELOCITIES IN EXCESS OF 200 MILES PER HOUR HAVE BEEN OBTAINED



G A L I L E O

.....“About two months ago, a report was spread here—in Padua—that in Flanders a spy-glass had been presented to Prince Maurice, so ingeniously constructed that it made most distant objects appear quite near, so that a man could be seen quite plainly at a distance of two miles. This result seemed to be so extraordinary that it set me thinking, and as it appeared to me that it depended upon the laws of perspective, I reflected on the manner of constructing it, and was at length so entirely successful that I made a spy-glass which far surpasses the report of the Flanders one. The effect of my instrument is such that it makes an object fifty miles off as large as if it were only five.”....

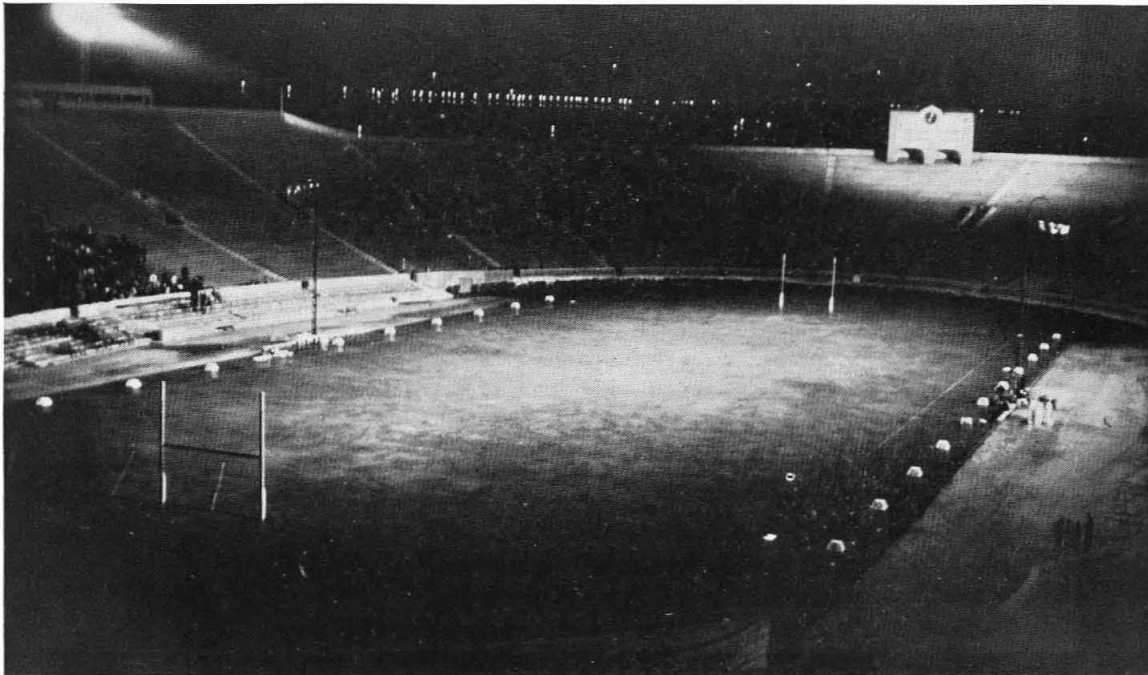
—Translation from a letter sent by Galileo to his brother-in-law, Sanducci.



HEIZER

FOOTBALL

Football



Champions!
Varsity
Scrub
Frosh



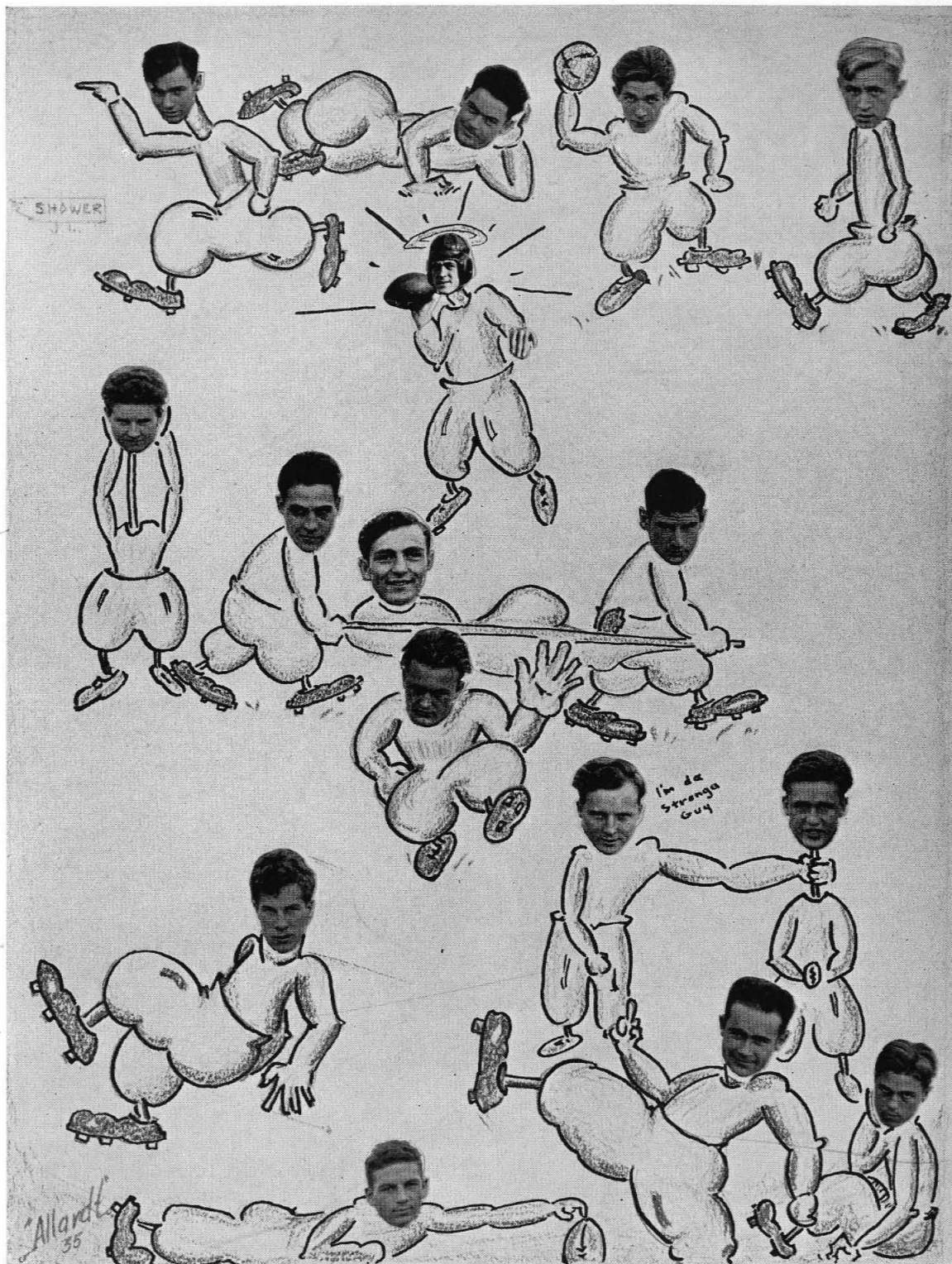
The 1931 Conference Champions

When the 1931 football season opened, the Caltech grid outlook was a good deal brighter than it had been one year before. Ten lettermen from the championship team of 1930 were back, these being Red Watson, Clark Goodman, Ed Hayes, Bill Shuler, Ed Crawford, Phil Craig, Sam Johnson, Henry Bruderlin, Randall Maas, and Kedric Keeley. In other words, Coach Fox Stanton had an almost complete eleven of lettermen. With such prospects as Francis Hunter, John Mendenhall, Bob Sharp, Sid Bamberger, Joe De Milita, and Lee Morris, the outlook became optimistic as compared to that of past years.

In spite of all this, the sports writers gave Tech but a third rating in the conference scale. Both Occidental and Whittier were favored over the Beavers as possible conference champs. Occidental did win over Tech, and it looked as if the scribes were right since the victory over Tech was the third straight win for the Tigers. But the Kienholz forces were destined to fall before both Whittier and Pomona, leaving the road open for a championship for Tech, with one hurdle, the San Diego Staters, to be passed.

Thanksgiving Day saw the Beavers winning over San Diego, 13-0, gaining the grid championship for two years in succession!

CHAMPIONS



The Champions

COACHES



Coach Fox Stanton

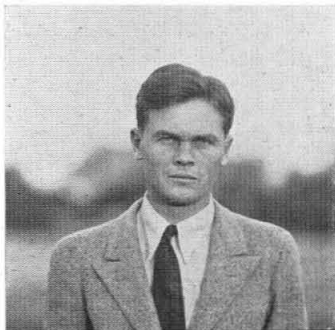
The man behind the guns—that's Coach Fox Stanton! The man who designs the tricky plays which keep conference foes guessing. The man who works out night after night with his football squad, whipping inexperienced material into shape which defies the most skilled grid machines encountered on the field of battle. And the man who turns out teams, both track and football, year after year, which continue to make the name of Caltech respected in sports circles.

In the last two years Coach Stanton has turned out championship football teams. At the beginning of the college year he was convalescing from two serious operations which he under-

went during the summer. Yet, he was so determined to get back to the football field, that he denied himself every possible thing which might endanger his chances to be in condition to coach for the 1931 season. This spirit of determination and fortitude must have permeated the Tech grid team, for it finished up strong by taking the conference grid crown for the second time in the last two years.

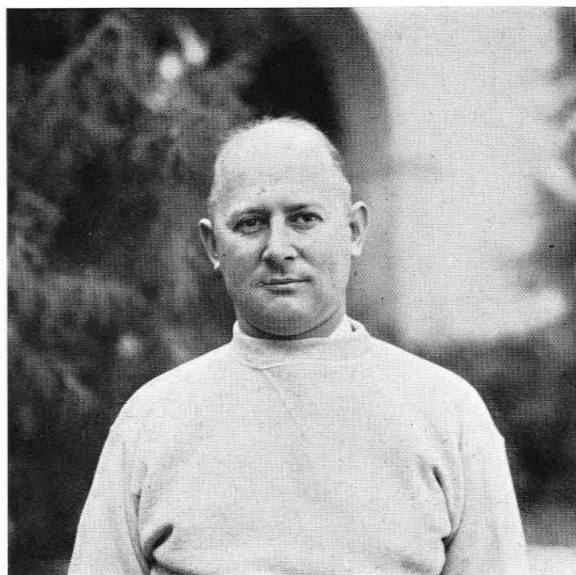
This achievement is as much a credit to Coach Stanton as it is to the members of the team. It was he who designed the roster of plays which gave to Caltech the most versatile attack in the conference. It was he who had to work with such disadvantages as a line averaging 163 pounds and a backfield averaging 161 pounds. The skill involved in designing an attack which will be effective under these weight difficulties is not appreciated until one tries to duplicate the work. Coach Stanton does it year after year.

Sportsmanship is the keynote of Coach Stanton's sports philosophy. The doctrine of "win at any cost" has no place in the athletic training of track, football, and cross country men working under him. Although Tech teams are taught to play, and play hard, the blemish of underhanded play has never darkened the sports scene here.



COACH LAYTON STANTON

COACHES



Coach Musselman

Coach Harold Musselman has in past years coached baseball and freshman basketball. Since both of these activities were eliminated from the sports program for the past athletic season, Coach Musselman has devoted his energies to the myriad of details encountered in arranging schedules and other matters of importance to the sports department. He has been particularly active in the development of an intramural program to take the place of the reduced intercollegiate program.

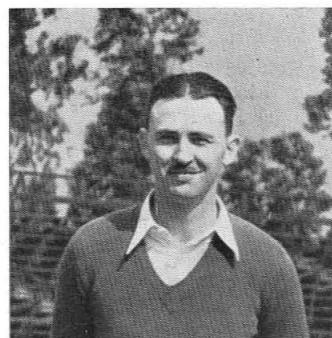
He has arranged schedules for contests in interhouse football, track, basketball, tennis, and several other sports. In short, he has been mainly responsible for the expanded intramural program which has attracted attention to Tech athletics.

Highly instrumental in producing this year's championship football team were assistant coaches Layton Stanton and Stewart Seymour. Both of these young coaches worked hard and unselfishly to train the Tech football enthusiasts in the fundamentals of the game.

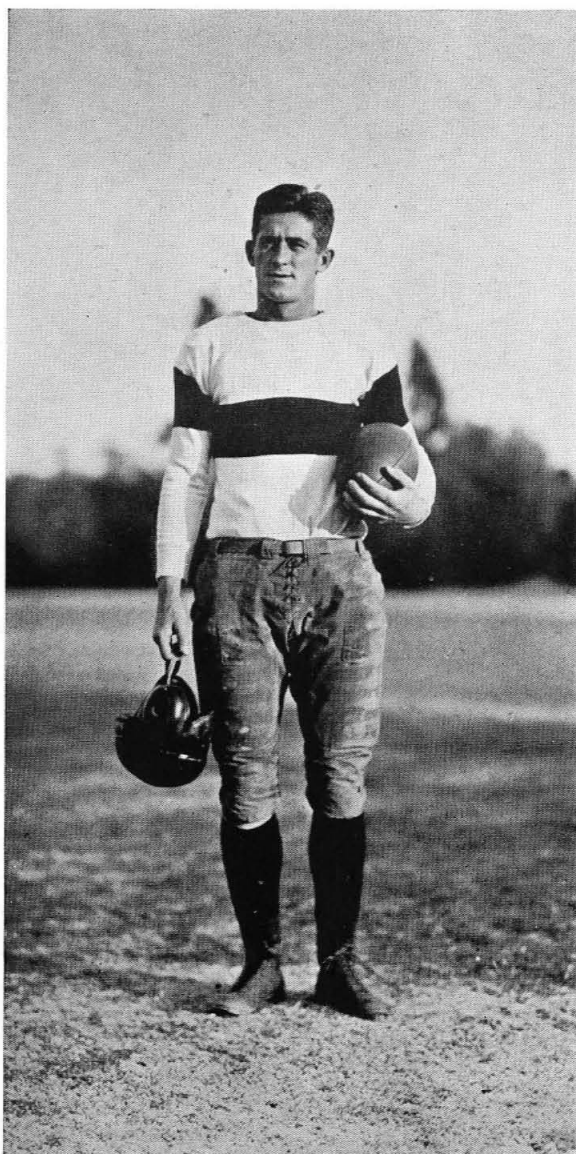
A good deal of the field work during the first part of the season was handled by the assistants when Coach Fox Stanton was in a weakened

condition caused by his illness during the summer. Since Layton Stanton is expertly posted on his father's style of play, he was entirely capable of running off signal drills and scrimmage sessions. "Stew" Seymour is well acquainted with the fundamentals of blocking, tackling, and other points of football technique; so the duties of training the line fell upon his shoulders.

The result of the efforts of these two young coaches was seen when Tech traveled north to Santa Barbara for the first game of the season. The 31-0 drubbing given to the Staters is indicative of the type of team built up in ten days under the supervision of the assistants.



COACH "STEW" SEYMOUR



Captain 'Red' Watson

Starting out against the Santa Barbara State Teachers in a blaze of football glory, Captain George "Red" Watson played a season of brilliant football which won for him the halfback post on the all-star Southern Conference grid team. His fiery playing was an inspiration to his teammates, lending them the fight and strength to play a type of game which could not be denied the championship.

He was a member of the 1930 varsity which won the conference crown for the first time in

the history of Caltech. He is one of the few Beaver players to be a member of two championship teams.

Playing the hardest game of his career last Thanksgiving Day against the San Diego State team, Watson culminated a football career which has been unequalled in the history of the game at Tech. The awarding of the Wheaton trophy was a gesture suitable to the brilliance of his performance.

FOOTBALL



CRAIG

Captain-Elect Craig

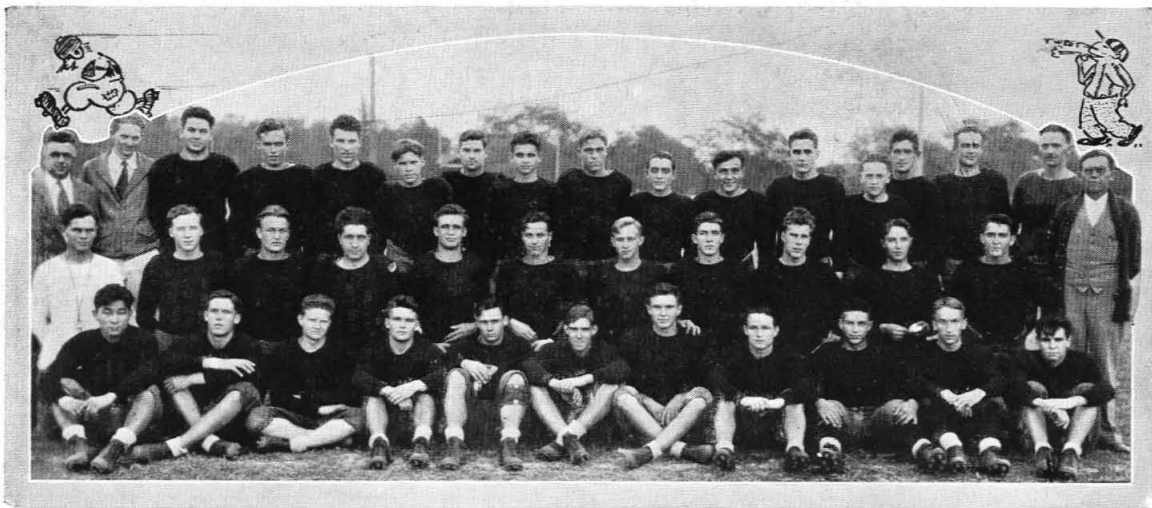
The football team's choice of a captain for next year's eleven was made known at the football banquet. Phil Craig was chosen by his teammates for the task. Craig is a junior and has the distinction of being one of the few Tech players to be a member of two Tech championship grid teams.

Earning a letter in his frosh year on the football field, Phil made the varsity team in 1930. He alternated at guard during the season which brought the first championship in the history of Tech. During the season of '31, he played consistently at guard, his type of play being such as to bring him all-conference honors.

The Squad

The schedule this season was such that all the available strength had to be in the field most of the time. The significance of this lies in the fact that many players out for football had to be content with watching, rather than playing, in the inter-collegiate games.

It is to these men who saw little varsity action and yet who turned out faithfully during the season that a word of appreciation is due. It is one thing to be assured of a varsity berth, and another to have little hope for a chance to play in the "big games." The "reserves" are an integral part of the football squad and play an important part in the success of any team.



FOOTBALL



Pre-Season

Starting practice ten days before the first game of the season against the Santa Barbara State Teachers' College, Caltech's gridgers began preparations for the grid wars under the experienced eyes of Coach Fox Stanton and his two assistants, Layton Stanton and "Stew" Seymour. Ten lettermen were back, making the outlook somewhat brighter than in previous years. The returning lettermen included Captain Red Watson, Ed Hayes, Bill Shuler, Phil Craig, Ed Crawford, Sam Johnson, Henry Bruderlin, Kedric Keeley, Randall Maass, and Clark Goodman.

The Santa Barbara game was played in the Channel City on the night of September 25, and the Engineers encountered little opposition from the baby members of the conference. With Watson, Hunter, and Joe De Milita executing the shrewdly called plays of Clark Goodman, the Roadrunners were swamped with a score of 31-0.

The Beavers scored two touchdowns within the first fourteen minutes of play. A pass from De Milita to Shuler landed the ball on the State 35 yard stripe. De Milita and Watson drove over in six plays. A few minutes later Watson tore off 50 yards to put the Engineers in pay territory again, with Hunter taking the ball over for the tally.

A partially blocked State punt was recovered by Tech on the Green-and-White 31 yard line. Hunter, Watson, and De Milita alternated at packing the ball for the third touchdown. Crawford's interception of a State pass in the fourth period on the enemy 41 yard line resulted in another score for Tech with Johnny Mendenhall making the tally. Watson converted to make the score 25-0. The last touchdown came after the completion of a long pass from Watson to Maass.



HENRY BRUDERLIN

HIGHLIGHTS

Tech 31, S. B. 0

Touchdowns by De Milita, Hunter, Watson, Mendenhall. Two tallies within 14 minutes after start of game. First touchdown in 6 minutes. Score in 1930 was 6-6.



JOHNNY MENDENHALL

FOOTBALL



Arizona-P. J. C.

The next week found the local crew at Flagstaff, Arizona, about to engage in the first game ever played between Arizona State Teachers' College and Tech. Although outweighed 20 pounds to the man, the Beaver gridders engineered a 13-0 victory.

The first half was played deep in State territory and at one time the ball was on the Teachers' one yard line, but the Tech team lacked that little extra drive to score. The second half netted two tallies for Tech, although the Cactus Staters were driving hard for a score. A pass, De Milita to Mendenhall, caught the Staters flat-footed with Johnny galloping fifteen yards for the first goal. De Milita converted. In the fourth period Bill Shuler snagged an enemy pass to ramble 40 yards to the second score.

Pasadena Junior College upper division's squad came to Tournament Park on the next

week-end to meet the Beavers. Coach Stanton opened the fracas with the Tech first string which quickly ran up two touchdowns. A bad pass from the Jaysee center put McCue, giant tackle, behind his own goal line to punt, but alert Tech lineman blocked the attempt and captured the ball for a touchdown. De Milita converted.

A pass, De Milita to Mendenhall, scored for the locals again, De Milita missing the conversion. The Tech second team was sent in at the beginning of the second period. Young, fast Jaysee back, led a drive over the Tech goal stripe early in this period. A pass, Young to Twelvetrees, scored for the visitors. Stagno and Little slashed the Tech line for another tally in the third period. The game ended in a 13-13 tie, the junior college team fighting off a Tech attack.



NORMAN GERTMENIAN

HIGHLIGHTS

Tech 13—Arizona 0

Tech 13—P. J. C. 13

Arizona outweighed Beavers 20 pounds average to the man.

Touchdowns by Mendenhall and Shuler.

Winning play—pass from De Milita to Mendenhall.

Same play scored against Pasadena Jaysee.



JOE DE MILITA

FOOTBALL



Occidental

The Occidental game proved to be a heart-breaker for the Tech student body. The entire A.S.B. was inspired with the spirit of the affair. The freshmen had prepared an enormous bonfire in Tournament Park, and plans for after-game events were made. The largest turnout for any athletic event of the year witnessed the kick-off at the Rose Bowl.

The Engineers opened with the full power of their attack in order to outdrive the Bengals 3 to 1 before the end of the game. Four times within the first half, the valiant Beavers drove within the Occidental 20 yard stripe, but each time the thrust was stopped by a determined Oxy defense. The Tigers had little on the ball in the first period, the high spot in their play being their excellent pass defense which broke up the Beaver pass attack with an effective precision.

In the second period, Jim Meeks, fleet Oxy right end, intercepted a lateral pass from Captain Watson to Chuck Spicer. The play was intended to go around the Tech left end, but the elusive Meeks stopped the oval on its way from Watson to Spicer and was off at full speed before the astounded Tech players could get up speed to nab him.

In the last quarter, Reed, Tiger back, got under a pass from Collier and followed with a neat piece of open field work to roll over the goal line for the second and last touchdown of the evening. Ackland converted to make the final score 13-0. The Tigers had yet to face the Whittier Poets and the Pomona Sagehens. Fate had a surprise in store which eventually gave Tech an open road to another championship!



KEDRIC KEELEY

HIGH LIGHTS

Tech 0—Oxy 13

Tech outchaged Oxy 3 to 1.
Touchdowns by Meeks and Reed.

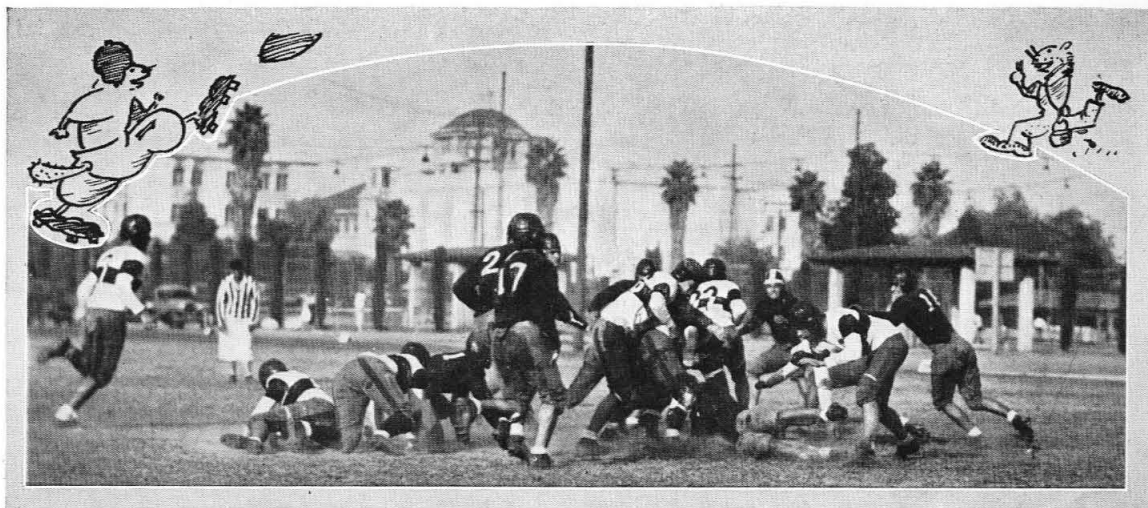
Was first defeat of season.
Was third straight conference win for Oxy.

Score year before was 6-0 favor Tech.



BILL SHULER

FOOTBALL



Redlands

Redlands came to Tournament Park for the next event on the grid program the Saturday afternoon after the Occidental tilt. Stanton's team was ready for a tough battle, but it was the opinion of old timers that John Gough's team had much more on the ball than was expected. The final score of 6-0 is not indicative of the relative strength of the two teams. Although the Beavers came out on top, they were outgained in yardage by the visitors.

With such stars as Hales, Boone, and Beiden, the Redlands team was well-manned and the fracas was a fight from start to finish. The score was made in the first quarter when a long Tech pass descended behind the Bulldog goal line only to be batted up in the air by Captain Beiden of Redlands. On its way, the ball fell into the waiting arms of Ed Hayes to chalk up

the only six points made during the entire afternoon. Several times the visitors drove deep into Tech territory, and it took all the fight and strength the locals could muster to keep them from scoring.

The fact that the Bulldogs drove within the Beaver ten yard line four times in the second quarter is indicative of the battle waged by the visitors. Tech was especially prepared to stop the passing attack which was heralded as one of the best in the conference. The Bulldogs had little opportunity to utilize this department of play because Captain Beiden, the key man in the aerial attack, was forced to leave the game in the second quarter as a result of a wrenched shoulder. The game was the closest conference tilt encountered by the Beavers during the season.



ED HAYES

HIGHLIGHTS

Tech 6—Redlands 0

CALTECH		REDLANDS
*Hayes	LER	Del Carlo
*Shuler	LTR	*Hales
*Craig	LGR	Speth
*Crawford	C	*Boone
Gertmenian	RGL	*McKenzie
Bruderlin	RTL	Minor
Keeley	REL	Keich
*Watson	RHL	Fox
Sharp	Q	*Beiden
Mendenhall	F	Massey

*All conference players.



CLARK GOODMAN

FOOTBALL



La Verne

The Beaver eleven hit its stride against the La Verne Leopards, coming up from behind a 6 point lead to win the game 20-6. Before the Tech game, the Leopards had beaten Santa Barbara and had come out on top in a number of other non-conference tilts, so that the Engineers were prepared for a real scrap, and they were not disappointed.

During the first period, one of Watson's punts was blocked when he attempted to kick out of danger after being backed up near his own goal line. La Verne recovered and lost no time in capitalizing the break into a 6-0 lead.

With Captain Watson playing one of the most spectacular games of his career, the Beavers took the ball on the Tech 40-yard line and opened a drive which ended in a tally in four plays. Watson scored the touchdown. At the opening of the third quarter, the red-headed

half-back again ran up two first downs single handed, then speedy Joe De Milita tossed a pass to Johnny Mendenhall who romped over for another touchdown. De Milita converted to make the score 13-6. The pass from De Milita to Mendenhall was the same play which scored against Arizona and Pasadena Jaysee.

Tech's diminutive signal caller, Sid Bamberger, tipping the weight indicator at 135 pounds, went into the game after the touchdown. Bamberger had seen little varsity action up to the La Verne game, but he had a surprise package in store for the fans. No sooner had he entered the game, than he engineered another touchdown, with Watson and De Milita taking the ball for long runs. Bamberger carried it over for the tally on an off-tackle slice over the left side of his own line.



ED CRAWFORD

HIGHLIGHTS

Tech 20—La Verne 6

La Verne scored first touchdown.

Famous De Milita-to-Mendenhall pass scored for Tech.

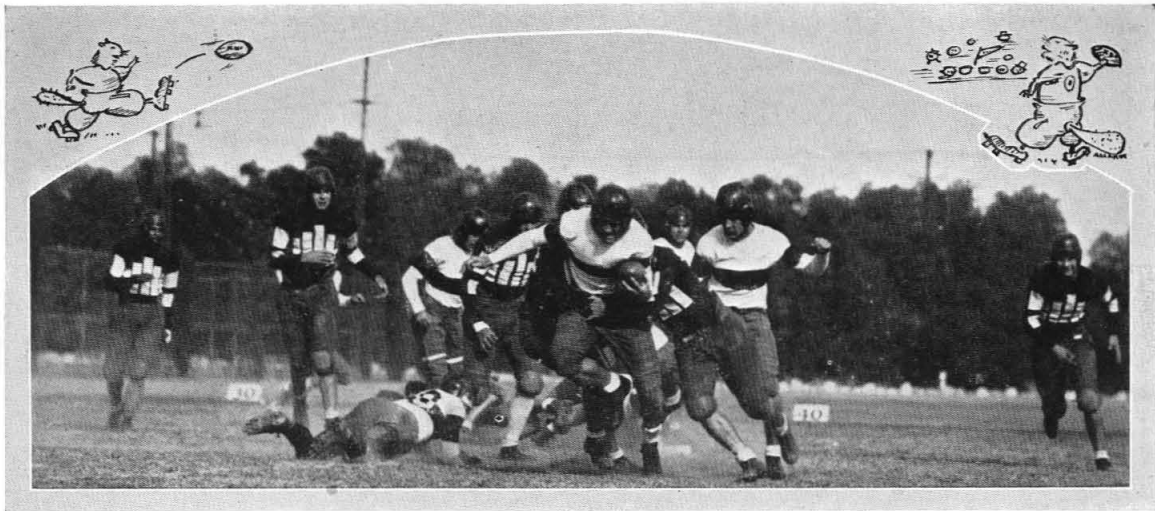
First Downs: Tech 20; La Verne 4.

Passes: Tech tried 11—completed 2; La Verne tried 14—completed 4.



SAM JOHNSON

FOOTBALL



Pomona

Coach Nixon brought his Sagehen eleven to town on the following Friday night only to be handed a 26-0 thumping in the Rose Bowl. Tech was picked ahead of time to win the game, and for once the dopesters were right. The Pomona team had little on the ball, the locals scoring in all but the first period.

Late in the first quarter the Beavers opened up and quickly ran up five first downs. The period ended with the oval deep in Pomona territory. The touchdown was made on the first play of the second period. A few plays later Mendenhall took a 25-yard pass from Watson to put the ball on the Sagehen 3-yard marker. Lee Morris, in at half back in place of Joe De Milita, outran the entire Pomona squad around his own right end to chalk up another one. De Milita was rushed in to convert, but the attempt was blocked.

Late in the third quarter, Blair Nixon, quarterback and son of the Pomona coach, attempted a punt, but it was blocked and recovered behind the Sagehen goal line by Pomona, scoring a safety for Tech. The score stood at Tech 14, Pomona 0. The fourth quarter opened with the Engineers in possession of the ball on the enemy 18-yard stripe. A new deceptive lateral caught the Pomona boys flat footed, with the result that the score became 20-0. De Milita scored the touchdown.

Another Pomona punt was blocked on the five-yard line, Keeley recovering for Tech. De Milita chalked up the last touchdown of the evening with a run around the Tech left end. The victory was one of the most decisive ever scored by a Beaver grid squad against a Pomona team.



HENRY SCHULTZ

HIGHLIGHTS

Tech 26—Pomona 0

Score year before was 2-0 favor Tech.

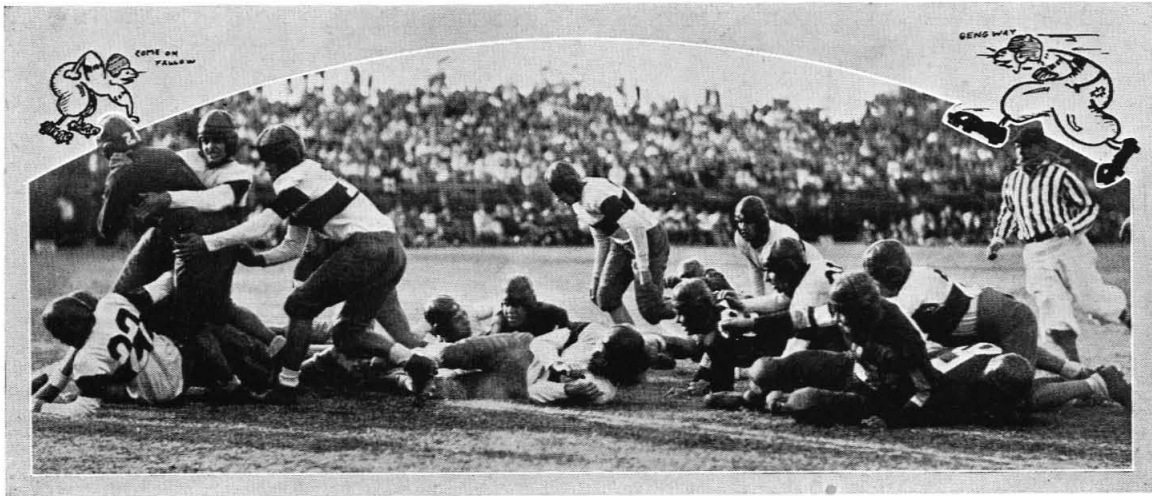
First Downs: Tech 13; Pomona 8.

Passes: Tech tried 5, completed 1; Pomona tried 18, completed 2.



SID BAMBERGER

FOOTBALL



Loyola

Under the arcs at Wrigley on the night of November 14, the Beavers took the worst thumping of the season from the Loyola Lions. With such tiny contestants as Euge, the 200-pound Lion fullback, the Lieb-men encountered little opposition from the locals.

From the above, the reader should not get the impression that Tech's crew laid down on the job. The Beavers waged one of the bitterest fights witnessed for a long time. From start to finish there was real scrap in every play, Coach Tom Lieb complimenting the team on its courage. The final score was 21-0.

One long consistent drive against the enemy second team was staged in the last quarter with De Milita and Watson taking the brunt of the ball-carrying responsibilities. These two stalwarts advanced the oval from the Tech 25-yard stripe to the same line in Loyola territory. A

pass, De Milita to Shuler, landed the ball on the Lion 5-yard mark, but a water tight defense prevented the score.

Late in the first quarter Watson punted from the Tech 3-yard line. Atkinson and Bouchard took the ball over for the first touchdown of the evening from the Tech 38-yard stripe on four plays. Bouchard skirted the Tech right end for the tally. Ryon converted.

Early in the second quarter, an elusive punt from Euge was bungled behind the Beaver goal line for a safety, making the score 9-0. Brosseau ran 54 yards through the right side of the Tech line for another score near the end of the first half, Ryon missing the conversion.

A recovered fumble on the first play of the third quarter gave the ball to the Lions who scored on a pass from Brubaker to Brosseau.



FRANCIS HUNTER

Tech 0—Loyola 21

First downs: First half, Tech 1; Loyola 4.

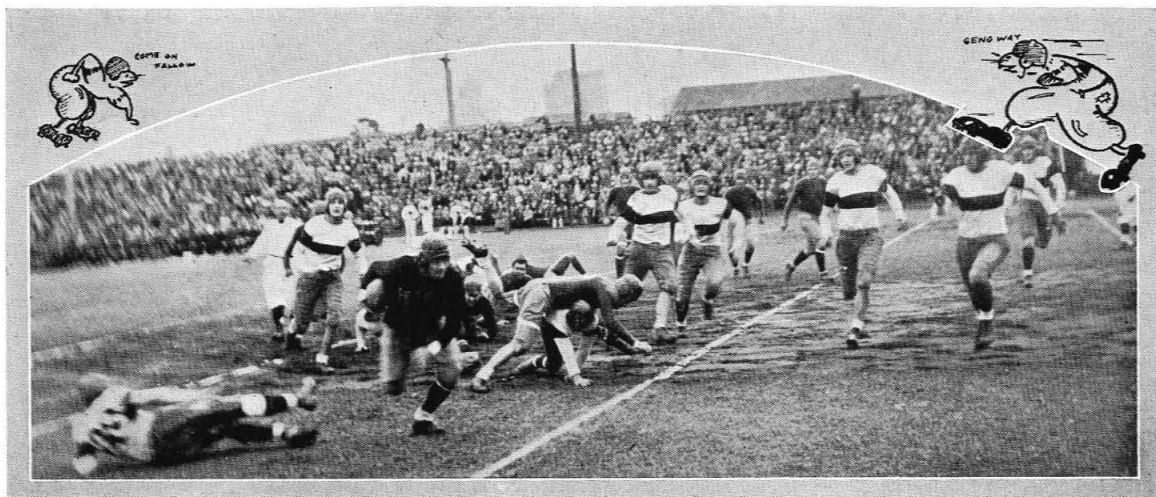
First downs: Second half, Tech 8; Loyola 3.

Passes: Tech tried 10, completed 1; Loyola tried 13, completed 3.



RANDALL MAASS

FOOTBALL



San Diego

Conference developments found Occidental falling before both Pomona and Whittier, thus the outcome of the mix-up lay in the results of the Tech-Aztec game which was played on Thanksgiving day at San Diego.

With the band present in all the glory which new orange sweaters could create, a relatively large turnout assembled in the Navy field stand for the game. The first half was scoreless and, more or less, was in favor of the Aztecs. Stanton's squad was not up to its usual game, and the outcome was very much in the air at half time. San Diego threatened the Tech goal line twice in the first two periods, and it was with a sigh of relief that the Tech fans heard the gun announce the end of these quarters.

The second half was an entirely different story, the Engineers waging a fight which swept

the Aztecs off their feet, the final score being 13-0. Mendenhall intercepted a State pass early in the third quarter. De Milita and Watson advanced the ball from the State 35-yard line to the 15-yard stripe. A pass, De Milita to Watson, put the ball on the five-yard line, and from there Watson crashed over for a touchdown.

The Aztecs threatened to score late in the third quarter, but the day was saved when an incompleting pass fell over the goal line unmolested. With the ball on the 50-yard line, De Milita broke away for twenty yards. De Milita to Hayes on a pass put the oval on the 18-yard stripe. A terrific smash over right tackle carried Captain Watson over the goal line standing up. He was aided by brilliant blocking on the play. De Milita converted.

The championship was again the Engineers'!!



BOB SHARP

HIGHLIGHTS

Tech 13—San Diego 0

Game gave championship to Tech. Was second consecutive championship.

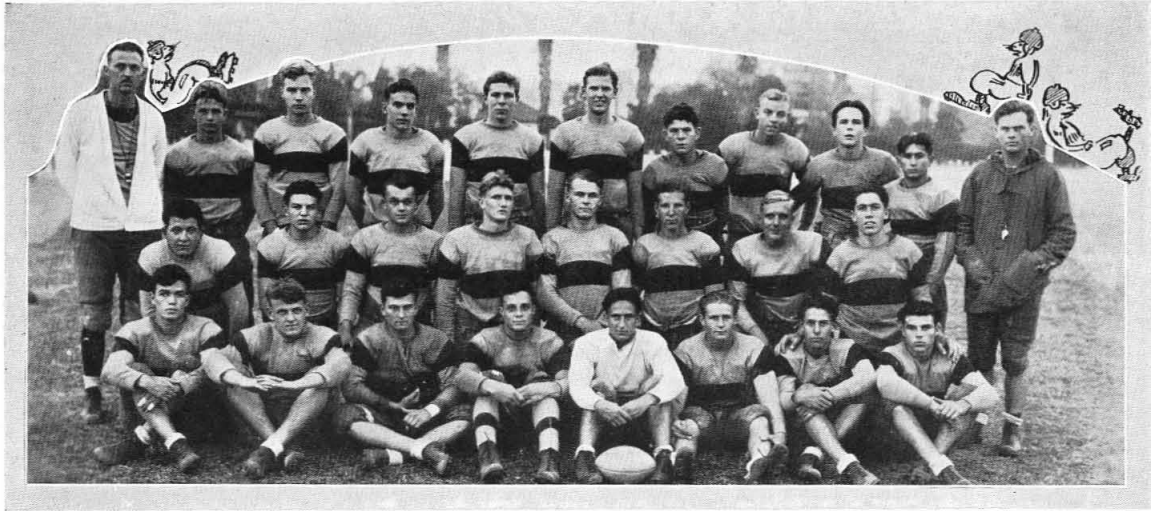
Last game for Watson, Shuler, Hayes, Bruderlin, Keeley, Maass, Goodman.

First downs: Tech 13; San Diego 10.



LEE MORRIS

FOOTBALL



Freshman Football

The Babes ran through a lengthy grid season with little reward in the number of games won. Opening with practice on the first day of the first term, the yearlings were sized up by Coaches Layton Stanton and "Stew" Seymour. October 8 came too soon for the amount of practice accomplished, but the Babes took the field against a superior team from Citrus Junior College in an endeavor to acquit themselves in a capital manner. The final score of the tilt was 41-0.

The next game was with the Occidental frosh in the Rose Bowl. The local eleven was much improved over the week before, the final score being 21-0 in favor of the Bengals. Blocking was better and there was more precision and drive in the execution of plays. Estep, Wilson and Caldwell showed up well in this encounter.

In a preliminary to the varsity tilt under the new arcs at La Verne, the Babes took another thumping, this time to the tune of 24-0. The pass attack was working well against the Leopards, and much yardage was gained via the aerial route.

In the Rose Bowl on the following Friday night as a preliminary tilt to the varsity match, the yearlings met and fought a titanic struggle with the Sagehen babes. The Caltech play was

by far the best of the season, the final score being 13-6 in favor of the Claremont squad. The local actually outfought and outplayed the Sagechicks. Wilson recovered Olson's punt on the enemy 40-yard line, and from then on the Beavers staged an exhibition of football as it should be played.

The team drove straight to a touchdown on short bucks and passes, Olson taking it over from the three-yard line. The try for point was close, but missed its mark. The Sagechicks retaliated with a tally, and the remainder of the tilt was all Caltech with the peagreeners driving deep into Pomona territory time and again but lacking the vital punch to score again.

The babes closed the season with an inglorious performance against a slow team from the San Diego Army and Navy Academy. The visitors were able to push over two tallies and convert one, the final score being 13-0. Tech drove to within one inch of the Army line in the third period, but the Cadets managed to hold.

Letters were given out at the annual Football banquet. The following men were awarded numerals: Olson, Captain; Ray, Caldwell, Wilson, Oliver, Heikel, Isham, Binkley, Snow, Black, Kramer, Evans, and Jones.

FOOTBALL

The Scrubs

Nobody has ever asked us what our conception of the worst job in the world is, but if they ever do, we will have a ready answer for them. We will merely answer that being a "scrub" on a football team is, without a doubt, the "world at its worst."

In simple language, the scrubs are the "out-laws." They are usually men who are ineligible to play, but not entirely so. Many "scrubs" are men who are too inexperienced to stand the gaff of varsity play. Their main duty seems to be to act as any type of dummy demanded in the varsity practice. If the varsity needs a dummy team, the scrubs act the part. If a game is coming up and it is necessary for the varsity to have practice in breaking up the opposition's plays, the scrubs are promptly drilled in these maneuvers and try them on their big brothers.

Coach Musselman usually runs the scrubs through their paces. He is greatly responsible, through the scrubs, for the alertness of the first

string. If the scrubs really make the varsity work to get over the ground, they are contributing a real value to the practice.

"Pat" Hogan, the Irish terror from Hollywood, captained this year's outfit. He had a varied assortment of material, some more experienced than others. Seniors serving in this capacity were Hibbs and Van Reed. Juniors on the scrubs were Detmers, Grossman, Hogan, Miller, Pauly, Secord, and Sharp; while Bellis, Mathewson, Whittaker, and Whistler served from the sophomore class.

They did much toward winning the conference championship. The Student Body is proud of its scrubs! Although they do improve their ball carrying technique and derive physical betterment, their greatest value lies in the spirit which invariably permeates their ranks and which they instill in varsity ranks. We doff our hat to the scrubs in appreciation for their loyalty to the game and their alma mater!



CRAIG, GROSSMAN, MATHEWSON, SHARP, PAULY, BELLIS
WHISTLER, HOGAN, WHITTAKER, COACH MUSSLEMAN
VAN REED, MILLER, MORRIS, CRAWFORD, SECORD

YELL LEADERS



ARNOLD

MORGAN

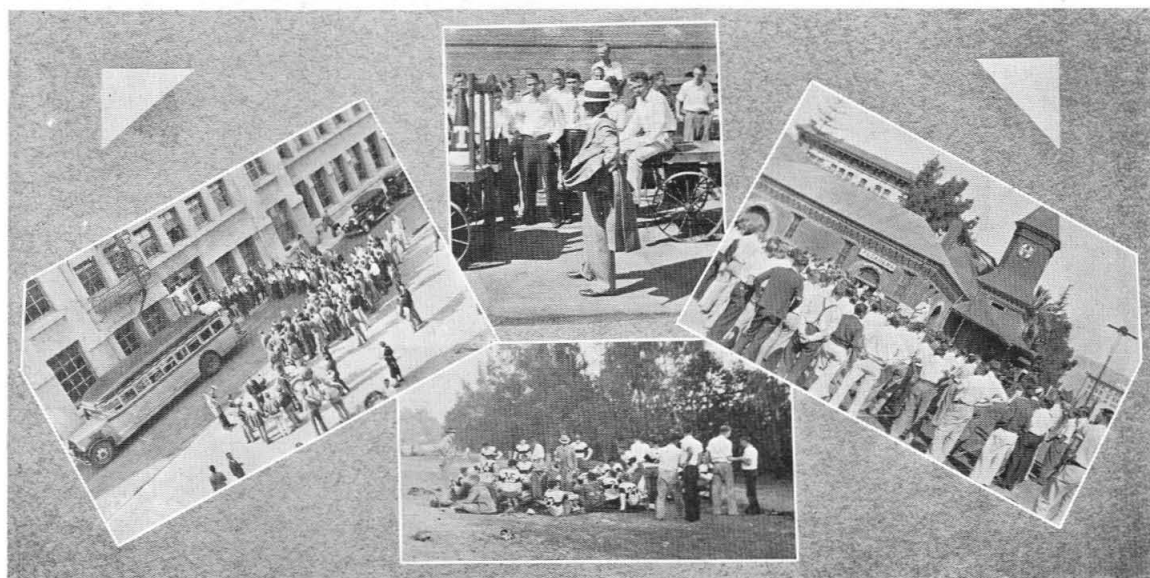
CLEVELAND

The Yell Leaders

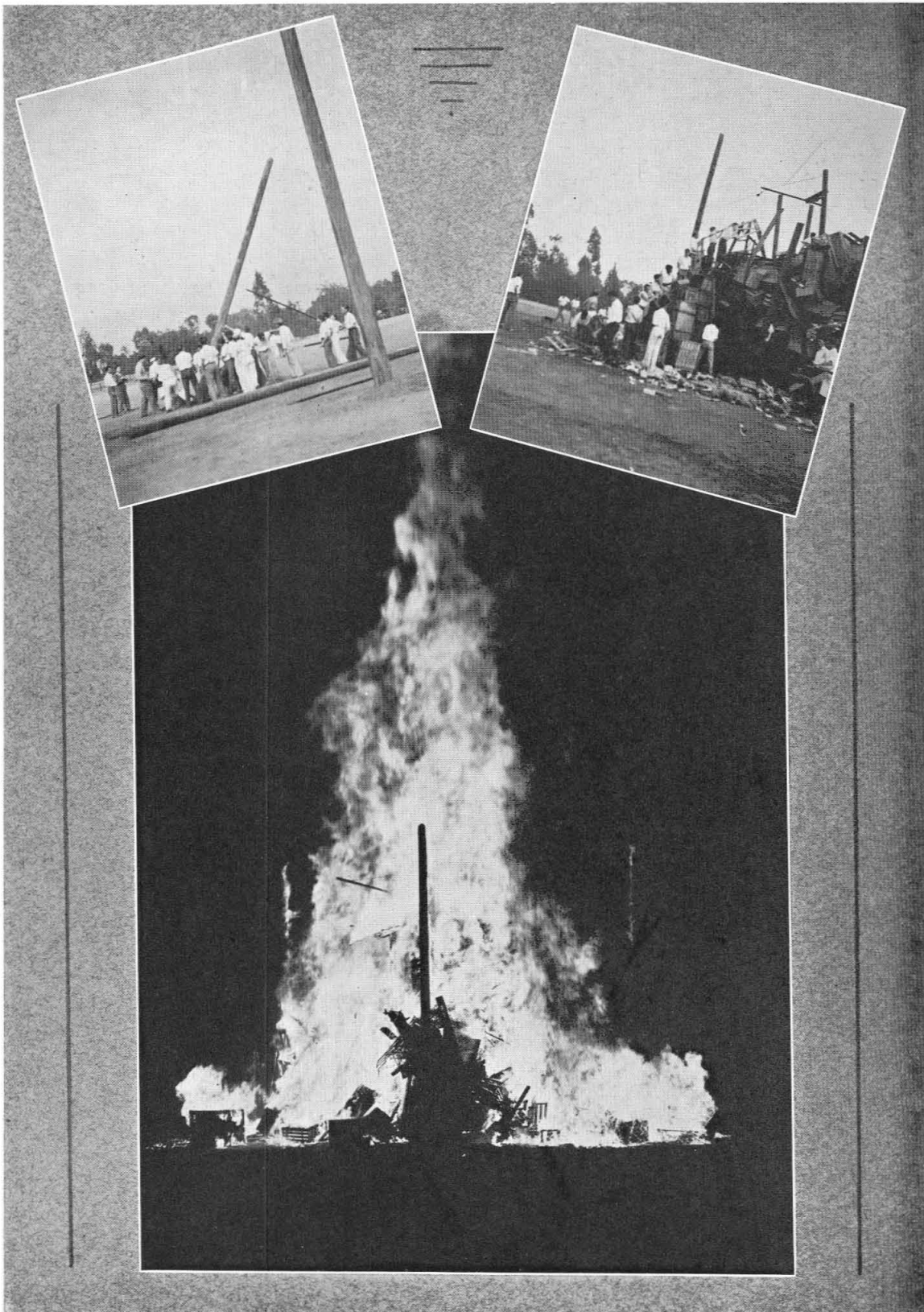
Tech's yell leaders, Wendal Morgan, Don Cleveland, and Emmer Arnold, have put in a season of hard work in their efforts to limber up the enthusiasm and spirit of the student body. Many rallies and a huge bonfire were part of the program engineered by this trio of inexhaustible spirit producers.

The concentrated energies of the students were

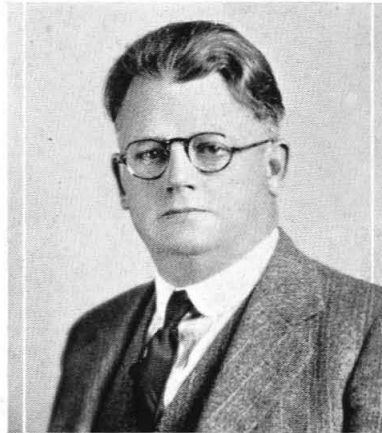
brought to a climax for Tech's traditional football game with Occidental College. The spirited night game was preceded by a mammoth bonfire for the purpose of invoking the spirits and cooking the Oxy Tiger. After the bonfire the rooting section formed a torch light parade and marched into the Rose Bowl. However, on this occasion, all yelling could not change Dame Fortune's mind.



OXY RALLY



ATHLETIC COUNCIL



PROFESSOR ROYAL W. SORENSEN

Athletic Council

The Athletic Council is one of the most democratic organizations on the campus. Democratic is used to mean an organization in which students are given a representation in matters which concern them in questions of sports policy. Six faculty members make up the Institute representation in the Council, with Professor Royal W. Sorensen acting as chairman of the body.

The student membership consists of the Athletic Manager, the manager whose major sport is being carried on, the President of the Associated Students, and a member appointed at large by the Executive Committee of the Associated Students.

This personnel during the past year was represented by Donald Graff, who served as Athletic Manager for the past college year. Bill Kent was senior Football Manager, hence he served on the Council during his tenure of office. Basketball was not an official sport, hence there was no Basketball Manager, and this post was not filled during the basketball season. Philip Schoeller represented the students as student body president. During the track season, Frank Hibbs served on the board as senior Track Manager. Clark Goodman was the delegate-at-large.

The faculty membership included, beside Professor William Smythe, Head Coach William Stanton, and Manager of Athletics Harold Muselman.

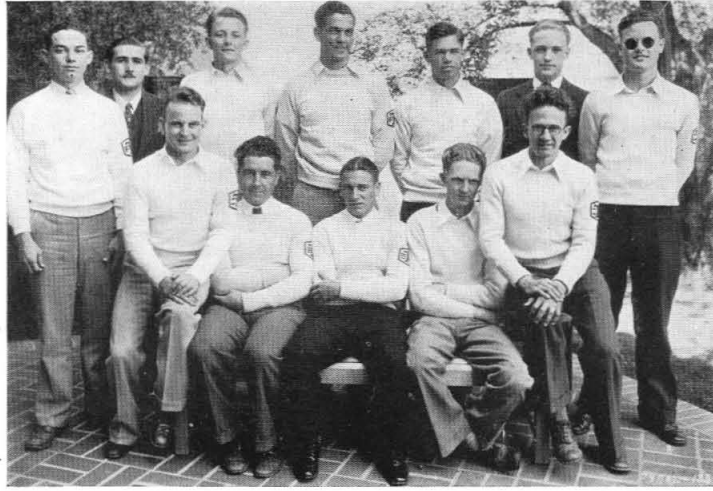
All questions of athletic policy and procedure fall under the jurisdiction of this group. Budget, expenditures, schedules, and other matters of the kind are decided by the Council.

The Council is responsible for the development of the sports program here. Intramural sports have been continually augmented with the result that more men than ever turned out for games and inter-house competition. It is continually on the watch out for any tendencies of sport to take on the much heard of "over emphasis." Equal weight is given to all forms of physical exercise by the Council, there being no effort to play up certain sports at the expense of others. The attempt is to make the most of limited equipment and resources and to accommodate any demand for certain types of apparatus or playing fields if there is a group large enough to warrant the move.

At the end of each sport season, faculty members from the Council are chosen to attend the meetings of the Southern Conference delegates. At these meetings schedules are drawn up and differences in policy ironed out.

The excellent management of the Council is exemplified in the performance of the Caltech football teams in the past two years. Conference championships have been won both years. Beaver sport teams cut lasting niches in the sports scene of the Southern Conference in almost every sport, and no small amount of the success can be attributed to the Council.

ATHLETIC MANAGERS



WEINSTEIN, GROSSMAN, HARRIS, MILLER, THOMAS, MERSMAN
EISENHOWER, SECORD, SCHULTZ, HIBBS, KENT, CALDWELL

Athletic Managers

Tech has a legion of workers who serve in the athletic picture in a manner which does not bring them into the limelight. Their function is not an athletic one in the usual sense of the term, but is one which is highly essential and one which saves the Student Body and Institute much money each year.

The managers do the "dirty work" of the athletic scene. It is they who keep the equipment in hand, who keep first aid materials, keep records of events, do the thousand and one things which are necessary to a smooth running athletic organization.

The football managers have a task and one-half. Each night, they are on hand for practice from beginning to end, and they attend each game. They care for the transportation of the suits, footballs, headgear and all other accessories. The brunt of this year's grid managerial duties fell on the shoulders of Bill Kent. Kent acted as senior manager, under him there being Dave Clark, Berny Palm, and Dick Russell, juniors; Carroll Craig, sophomore; Morse and Sikes, frosh. This crew attended the championship varsity outfit from the opening of its practice on September 15, until the end of the season at San Diego on Thanksgiving Day. Their con-

tribution was no mean one, and they are on the list of "silent servants."

Basketball was ruled out of the athletic program this year, hence there was no activity in that region, but there was plenty stirring in track circles. The senior manager was Hibbs, who acquitted himself in a capital manner, running the home meets with outstanding efficiency. He was given much valuable help by Mersman, Weinstein, and Secord from the junior class, Smith and Thomas from the second year class, and Harris, Palmer and Eisenhower from the frosh class.

In baseball circles, Bill Schultz was the shining managerial light, being aided by stellar hands such as Grossman and Miller. The baseball schedule was longer than average, and the managers were hard put to keep up with the needs of the horsehidiers.

In tennis, Bob Carey carried the duties of manager while acting as captain of the team at the same time. Reynolds, a member of the freshman tennis squad, acted as manager for it.

Don Graff filled the post of senior intramural manager, while the post of junior manager was held down by Bob Wherritt.

VIEWS



TRACK

Track



JONES OVER THE TOP

The Track Season

TRACK



CAPTAIN FOLKE SKOOG

The team was fortunate this year in possessing a captain who combined leadership ability with athletic prowess. Folke Skoog started breaking records in his freshman year, and kept it up throughout his three years of varsity competition. Fox Stanton, quick to recognize Folke's natural ability, trained him wisely—until during his junior and senior years he was recognized as one of the finest middle distance runners ever seen in the Southern California Conference. No better selection could have been

made for the captaincy of the track team. Not only did he himself win many points for his school, but he was also responsible for the inspiration and determination which spurred his teammates on to greater efforts. Captain Skoog has always been a "two race man." After having run a hard mile early in a meet, he has always come back later in the meet and turned in excellent time in either the half-mile or two-mile events.

TRACK



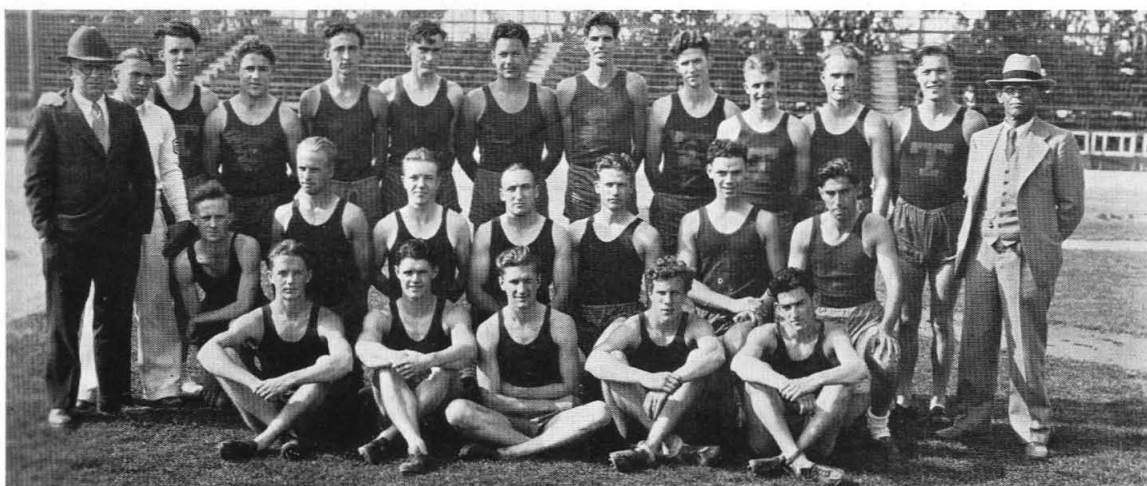
COACH "FOX" STANTON

The Coach

Coach Fox Stanton is almost as famous for the track and field teams he turns out as for his grid squads. An exceptional example of Stanton's style of developing athletes is had in two of this year's track team members, Bill Shuler and Folke Skoog. It cannot be denied that both men are possessed of natural ability, but the Coach did much to bring out whatever natural talent there was in each man so that it was productive of the best results.

The Squad

The opening of the 1932 track season at Tech saw the return of seven varsity lettermen. They were Captain Folke Skoog, Bill Shuler, Millard Barton, Ed Mathews, Chris Prior, Chuck Jones, and Bob Freeman. These men formed the nucleus about which Coach Stanton built a team which won an admirable percentage of its meets, and which throughout the season displayed the fine team spirit characteristic of Tech athletic squads. The lettermen earned a goodly percentage of the points during the season, but the second and third place men did the rest.



PRIOR, UGRIN, ROMOLI, HARSHMAN, SHULER, BARTON, BRADBURN, FREEMAN, JONES, MEAD
DR. HANES, HIBBS
PICKERING, MCCLAIN, GOSS, ROBERTS, WYATT, EVERETT, PIPES
PERRINE, VAN REED, SKOOG, HUNTER, WIDESS
COACH STANTON

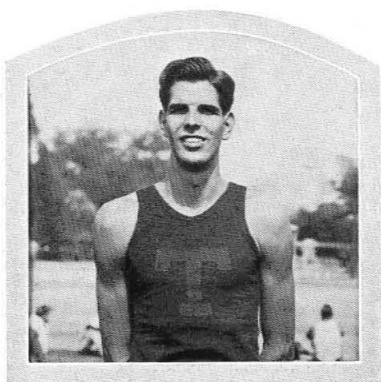


1932 Track Season

At the start of the season, it appeared that Tech would be unusually strong in the weight and distance events. The return of Skoog and Shuler were potent indications, as was the presence on the squad of such men as Bob Freeman, sprinter; Chuck Jones, pole vaulter; and Millard Barton, sprinter, broad jumper, and hurdler de luxe. It soon became evident that the team was to be handicapped by the loss of two sure point winners—Leroy Osborne and Ed Hayes, both of whom failed to return to school at the start of the second term. Leading quarter mile prospects were Bradburn, McLain, and Everett. Prospects in the high jump were good, with Prior and Romoli on hand ready for competition. During early season afternoons, Davis, Carleton, and Prior were working out on the

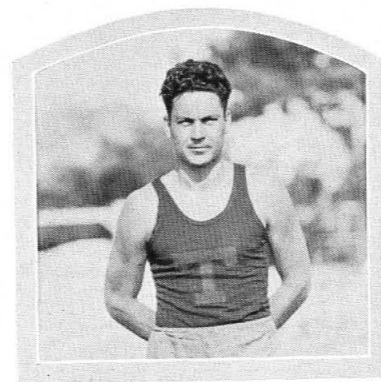
high hurdles; Shuler and Craig on the shot; Shuler, Matson, and Van Reed on the discus; and Skoog, Harshman, Wyatt, Laslett, and Pickering on the distance runs. Prospects were, on the whole, favorable for a successful season. There were more cinderpath enthusiasts out at the beginning of this season than ever before in the history of track, with 129 men signed up for the sport.

As was expected, the mighty Seniors, led by "Big Bill" Shuler and Folke Skoog, copped the annual interclass meet held early in the season on Paddock Field. The fourth year men finished with 74½ points, followed by the Juniors, Frosh, and Sophomores with 39, 32½, and 29 digits respectively. In the second practice meet of the season, the Caltech beavers trimmed the Pasa-



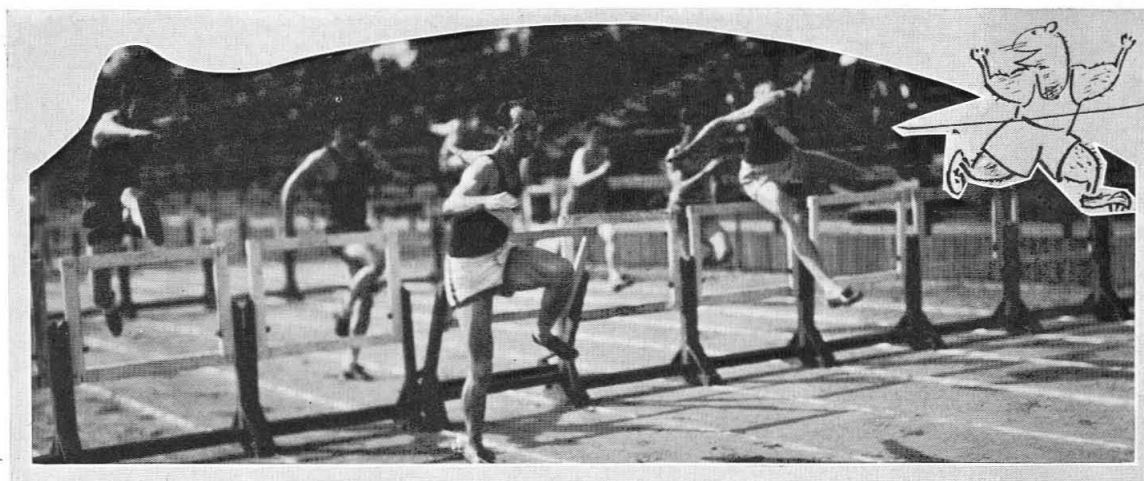
BARTON

7 lettermen back.
Folke Skoog, Captain.
Shuler, Barton, Mathews,
Prior, Jones, Freeman.
Seniors cleaned up Inter-class
meet with 74½ points.



SHULER

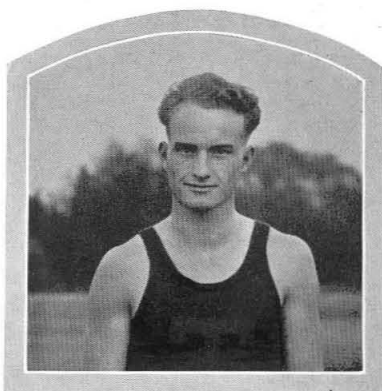
TRACK



dena Junior College St. Bernards to the tune of 76 to 55. Per usual, Skoog and Shuler were the outstanding Engineer performers. On February 12, Tech succeeded in squeezing out a close win over Glendale J. C. In this meet, Captain Skoog broke his own school record in the 880 by turning the distance in 2 min. flat. The first defeat of the season for the local squad came at the hands of the strong Los Angeles Junior College team. Consolation comes, however, from the remembrance of the fact that it was in this meet that Bill Shuler set a new Southern Conference individual record in the shot put with a beautiful heave of 47 feet $\frac{3}{8}$ inch. At the Southern California College Relays, which took place at Oxy on February 27, the Beaver squad made a very commendable showing, snatching two firsts and a third in the relay events, and two firsts and a fourth in the open competition. Shuler

put out the shot to a new record of 46 feet 1 inch, and grabbed fourth place in the discus throw. Jones tied for first in the pole vault. The Engineer one-mile novice relay team romped home in first place ahead of Pomona and Occidental. The distance medley event was also won by the Beavers. The Tech sprinters finished up the day by taking third place in the sprint relay event. This meet was the last one before the opening of the regular Conference schedule.

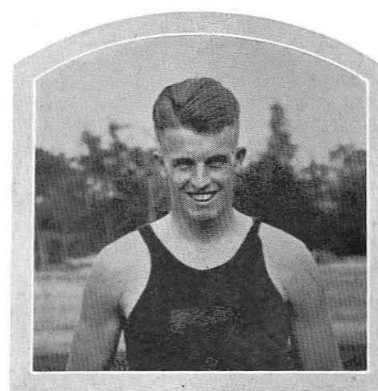
In the first Conference engagement of the season, the Engineers administered a sound trouncing to the Roadrunners from Santa Barbara State College. The Tech point total was 116 against 24 for the visiting team. The only wins registered by the Staters were in the high hurdle and javelin events. The following Saturday the Tech oval men rang up another impressive win when they defeated the Poets from Whittier Col-



JONES

Shuler sets new Individual record in shot against L. A. J. C. Distance is 47 ft. $\frac{3}{8}$ in.

Skoog breaks own record in 880 against Glendale Jay-see. New time was 2 minutes flat.



FREEMAN

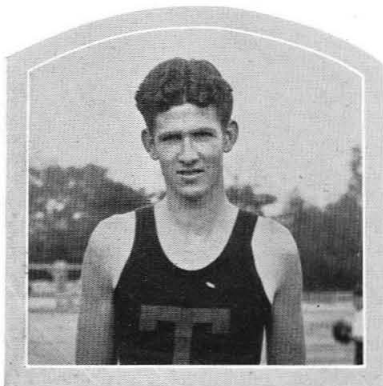
TRACK



lege in a meet held on the home lot. In this meet Captain Skoog again rebroke his own College record in the half mile, the time being 1:58.7. Perhaps the fact that the Whittier boys had all been recently vaccinated accounted for their apparent mediocrity.

The first defeat of the season in Conference competition came on March 19 at the hands of Occidental College. The meet was held at Occidental. In a few instances, the Techmen upset the dope, as is shown by the fact that they amassed 43 points against 96 for the Bengals. The meet was featured by Belman's winning of both sprints in excellent time, Skoog's performances in the mile and half mile, and Shuler's duel with the combined forces of the Occidental weightmen. Having won the hammer and nabbed the shot by a scant two inches, Bill lost the discus to Finley by the breadth of a

couple of hairs, and in the javelin throw, which he entered for the first time this season, got off a toss of over 170 to take a second. None of Tech's trio of high jumpers were able to better 5 feet 6 inches, so that the three had to content themselves with a five-way tie with two Oxy men in that event. Oxy was on hand with an unusually good crop of pole vaulters, tying three men for first at 12 feet 6 inches. Meeks managed to take both hurdle races without exerting himself particularly. Although local newspapers gave Tech at the most 37 points, the old fighting spirit accounted for six more; and the locals were able to come home knowing, at least, that the infallible dopesters had once more taken a beating. In the Occidental meet, Captain Skoog stepped a mighty classy mile, winning in 4 minutes, 29 seconds flat.



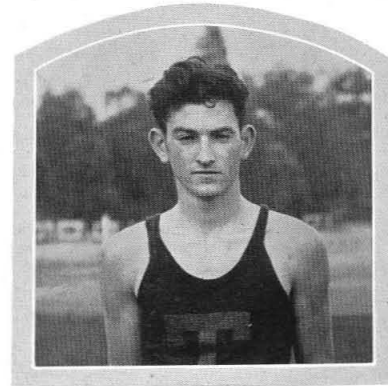
BRADBURN

Santa Barbara beaten 116-24.

Oxy wins fracas 96-43.

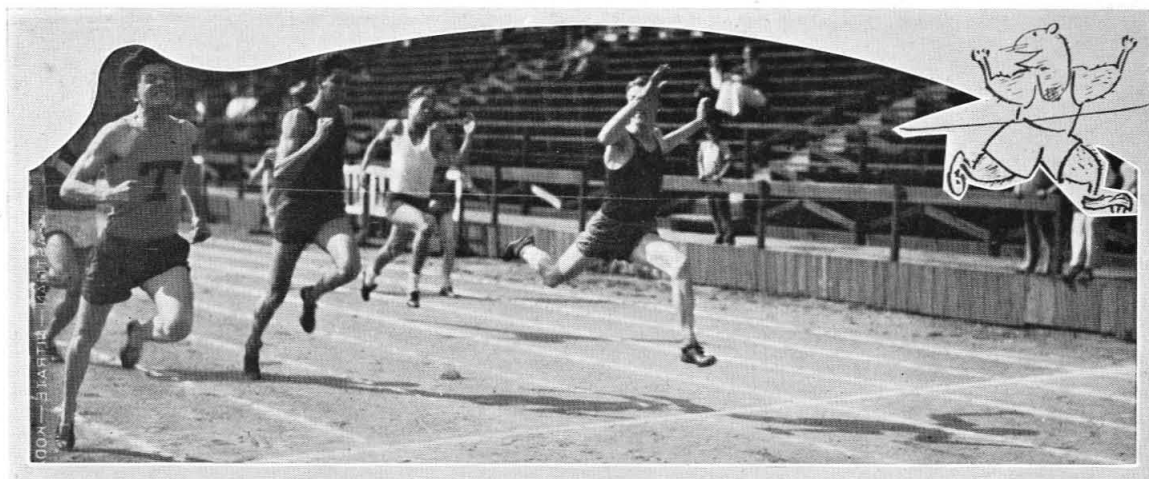
Hunter, Prior, Romoli in five way tie for first in high jump event at 5 ft. 6 in.

Skoog does mile in 4 min. 29 seconds.



WIDESS

TRACK



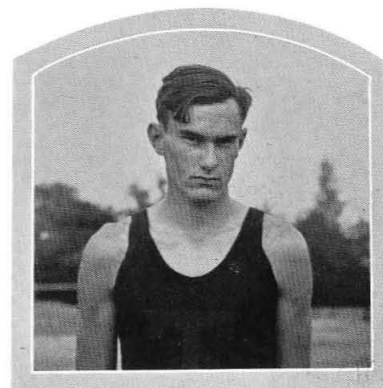
The Saturday following the Oxy meet, the Beavers drew a bye due to the intervention of spring vacation. Two weeks rest, however, seemed to work havoc with the team. The old pep and fire seemed to be lacking at the time of the Pomona meet on April 2. The Sagehens took Tech into camp to the tune of 92 to 48. The Claremont aggregation scored in every event, winning eleven first places and taking second in six. As anticipated, Bill Shuler copped high score honors, with twelve digits, winning the shot put and the discus and taking third in both the hammer throw and javelin. Folke Skoog, as usual, was also a double winner. It was in this meet that Don Plumb of Pomona, premier sprinter in the Southern Conference, unfortunately suffered his first defeat via the pulled muscle route. The injury, however, was

not serious. Barton nosed in for his usual place in the hundred, and we picked up four more points in the sprint events when, following the injury to Plumb, Freeman and Morris placed second and third respectively in the 220. Skoog and Louie Goss had little trouble in taking first and third in the 880. Skoog and Harshman repeated the act in the mile. In the two mile Tech took a point with Pickering's third place. Prior picked up another point in the high hurdles. It was obvious that Tech's point total was increasing but slowly. Pomona's army of hurdlers were again successful in the low sticks event, pushing "Lanky" Barton into a mere third place. While Tech held the upper hand for the most part in the weight events, still Pete Somfeld of the rival school came through nobly in the hammer throw to set a new Sagehen record of 149



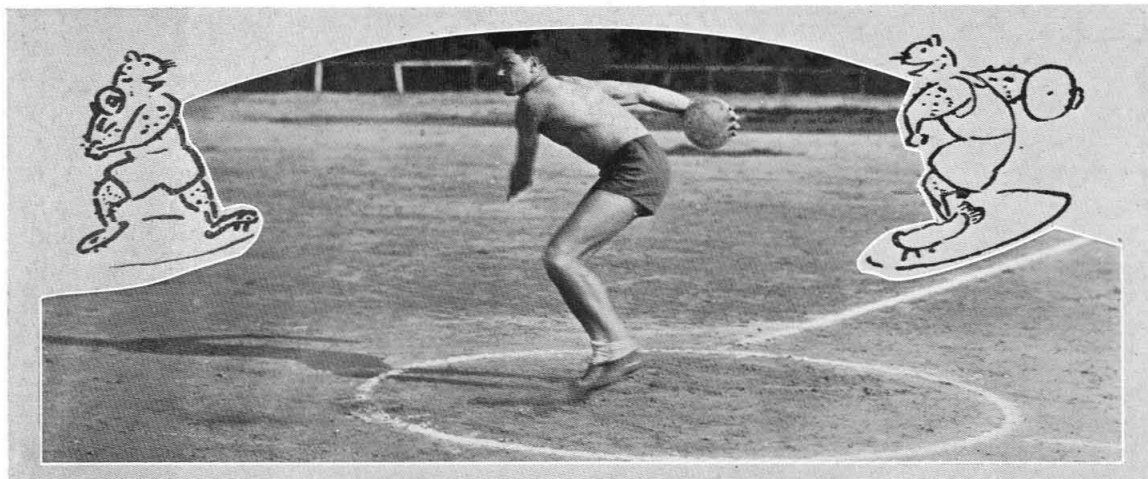
WYATT

Sagehens win meet 92-48.
Plumb pulls leg muscle in 220.
Skoog again double winner.
Somfeld sets new hammer
record.
Barton cops broad jump event.



HARSHMAN

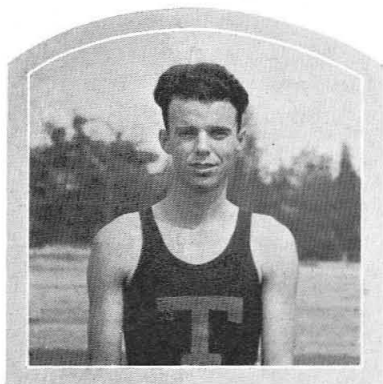
TRACK



feet 11 inches. The Pomona javelin men, also, were going great guns. Two of them went over 180 feet to take first and second. The Engineers' culminating field event win was produced by Millard Barton. He took the broadjump event with a nice leap of 21 feet 3 inches.

The most exciting dual meet of the season was the last one—with Redlands. Doped to lose, the Beavers set the bucket topsy turvy when they pulled a 72 to 68 win out of the fire. All traces of the Pomona slump gone, the "Dirty Engineers" certainly showed the Baptist Ministers how to win a track meet. "Big Bill" Shuler made himself high point man of the meet by taking four first places to garner twenty points. Captain Folke Skoog won both of his events to gain ten points. He ran the 380 in the good

time of 2 minutes and 5 tenths seconds. Chris Prior came through in great style to win the high hurdles and tie for first in the high jump at 5 feet 10 inches. Chuck Jones won the pole vault at 12 feet 3 inches in spite of a sore muscle which had been bothering him all week. Perhaps the most sparkling performance was turned in by Hind of Redlands. This gentleman won both the 100 and the 220. His time for the furlong was 21.6 seconds, which is plenty fast in any man's conference. The Tech javelin artists came into their own when Shuler, Roberts, and Mathews made a clean sweep of the event. The score was tied many times in the process of the meet, and it was not until Millard Barton made a third in the broad jump that Caltech was sure of victory.



PRIOR

Tech downs Redlands 72-68. Shuler garners 4 first places. Hind stars for losers in dashes. Jones cops pole vault. Shuler, Mathews, Roberts shut out Bulldogs in wand waving event.



ROMOLI

TRACK

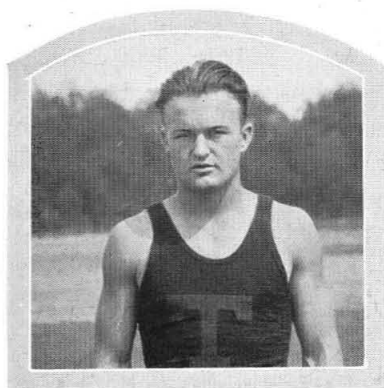


The Redlands meet ended the Conference dual meet schedule. The records showed that Tech had won three and lost but two of her Conference meets, which, on the whole, is quite satisfactory. We can point with pride to many outstanding individual performances made by Tech track stars this season. Notable among them are Skoog's 880 record and Bill Shuler's new shot put mark. Such men as these could always be counted upon to come through in a pinch.

The last meet of the season, prior to the All-Conference affair, was held with the University of California Bruins at Paddock Field. The visitors won the meet, as was forecast, with a score of 91-3/5 to 48-2/5. Shuler rose to grand heights to win four first places, namely in the hammer, shot put, discus, and javelin. Skoog tallied 10 digits with wins in the mile and 2

mile, his attempt at a record in the latter event falling short of its mark. The bevy of Bruin hurdlers shut out the Beaver runners in the highs, but Barton came through with a surprise in the lows to place second in a beautiful race. McLain and Lockett, of the Bruins, took first and second in both sprint races. Barton grabbing a third in the century; Freeman repeating in the furlong.

Folke Skoog starred in the All-Conference meet with a win in both the mile and two mile runs. He established a new record in the former, running the four laps in 4 min. 26.6 seconds to nose out the old mark held by Himrod of Pomona at 4 min. 26.8 seconds. Shuler, after taking second in the hammer throw, sprained his ankle in a practice throw in the shot and barely managed to eke out a fourth in the event.



CRAIG

Bruins win with 91 3/5-48 2/5 score.

Shuler takes four firsts in weights.

Skoog wins mile and 2 mile.

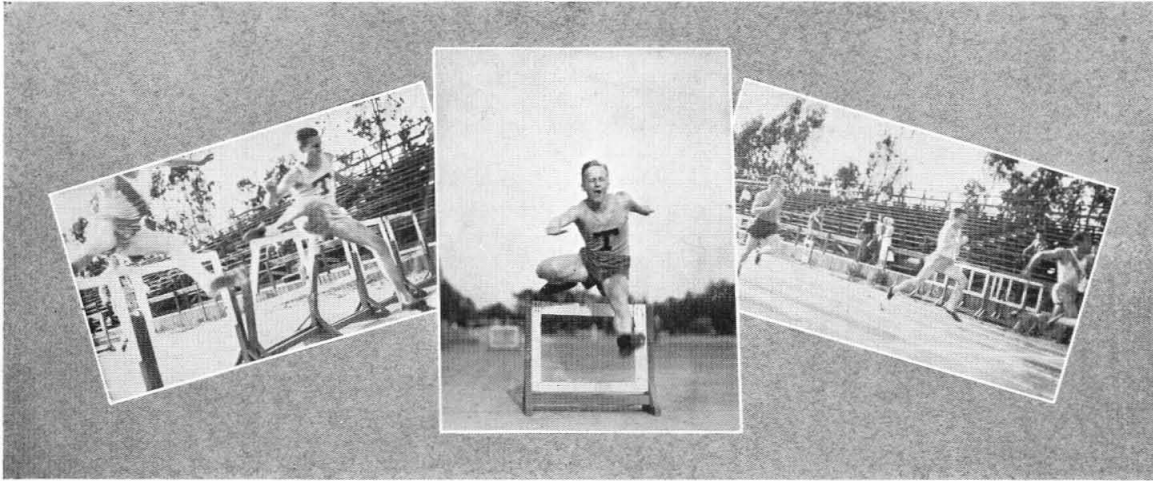
Barton takes second in lows.

Is last meet of season.



HUNTER

FROSH TRACK



Freshman Track

The Beaver freshmen produced one of the greatest track outfits seen on the campus in many a moon. Whether they were blessed with an unusual amount of veteran material or whether there was a greater percentage of potential trackers is a point which cannot be determined easily. The fact remains that the babes sailed through a highly successful season, conquering every peagreener team in the Southern loop.

With Layton Stanton at the helm of the yearling track activities, the initial call for performers was issued at the beginning of the second term. The turnout was a healthy one, both in numbers and quality, and it wasn't long until the outfit was crying for competition. Meets were arranged with a number of high school teams which proved excellent training for the greeners. South Pasadena High landed one on the little Beavers in the first meet of the season, winning by a small margin. In retaliation, the locals followed with successive victories over El Monte High, Monrovia High, Cathedral High, and Lincoln High.

With such an excellent start, the outcome was inevitable, and the Orange-and-White swept the conference from bow to stern in quick succession. The frosh from Santa Barbara didn't appear for the scheduled affair in Tournament Park, hence the babes did not get a chance at the loop's newest addition. Never-the-less, Tiger meat was just around the corner, the babes managing to re-

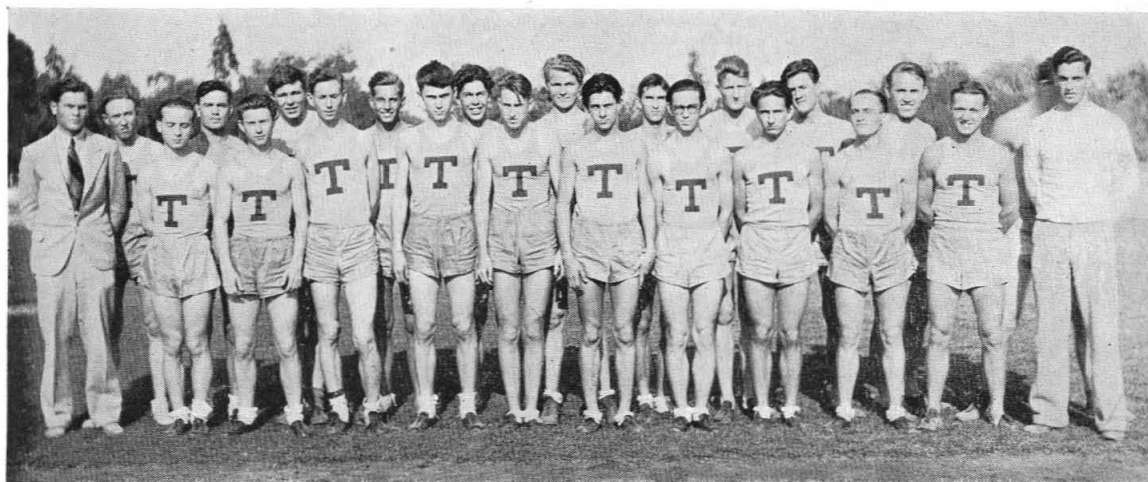
main content until the following week when the Bengal frosh came to Paddock Field. A thorough lambasting was handed the visitors, the final tally stacking up 101-39.

La Verne sent a team to Paddock Field on the next week end, Cumnock School of Los Angeles making the affair a three-sided one. Again the locals fared the scorching fires of competition and walked off the field victors. Caltech garnered 82 points, as stacked against 55 for Cumnock and 35 for La Verne. Leopards featured several strong performers, but the squad was not as well balanced as the Tech legion.

The results gave a good indication of what the strength really was, giving the first key to what later turned out to be such an outstanding performance in the All-Conference, held at Paddock Field on April 22. Traveling to Redlands with the varsity, the yearlings dealt a violent pounding to the Bullpups. The final score was 113-27, more of a compliment to the quality of the local outfit than to any weakness in the Redlands crew.

The last meet prior to the All-Conference was held at Paddock Field, featuring the Citrus Jaysee aggregation with a very weak squad from Whittier. The Jaysee team took the meet, Caltech pulled up second, Whittier trailing last. Thus the locals succeeded in wiping off every greener team met during the season.

FROSH TRACK



CALLIS, WILSON, ATKINS, CHAMBERLAIN, JONES, HEINKEL, SHERB, GREGORY, COX, MERRALLS, STOLL
STANTON, WOOD, WEBSTER, GRIFFITHS, SHEPPARD, JONES, EVANS
McRAE, CALDWELL, BAILEY, OSMAN, HARRIS

The personnel of the squad is one featuring both experienced and inexperienced material. Near the end of the season it was impossible to distinguish which was which.

Stoll was the outstanding Beaver weight heaver of the season. He reached his peak against Occidental, shoving the hammer out into space with a velocity high enough to place it four feet further from the circle than Bill Shuler did when he was a babe. The mark was hailed as a new record and took on unique significance with the fact that it was Stoll's first competitive toss of the season. Merralls and Heinkel took points from time to time in the event.

The remainder of the weight events featured a number of performers. Jones, Osman, and Merralls spent several weeks trying to get the shot to defy gravity and enter the realms of powered flight, while Jones also entered the discus throw with no mean success. Miller, Wilson, and Osman made it hard for competition to garner points in the wand waving classic, the locals having it all over the Greeks (if the Greeks had a word for it).

Field showed up to be a great hope in the century and 220 yard dashes. Beating the varsity sprinters with maddening consistency, the yearling sprint flash smacked 10 seconds easily, and ran the 220 in less than 23 seconds with great success. Cox featured in the sprints.

Sheppard and Bailey pounded the turf with mighty endeavor in the quarter mile, while Caldwell tore up the cinders in the two-lap event. In the distances, there was much inter-changing, but the outstanding runners were McRae, Warner, and Callis. All have turned in representative times at one time or other during the season, and promise to make excellent varsity material for next year.

Fuhrman and Griffiths amused themselves with the high jump, shutting out competition with comparative ease. Fuhrman, Webster, and Chamberlain handled the broad jump, Webster seeming to have more on the ball.

Outstanding on the squad was Chamberlain in the high and low sticks. He was a winner throughout the season and has great promise. He reached the heights in the Citrus-Whittier meet, breaking the record for Beaver frosh in the high hurdles. His time was 16.4 seconds, one-tenth faster than Perry's time established in 1926.

These men formed the nucleus of the freshman squad. From such a sterling aggregation, Coach Fox Stanton should be able to draft material of varsity caliber for next year's team. We take off our hat to our babes and wish them luck in varsity endeavor.

VIEWS





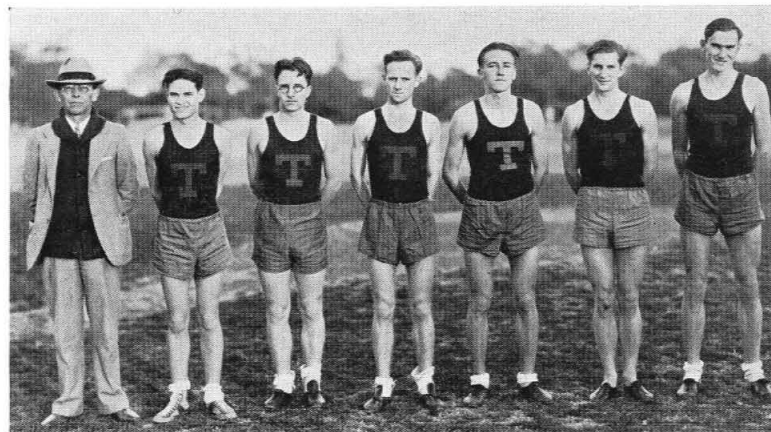
Minor Sports



OSBORNE, KEENAN, PICKERING HARSHMAN, DOUGLAS, SKOOG

Cross Country
Basketball
Tennis
Baseball

CROSS COUNTRY



STANTON, KEENAN, DOUGLAS, PICKERING, OSBORNE, SKOOG, HARSHMAN

Cross Country

A new plan was instituted by Coach Stanton this year when he crowned Folke Skoog "Czar" of cross country and relegated to him the duties of managing, coaching, and captaining the squad.

In a meet with Pasadena Junior College on November 18 the Tech leather-lunged stars swept to a 19½-36½ victory. Folke Skoog starred by setting a new school record in the three mile event.

At Pomona on December 5 the All-Conference meet was held. Although Skoog and Osborne of Tech copped first and second individual places, the Beaver squad's lack of strong supporting material forced it to be content with a second place behind Redlands.

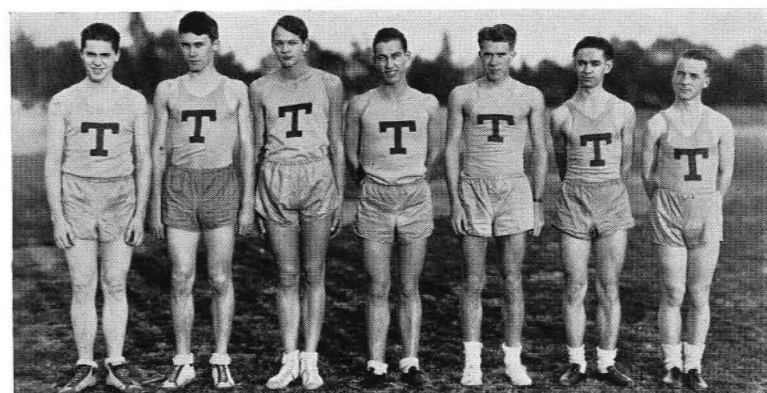
Varsity awards were made to Osborne, Laslett, Pickering, Keenan, Harshman, and Capt. Skoog.

A small but powerful band of frosh harriers maintained Tech's pre-eminence in conference cross-country competition again this year.

The yearlings indicated only average ability in the intramural and practice meets, and were not expected to gain the honors in the all-conference tussle at Pomona.

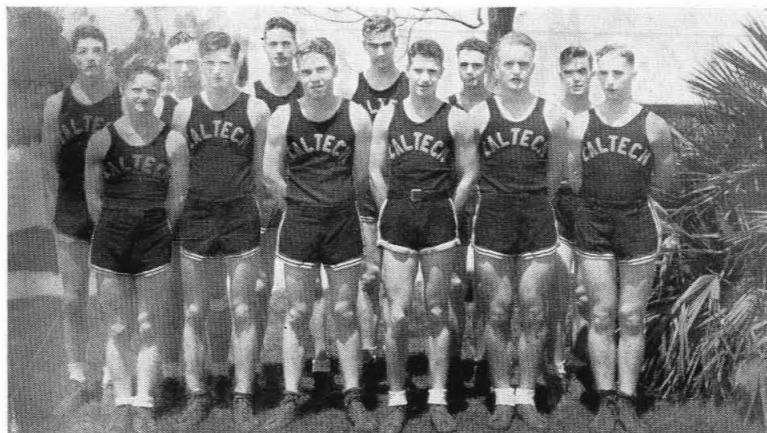
Upsetting the dope bucket, the Frosh fought to a draw with the San Diego team—a draw that would have been an undisputed victory except for a malignant bit of rock on the track over which chief-engineer Bakeman stumbled and turned his ankle. This mishap reduced his sure first place to a fourth, allowing the Aztecs to break into a tie.

Frosh numerals were awarded to Bakeman, Warner, McRae, Wood and Jackson.



WARNER, SHEPPARD, GIBBS, DECKER, JACKSON, McRAE, WOOD

BASKETBALL



CRAWFORD, McLAUGHLIN, ARNERICH, HOFMANN, THOMAS, WILSON
BAMBERGER, BIRDSEY, ROBINETTE, CLARK, CRAIG, MOORE

Basketball

Despite the fact that conference basketball was cut from the roster of sports activities at Tech this year, a group of enthusiastic students formed a hoop team to represent the Engineers unofficially.

From the start this uncoached, unsupported, poorly-organized team accomplished wonders. This stalwart handful entered the American (open) Basketball League, composed of teams representing Pasadena merchants.

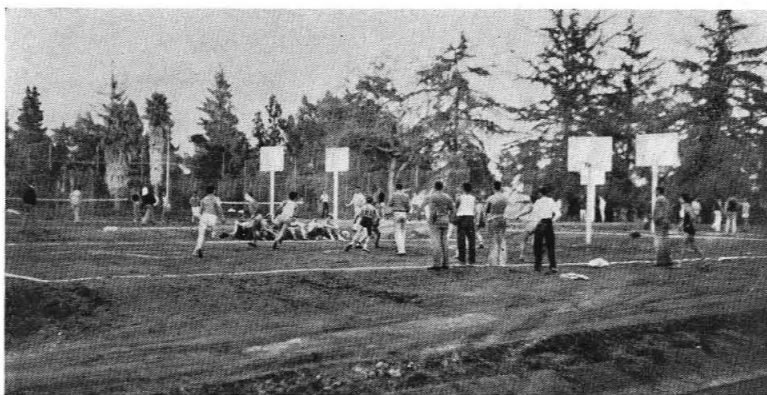
Opening the season against the Red Jackets November 9, the Beavers overwhelmed the unsuspecting foe, 30-7. The week following, the Black Hawk aggregation fell before the Engineer's surprising attack to the tune of 19-12. Throughout the entire schedule of games played in this merchant league, the Tech squad acquitted itself admirably, losing only four games

in all, three of these by the slim margin of a single point.

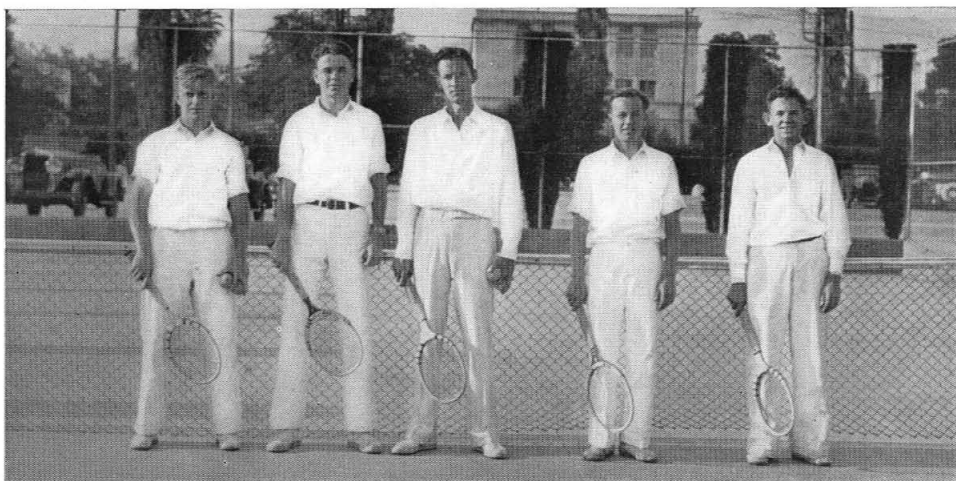
A new phase in the activities of this group of supermen began when unofficial games were scheduled with several of the regular conference teams. A hard fought battle with the S.C. Dental College squad January 18 resulted in a 40-30 loss for the Beavers, who as usual were greatly handicapped by scarcity of reserve material.

Too much credit cannot be given to the Engineers, who made the regular Occidental quintet fight desperately to grab a 28-23 victory, and who actually outplayed the Santa Barbara State squad, although losing the game 36-33.

Mainstays of the unofficial hoop team throughout the entire season were Hofmann, Moore, Clark, Birdsey, and Crawford. Strong support was given by Arnerich, McLaughlin, Robinette, Thomas, Boykin, and Bamberger.



VARSITY TENNIS



GRIMES, CAREY, BEHLOW, ANDERSON, EFROMSON

Varsity Tennis Squad

After sweeping aside all competition in 1931, the Beaver racquet teams, both freshman and varsity, opened practice for the '32 season with a good deal of optimism and bright outlook. This did not apply to the frosh, of course, because it is never known what type of yearling team will be turned out until the season is over and the results are available.

Nevertheless, varsity hopes were shining brightly. Captain Behlow of last year was returning, and he was to be supported ably by the present captain, Bob Carey. A third returning man was John Sullwold. This was a trio of veterans, all of whom had played consistently throughout a championship season. Hence, on the face of things, the optimism was justified.

In addition there was a bevy of talent on hand. Joe Grimes loomed as a potent contender for a varsity berth, and he made it with little trouble. Bob Brown came in for a place in many matches, and Phil Efromson was on and off the courts.

The varsity ladder at the beginning of the season read as follows: Behlow, Carey, Grimes, Sullwold, Brown, Woodward, and Conner.

Practice tilts were held prior to the Conference matches. The first was with Los Angeles Jaysee, the outcome being unusually close, namely 5-4 in favor of the locals. Under the tutelage of Coach Bob Allen, the locals found themselves in fair shape for so early in the season, and it was expected that a few more fast matches of the practice variety would put the squad in first class condition for the ordeal which was to come.

The next practice match was with the University of Southern California aggregation, a fast, powerful squad. The competition was a bit too hot for the locals, the final score being 7-0. Real tennis was exhibited by the Beavers, the lopsided score being a tribute to the exceptional ability of the victors rather than a shadow on the playing of the Beavers. Behlow held his man, Captain Jack De Lara, to a 6-4, 7-5 score. Carey

VARSIITY TENNIS

held Newman to 6-4, 19-17, the last set bringing out a whale of a battle between the two racquet wielders.

The last practice meet of the season was with Glendale Jaysee, Caltech coming away an easy winner 8-1. The time was ripe for conference competition, the matches opening with a tilt at Redlands which the locals easily won. It was the first step toward a new conference championship, and when San Diego came north the following week end, Caltech's outfit was out to scalp the Indian.

Difficulty in securing a decent court was cited as the reason for the defeat at the hands of the Aztecs. The players had to use the asphalt courts of a local school, the quality of which is not of the highest (we speak of the courts, not the school). The Indians took the matches with comparative ease, spiking championship hopes for the moment. The final score was 5-4, in spite of the numerous defeats suffered by the Tech players.

McArthur starred for the visitors, downing Behlow 6-0, 6-4. This was followed with a defeat of Carey at the hands of Hayward to the tune of 6-4, 6-4. Grimes of Caltech scored a win over Hargreaves, the points totaling 6-3, 6-3; while Sullwold socked Hoke 6-1, 6-3. Anthony of San Diego lambasted Brown 6-1, 6-2.

In the doubles, Carey and Behlow went down before the fire of McArthur and Hayward, while Grimes and Sullwold retaliated to win over Anthony and Hargreaves, making the final score in favor of the visitors.

But there is a silver lining to all clouds, and the Beavers found out that this was true on the following week end, when they succeeded in dealing out an 8-1 licking to Whittier College's racquet forces. The games were played on home

courts on the Saturday morning of Exhibit Day.

Sullwold smashed Ograin with a 6-3, 6-3 win, while Carey repeated on Bryson with scores of 6-3, 6-4. Behlow walloped Church with 7-5, 7-5 scores, and Grimes smacked Bradshaw with 6-1, 6-2. The only singles setback of the match was suffered by Efromson at the hands of Davies. The scores were 7-5, 5-7, 6-4.

In the doubles, Carey and Behlow functioned together to swamp Bryson and Ograin with a 6-0, 6-1 pair of sets, while Grimes and Sullwold repeated with a 6-1, 6-2 semi-shutout of Church and Bradshaw.

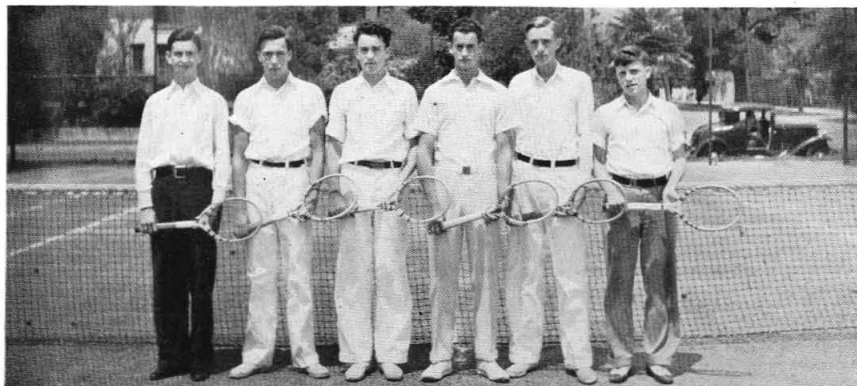
Further results of tennis activities were not obtainable at time of going to press, but a number of matches were still on the schedule. The All-Conference matches were scheduled for Pomona College on Friday and Saturday, April 29 and 30. Two more Conference meets were on the varsity schedule, one with the powerful Occidental outfit, the other with the Pomona College racqueteers.

The match with Occidental was to be the crucial test. The Tigers featured a number of fast players, and were winners of the title if they could get over the Beaver team. If the locals could bring home a win over the Bengals, it would mean at least a tie for the crown.

The locals were figured to cut into the picture at Pomona. Behlow and Carey were openly favored to end up high in the singles matches, and were possible winners in the doubles matches. Sullwold was doped to go high in the singles, while in combination with Joe Grimes, he was figured for a high place in the doubles tourney.

Championship or no championship, the season will go down in Tech athletic annals as one of the most successful in the history of the game here.

FROSH TENNIS



RODRIQUEZ, DRAEMEL, REYNOLDS, PATTERSON, SWANSON, VREDENBURGH

Frosh Tennis Squad

Tennis proves one of the most popular sports in the athletic program, especially with freshmen. Perhaps it is because other sports activities for yearlings are not so numerous in the third term. Nevertheless, the freshman tennis teams at Caltech are usually above average.

It so happens that the 1932 freshman squad was one with a personnel of unusual experience and promise. The outstanding player on the squad was none other than Leonard Patterson, Los Angeles champion wielder. Patterson is a former Hollywood High School star, and his ability has brought him a number of junior championships throughout the course of his playing. He has proven a boon to the Tech team, and will be a welcome addition to Coach Allen's varsity squad next year. So far this year, he has cleaned up most competition furnished him on this campus, and with the opening of the Conference matches, seems to be enjoying unusual prosperity in wins there. The eyes of the tennis fans are on Patterson, hoping that he will carry the Orange and White to new heights in future seasons.

Reynolds is said to be a Hollywood player of some note. Forgetting whatever past glory he may have accumulated for himself, he stacks up well on the yearling squad. He ranks number two man, and seems to be coming along all the time. Swanson ranks in the third bracket and is a real boon to the babe's cause, his ability be-

ing such as to bolster up the squad to no mean degree.

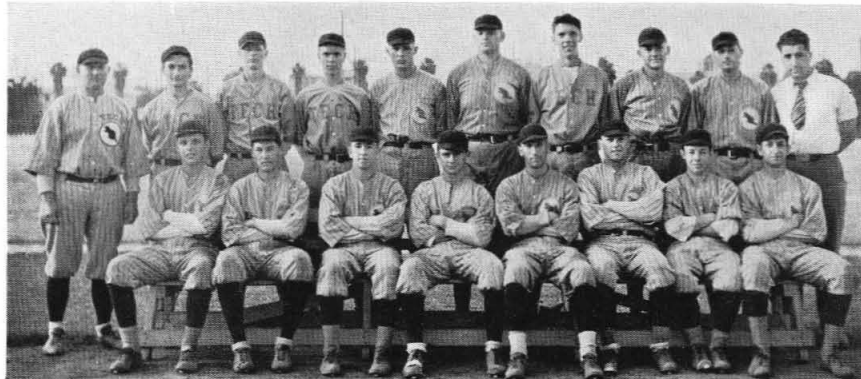
Any team may boast one or two outstanding stars, but that will not win matches for it. It is necessary to have a well rounded team to clip points out of the lesser matches, because the few points gained by the exceptionally good players cannot take matches alone. It is necessary to have the support of some other source of digit taking to build the score into winning proportions.

That's where the men lower down on the bracket come in. Under Swanson is Draemel. He wields an effective racquet and is considered as likely material for the team. Next comes Rodriguez, also considered potential material, while below him is ranked Vredenburg and Baker.

The entire freshman turnout represents a well-rounded squad. There are individual stars of exceptional ability, a reserve of dependable material, and plenty of potential material which can be worked into shape for this year or as varsity material in future years.

The first match of the season was held with Redlands, the locals duplicating their big brothers' feat by thumping the Bullpups. Other matches were to have been played with Occidental and Pomona, the Tiger babes being figured on to give the Tech yearlings a crucial test of ability and organization.

BASEBALL



MUSSELMAN, ROSEN, EVERETT, SHIPLEY, CORTELYOU, WHEELER, POTTER, CHILDERS, MOUZON, SCHULTZ
DOLL, JUDSON, SPADE, RUSSELL, SPICER, CONNER, CLEVELAND, SCHARF

Baseball Squad

Not to be daunted by conference action in abolishing official baseball competition this year, Cal Tech diamond enthusiasts organized an unofficial team, following the plan of several other institutions in the conference.

No eligibility rules were applied, so the squad was composed not only of regular varsity material but likewise of freshman hopefuls and never-say-die graduate students.

Under the able tutelage of Coach H. Z. Musselman the denizens of the diamond rounded into form rapidly and played surprisingly good ball throughout the season. Competition was not limited to regular conference opponents, the majority of games being scheduled with widely varied colleges and junior colleges of Southern California.

The initial contest of the season with Hollywood High School, March 4, sent the Beavers off to a flying start when they trampled the screen city's representatives, 6-3. A week later, however, a different sort of competition was encountered when a powerful Citrus J. C. squad hammered at the many weaknesses of the locals and walked off with a 11-0 shutout.

Followed a period of two weeks in which the Tech pelleeters were driven from pillar to post by savage onslaughts of the foe. An extremely close contest with Pasadena J. C. resulted in a 9-8 loss for the Beavers. To continue the ava-

lanche of woe, Santa Ana J. C. emerged from the fray with a 6-3 victory. Then the crowning disaster! Walking innocently into a devastating barrage of base hits and runs, the local squad was practically annihilated, March 24, when Los Angeles J. C. scored a 20-7 win.

Displaying an indomitable fighting spirit and rapidly beginning to show the effects of good coaching, the Beavers severely trounced Woodbury College 13-1, and for the second time defeated Hollywood High.

On April 9 and 11 two extremely close contests were held. The first with Long Beach J. C. resulted in a 3-2 loss, and the second with Pasadena J. C. in a 2-1 triumph.

The burden of the pitching fell upon the capable shoulders of Chandler Conner, sophomore, who combined consistence with occasional periods of absolute brilliance, much to the discomfiture of dazzled opponents. A small but efficient supporting list of hurlers was composed of Mouzon, a graduate, Iwasaki, and Captain Russell, who indicated his versatility by also playing in a variety of positions both infield and outfield.

Members of the team were as follows: Captain Russell, Mouzon, Scharf, Conner, Spicer, Judson, Pearne, Cleveland, Spade, Doll, Iwasaki, Monning, Potter, Craig, Shipley, Everett, Forney, Rosen, Wheeler, and Cortelyou.

VIEWS



INTRAMURAL SPORTS

Intramural Sports



Football
Basketball
Track
Baseball
Tennis

INTRAMURAL SPORTS



Intramural

The intramural sports took on a new significance this year with the opening of the new student house units. The development of inter-house rivalry through the means of athletic contests is an integral part of the house plan, and consequently much time and study was devoted to the plan for the intramural athletic set-up. Before the advent of the new house units, intramural sport had been inter-class, a cup being awarded at the end of each college year to the class having amassed the greatest number of digits during the year. But this year's program called for the abolition of the inter-class contests, the sole form of intramurals to be between the four residence houses and the Non-Resident Club.

Every sport in the program was included, ranging from football to horse shoes. The first term featured Tennis, Soccer, Indoor Baseball, Cross Country, a Modified Track Meet, and a

Football Tourney. The competition was made keener by the introduction of a perpetual trophy to be used in conjunction with inter-house games only. The season was opened with a series of soccer matches played in Tournament Park, each house being represented. The outcome of the matches saw the little bronze figure going to the Non-Residents, a fitting send-off for the year's inter-house athletics.

The course followed by the trophy, whose name is "Discobolus," is too dizzy to relate here. He has been stolen, hi-jacked, bribed, and subjected to every sort of corruption known, but it has been rumored that he has been won in battle during the season. But it's just a rumor. If any of our dear readers wish to investigate further, we recommend the big leather bound record book which accompanies Disco on his wanderings.

INTRAMURAL SPORTS

In the interhouse two-mile run, the Non-Residents again chalked up a win over the house boys. With Skoog, Osborne, and Laslett in the lineup for the off-campus men, the rest of the field didn't stand much of a chance. The Non-Residents repeated a week later, the same trio making it too hot for the other runners in the 3-mile event. The whole issue was drawn to a head on the following week end when the off-campus boys won the 4-mile to cinch all-time cross country honors.

Non-Resident superiority became plain again a few weeks later when the off-campus boys walked off with the modified track meet. The Houses' total was 57, which did not equal the Non-Resident score of 63. Graff, Freeman and Skoog cinched the meet for the winners.

About this time the indoor baseball tourney wound up with the graduates winning the pennant. Blacker house finished second, Ricketts finished third, followed by the Club. Dabney and Fleming drew up in the rear.

In line with the program of intramural athletics instituted at Tech this year, a legion of zealous would-be gridsters, immediately upon completion of the regular conference football season, donned moleskins and jerseys, helmets and shoulder pads, tuned their nerves to fighting pitch, and sallied forth upon the greensward.

The response to the call for stalwarts to go forth and do or die for dear old Ricketts, Dabney, Fleming, Blacker, or The Club was so spontaneous that difficulty was encountered in attempting to gird up these intrepid hordes.

Night after night, sweating and toiling, this multitude of dauntless athletes joyously prepared for coming battles. Members of the varsity were on hand to coach their various house teams, patiently hammering signals, trick plays, and a preponderous load of advice into the skulls of their perspiring cohorts.

On hand to sing paeans of praise for the efforts of their brethren and incite them to super-

lative heights were droves of supporting undergraduates.

Making up in sheer enthusiasm for what they lacked in smooth coordination and teamwork, the various house teams astonished observers and themselves with an unexpected display of good football.

The interhouse season began with a bang on November 30, when the Ricketts gridsters smeared the Non-residents 7-0 in a raggedly-played, but thrilling, battle. The hordes from Dabney and Blacker engaged in the next furious fray with the former snatching a rather doubtful victory by the margin of a very slight superiority in first downs.

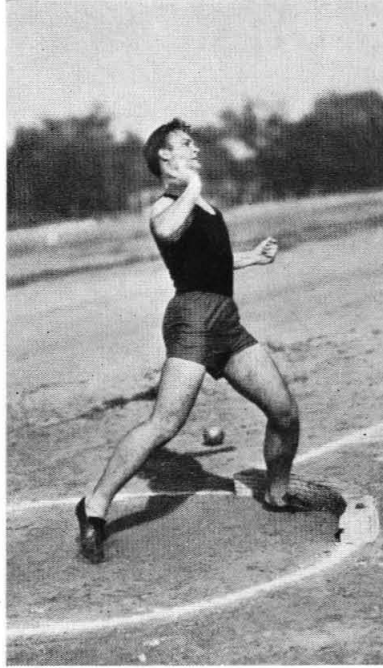
The Non-Residents forged into temporary lead in the interhouse series by ekeing out a 4-3 first downs victory over the hapless Blackermen. Novelty was introduced into the combat when the entire first quarter was played with the Club squad composed of only nine men.

A very powerful Fleming machine received its only shellacking of the series at the hands of the Dabneyites to the tune of 12-0. Superior line play, kicking, and passing by the victors, along with frequent fumbling by the Fleming team, converted the battle into the most decisive win of the season.

Premier honors in the round-robin tourney of four games were taken by Fleming and Ricketts with three wins and one loss apiece. Dabney and The Club tied with two victories and two defeats, and Blacker brought up a poor fifth.

Throughout the series the eagle-eyes of the coaches were fixed on the play, hoping to ferret out likely prospects for the varsity. Those most deserving of stellar rating, in the opinion of the coaches were as follows: First team—Pearne, Pruden, Wheeler, Mathewson, Palm, Romoli, Davis, Felt, Dietrich, Roberts, and Hogan. Second team—Perrine, Demmett, Van Reed, McFadden, Whittaker, Adams, Griffiths, Johnson, Donahue, Hofmann, Radford, and Hannay.

INTRAMURAL SPORTS



The point totals, computed after the football tourney was over, read as follows: Club, 60; Fleming, 37; Dabney, 35; Ricketts, 32 and Blacker, 15.

Thus ended the first term of inter-house competition. A new offering was on hand for the second round, including tennis, basketball, handball, track, boxing, and wrestling.

Basketball proved the greatest attraction in this list. The courts north of the house were scenes of much activity for a period of several weeks while the tournament was being run off. Three separate leagues were formed for the elimination process. Graduates were grouped into one league, Non-Residents into another, and House teams into a third. The graduates had five teams representing the departments of Geology, Chemistry, Physics, Electricals, and Mechanicals. In the Non-Resident League were teams with such high sounding titles as Nobody's, Alley Rats, Indians, Papoose, and Rookies. The house teams went under the names of the houses which they represented.

In the graduate league, the Geologists ended up victors with seven wins and only one loss chalked against them. Their nearest competitors were the Chemists, who lost 2 games, winning 6. The Physicists trailed third with 5 wins and 3 losses.

Nobody's team won in the off-campus league, scoring 7 wins and 1 loss, while the Alley Rats claimed second with 6 wins and 2 losses. In the house league Fleming swamped all comers, ending with 0 losses and 6 wins. Blacker dragged along second with 4 wins and 2 losses.

The finals were featured with a number of fast, thrilling contests. As was to be expected, the natural athletic superiority of the Non-Residents again came out, the Club boys winning the whole basketball series with 4 wins and a zero in the loss column. Fleming ran a close second with 3 wins, 1 lost; while Blacker came third with 2 and 2, while Dabney and Ricketts trailed.

The series was considered as highly successful and demonstrative of the plausibility of creating interest in intramural athletics

INTRAMURAL SPORTS

Boxing and wrestling drew lots of attention. The "iron men" worked out for the matches conscientiously, and many a thrilling battle resulted when the leather met the chin. Nobody could be found on the campus who cared to risk his hide in a boxing match with Red Watson, the Bull of Fleming House and Czar of the Grid. Watson was signed up in the unlimited division, and much reducing was seen going on among the heavier members of our glorious student body when this news was released. Nevertheless, Watson was awarded points on the basis that he was willing to tangle with all and sundry who cared to commit same with him.

In the 160-pound class Desmond of the Club fought a terrific battle with Sass of Fleming house. Some still hold that the second fight was a draw, but the judges thought that they saw a little superiority in Desmond, to whom the battle was awarded on a decision after the second skirmish had been run off. In the 175-pound class, Van Osdol thumped Johnny Mendenhall hard enough on the proboscis to convince the judges that he was the better man, hence the Non-Residents were awarded more points through Van Osdol's win. Mendenhall represented Ricketts house. In the 145-pound class, Mathewson of Fleming took a decision over Boyle, Non-Resident; while Olson, Non-Resident, slammed Grover Secord of Fleming to even up the score and take the 130-pound class. Points awarded on these matches were Non-Residents, 15; Fleming, 12.

Almost as much interest was shown in wrestling. "Wild Nell" Ruge of Blacker tangled with Secord of Fleming in a back breaking struggle. The judges couldn't tell which was which during the match, so they gave the match to Ruge because his name was easier to spell. The match was decided on falls. Johnson of Ricketts upset the dope bucket with great precision when he calmly dumped Ralph Burn on his jolly old can. Burn's superiority as a wrestler has been a standing tradition around the campus for some time, but when the little iron man from Ricketts

dumped him, somebody got a lesson in the theory of infallibility.

Anyway, Johnson took a decision over Burn in the 145-pound class, thus scoring one for Ricketts over the Non-Residents. Switzer won over Roberts in the 160-pound match by virtue of a fall. Chalk up another for the Non-Residents at the expense of Ricketts house! Dourson of Fleming messed with Hebel of Dabney, the suspense being fierce. In the long run the Flemingite took the match, but not without much groaning and grunting. Fleming house once more made the headlines when Dan Mathewson moaned his way to a fall over Willitts of the Non-Resident Club to terminate the matches.

With such keen interest being shown in the intramural sports program, it was imperative that a suitable trophy be obtained to give to the winner at the end of each year. The Senior Class, with the help of several faculty members and the Athletic Council, is having a novel trophy made for use in the inter-house tourneys. It will be a large plaque with appropriate figures on it and room for the engraving of the winner's name. It will be held in the possession of the winning house for the period of one year.

At time of going to press, there were still a number of contests to be run off under the program. One of the most important was the swimming meet for all five competing units. It was to be the only event of its kind on the program, swimming having been eliminated from the Institute athletic program at the beginning of the year. A fencing match was planned, but this did not precipitate because of lack of talent in the art of foil slinging.

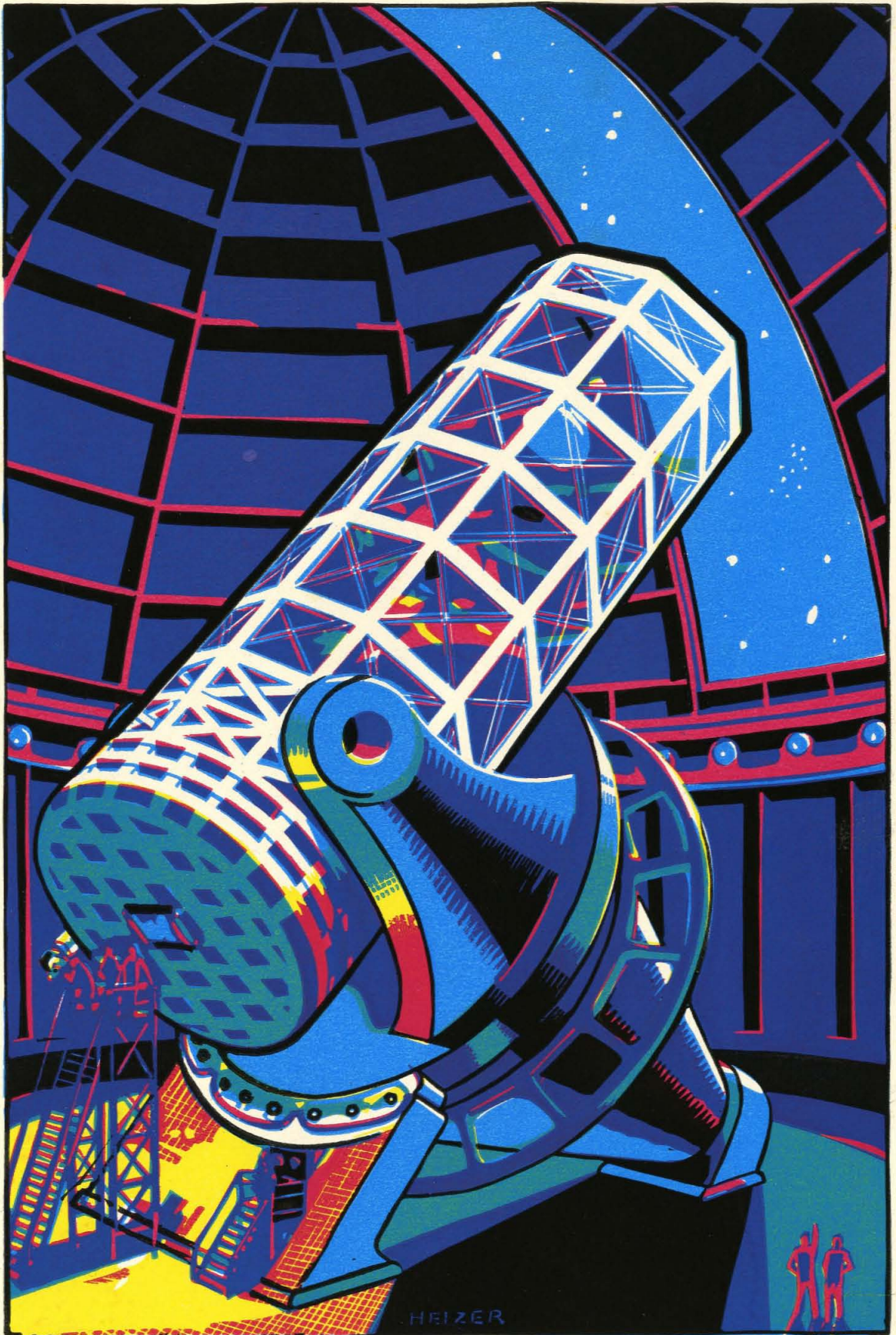
As a whole, the success of the venture is considered commendable. There are certain difficulties inherent in such a program, and it is the belief of many that these have been reduced to a minimum and that the program as it worked out this year shows that such a set up is practical and can work when handled right. Next year will probably see a similar program, if not a more extensive one, in operation.



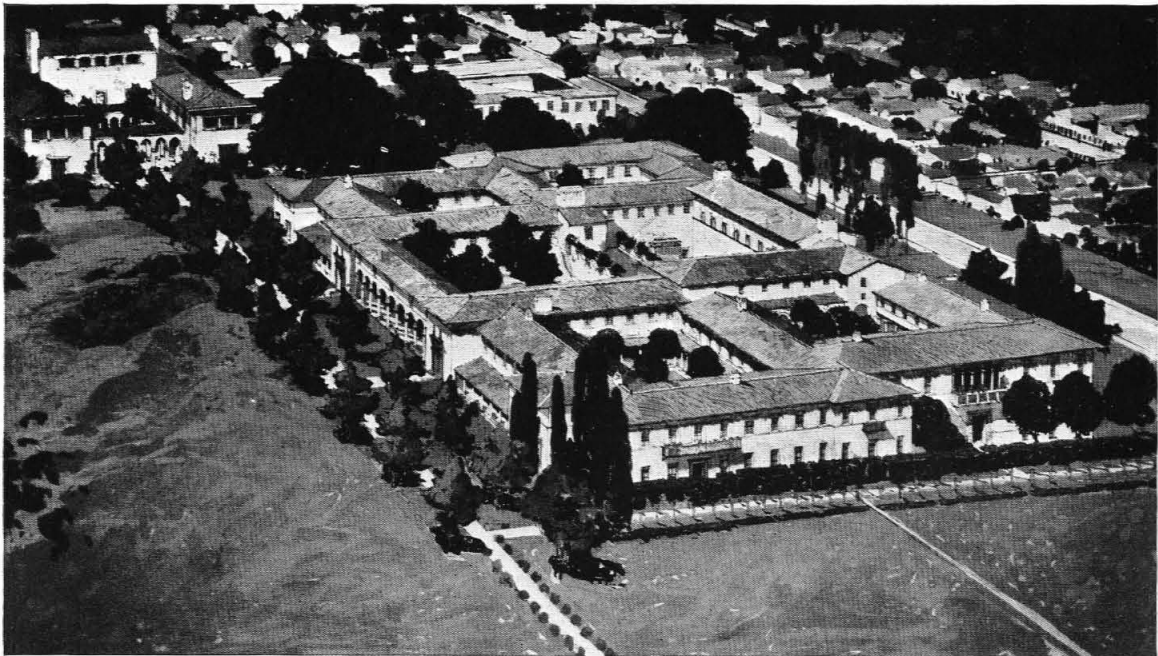
200-INCH TELESCOPE

In keeping with the great advancements in the other scientific fields, the International Education Board has provided for construction by the California Institute of Technology a new telescope double in size of any now existing, together with necessary auxiliary equipment. The completion of such a telescope can not help but have a marked effect on the astronomical knowledge of the future.

The telescope's two hundred inch mirror will give it such light collecting power that the number of known stars is expected to be tripled. The efficiency of stellar photography will be increased. Heavenly bodies will be brought apparently twice as close, and scientists will be given a clearer view of celestial laboratories where vaporized metals might be observed at pressures and temperatures which cannot be matched in the laboratories on earth.



Student Houses



Blacker
Dabney
Fleming
Ricketts
The Club

LIVING HOUSES

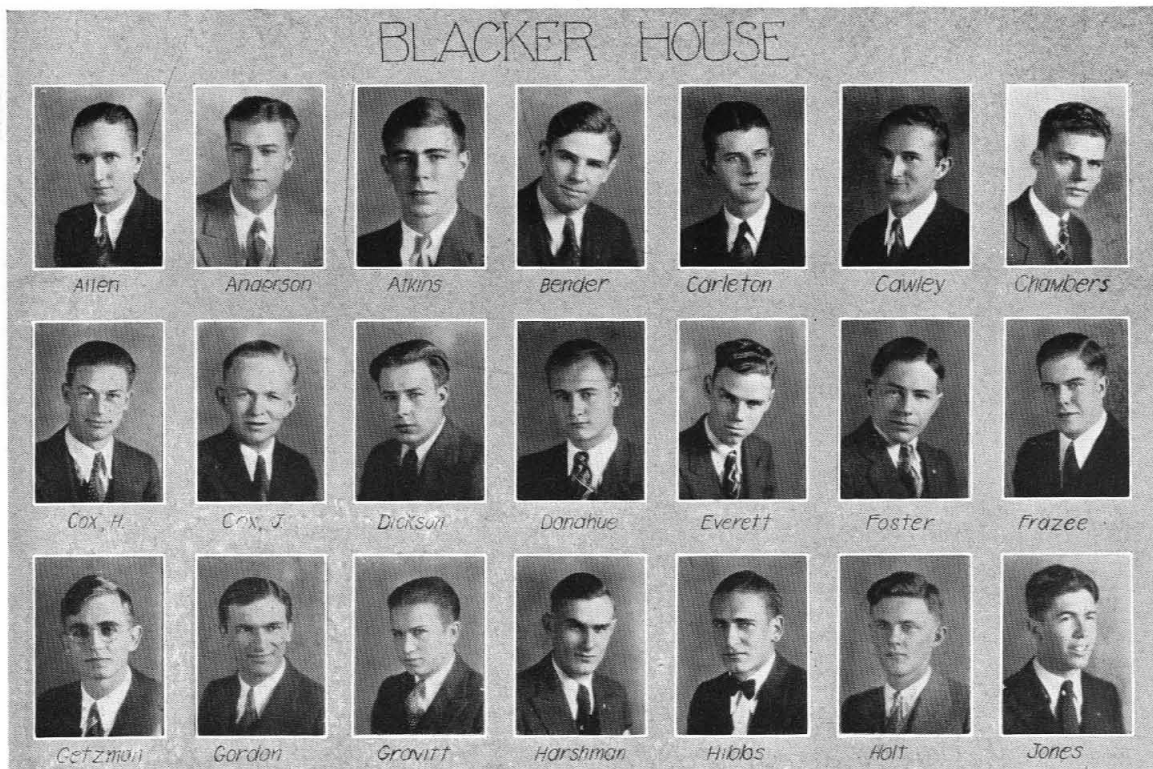


Blacker House

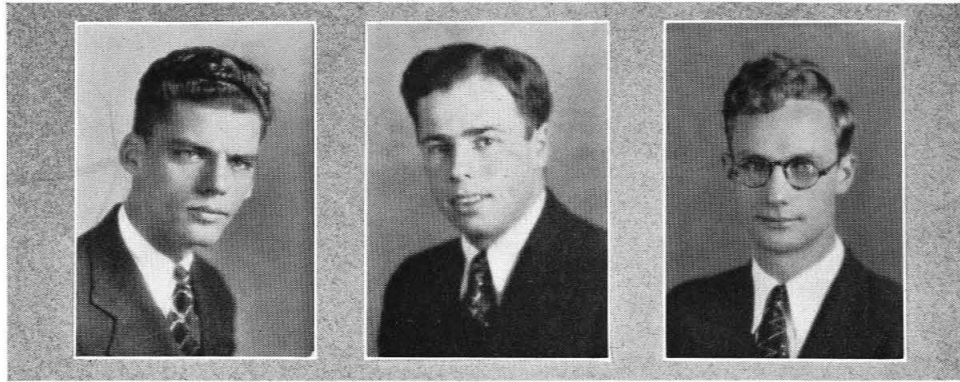
Fully cognizant of the hopes of the Executive Committee as to the ideals to be fostered by the new Houses, the men of Blacker House have made every effort to produce a rounded House, a group spirit, and seventy individual gentlemen. Dr. Harvey Eagleson, who had been selected by the men of the House as the faculty associate, has taken a full share of the work, illustrating his ingenuity with original ideas on methods of entertaining

guests and fostering social activities. The members of Blacker House were led by a set of capable officers of whom Jack Chambers was president; Walter Scholtz, vice-president; Charles Welch, secretary; and Tom Andrews, treasurer.

At the beginning of the school year, the Blacker men selected several men and women to help and inspire them in carrying out the social responsibilities of the House. Among them were: Mrs. R.



LIVING HOUSES



CHAMBERS

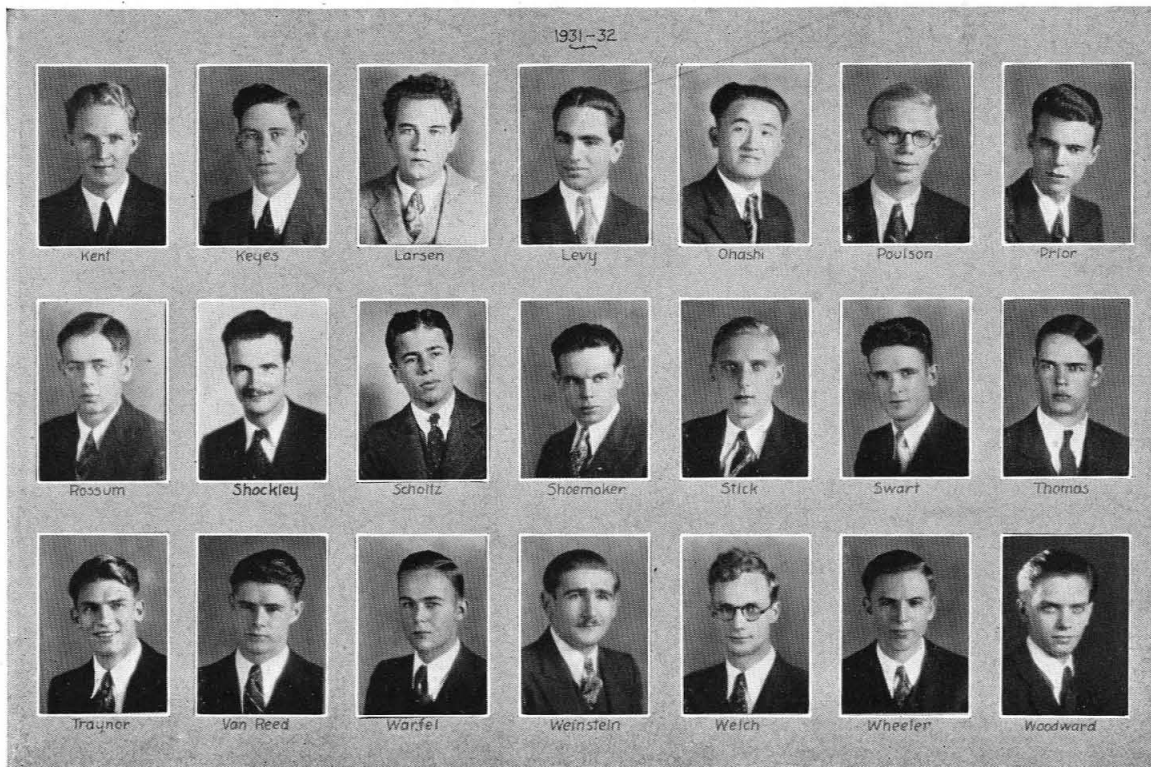
SCHOLTZ

WELCH

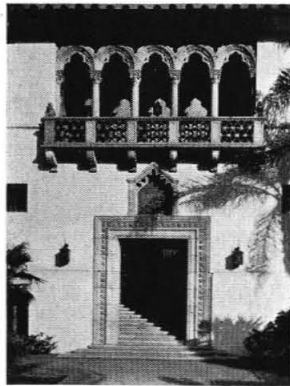
R. Blacker, Mr. and Mrs. Allan C. Balch, Mr. and Mrs. John E. Barber, Dr. and Mrs. Seely G. Mudd, Mr. and Mrs. E. C. Barrett, and Mr. G. V. Jenkins.

Many types of amusements and entertainments were devised in order that each man in the House would be able to indulge in the particular entertainment he was most actively interested in. In the list of enterprises that the Blacker students were engaged in are included beach and yachting

parties, mountain week-ends, dinner-dances, sport shindigs, and bridge contests. The members of Blacker House thoroughly enjoyed every moment from the formal opening of the House to the organization of the Blacker House Alumni Association near the end of the school year. The day following the graduation exercises marked the close of the college year with a reception for the Seniors and their friends in the lounge for a last get-together.



LIVING HOUSES



Dabney House

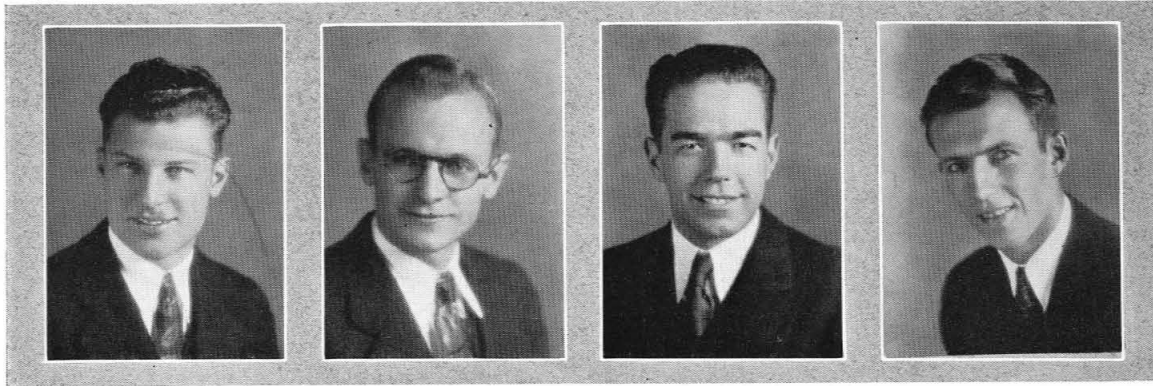
The men living in the southwestern corner of the new houses revive pleasant memories when they look upon their first year in Dabney House. It has been a successful period with seventy entirely satisfied and congenial men as evidence of the new housing plan.

The president of the House for this first year was Ed Foss. Wendall Morgan filled the position of vice-president. The position of secretary was

filled by Sid Smith, while the finances were handled by Curtis Rockefeller. The athletic activities were supervised by Bill Adams. Dabney House was extremely fortunate in having as its faculty advisor during the strenuous period of organization, Professor Huse. The House is deeply appreciative of the efforts of Professor Huse in furthering the best interests of the House and of his advice and good fellowship.



LIVING HOUSES



Foss

MORGAN

ROCKEFELLER

SMITH

In Intramural athletics, Dabney House was represented by good turnouts in most sports. The spirit of competition between the houses in sports was thus furthered. The much sought after Discobulus was in the possession of the House twice during the year. Another trophy, the after-dinner speaking award, a bronze of Abraham Lincoln,

was won from Fleming, and soon lost to them again.

The past year has seen the men of Dabney in a continual round of social, athletic and studious activities. Through it all has run a splendid spirit of goodfellowship and many a fast friend has been formed. This proves as nothing else can the success of the new living houses.



LIVING HOUSES



Fleming House

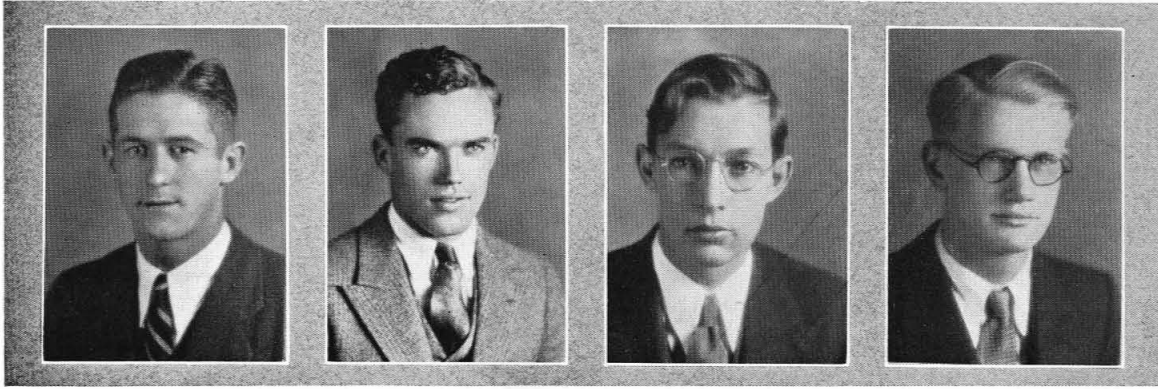
During the first year of its existence, Fleming House has fulfilled many of the expectations of those who have worked and planned to bring these houses to completion. The house was very fortunate to have as Resident Associate, Mr. Phillip Fogg. During the past year George Watson has acted as president, James McLaughlin as vice-president, E. Mott Prudames as secretary, and William Claussen as treasurer. Fleming

House is indebted to these men for the work they have carried on, and appreciates their efforts.

In intramural athletics Fleming House was represented by good turnouts. The House placed high in the interhouse football, tying for first place with Ricketts. When basketball season came along, three teams were formed and were nosed out in the finals by the Non-Residents. The Discobulus has been in the possession of



LIVING HOUSES



WATSON

MCLAUGHLIN

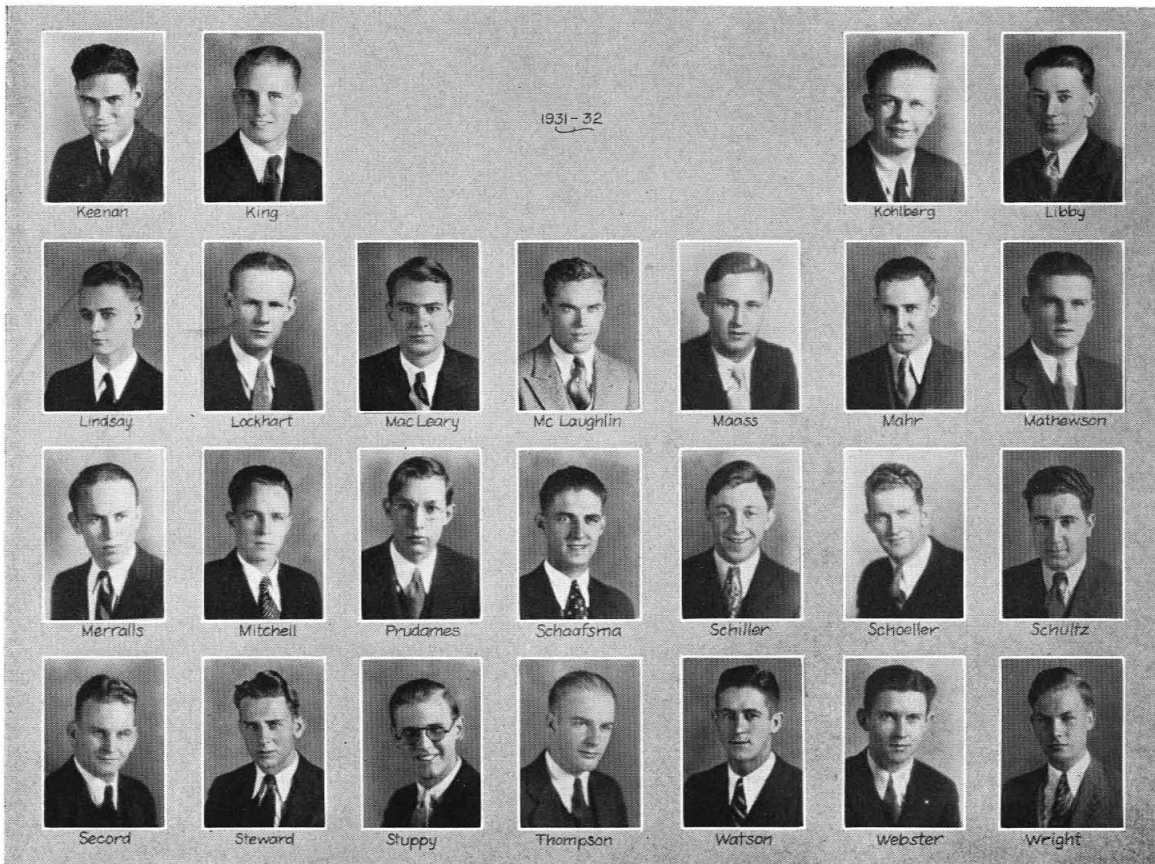
PRUDAMES

CLAUSSEN

Fleming House three times during the year. This interhouse competition is of value to those who are unable to make varsity teams, and participation in sports is encouraged by the leaders of the house.

The House won the trophy for after-dinner speaking, a statue of Abraham Lincoln, presented by Mr. Fleming, at the first contest, then lost it to Dabney House and won it back again.

Starting off the social season, a formal opening was held soon after the start of school. In January a formal dinner dance was held. Many informal dances were held, and in the third term "open house" dances were held in co-operation with the other houses. Thus it is that Fleming House completed its first year, and it is hoped that future years will be just as successful, if not more so.



Keenan

King

Kohlberg

Libby

Lindsay

Lockhart

Mac Leary

Mc Laughlin

Maass

Mahr

Mathewson

Merralls

Mitchell

Prudames

Schaafsma

Schiller

Schoeller

Schultz

Secord

Steward

Stuppy

Thompson

Watson

Webster

Wright

1931-32

LIVING HOUSES



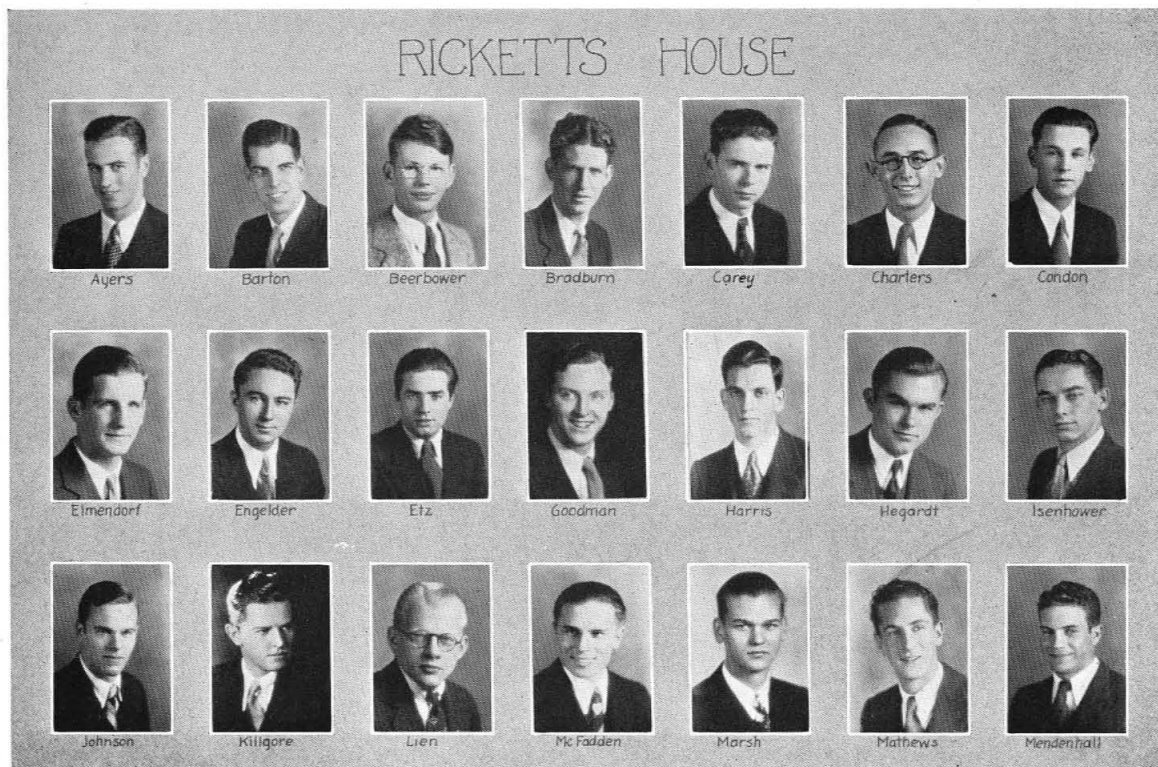
Ricketts House

Dr. Louis D. Ricketts, the donor of Ricketts House, can be a real inspiration to every Tech man. An engineer by profession, and a true student of human nature, he understands, better than any of us, the problems with which we are faced and the ends toward which we must strive if we are to justify our days spent here at the Institute.

To Mr. Davies, our Resident Associate during

the first term, they are greatly indebted for his spirit of interest and co-operation, which went so far to help out during that crucial period of organization. After his departure, Professor Gilbert, "the traveling economist," took over the job, and has since then made his presence tremendously valuable.

Ricketts House stands for the best not only in scholarship, but in social and athletic activities.



LIVING HOUSES



HEGARDT

GOODMAN

JOHNSON

PEARNE

Scheduled dances are held on the average of three times a term, and the efforts of those in charge are always rewarded by a large turnout. The formal, held about the middle of the second term, was a particular success. For the benefit of those who are not reached by the dances, a smoker was held toward the end of the second term, and an effort was made to have everyone present. It is believed that such functions as

these go a long way to promote a spirit of fellowship and House unity.

The men of the House have participated in soccer, baseball, football, cross country, tennis, track, boxing, wrestling, and basketball. Some of these men who are participating in athletic activities have had comparatively little experience previous to this, and what they have accomplished indicates a show of real fight.



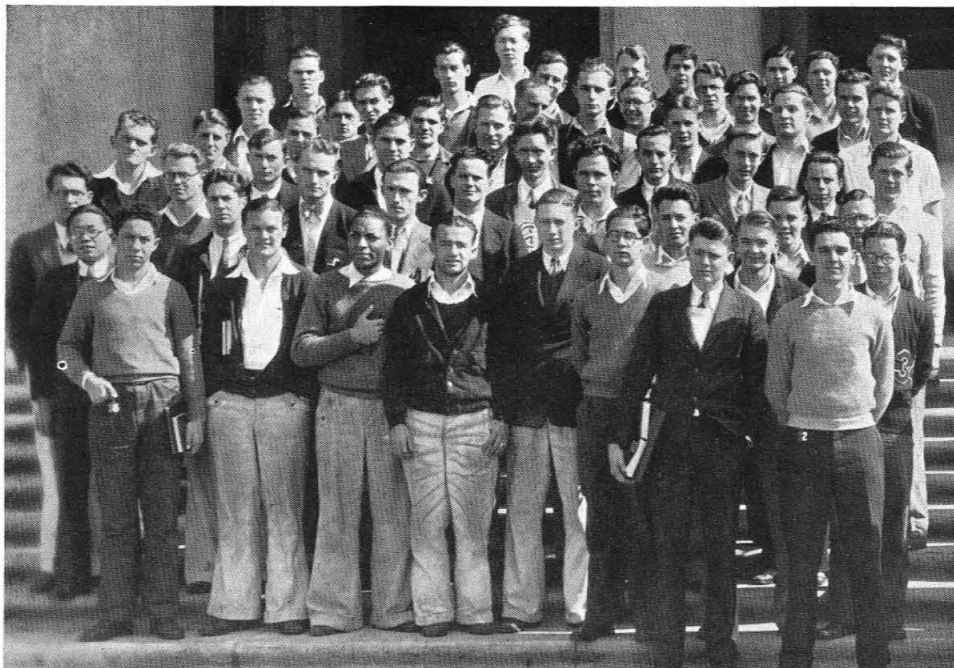
THE CLUB



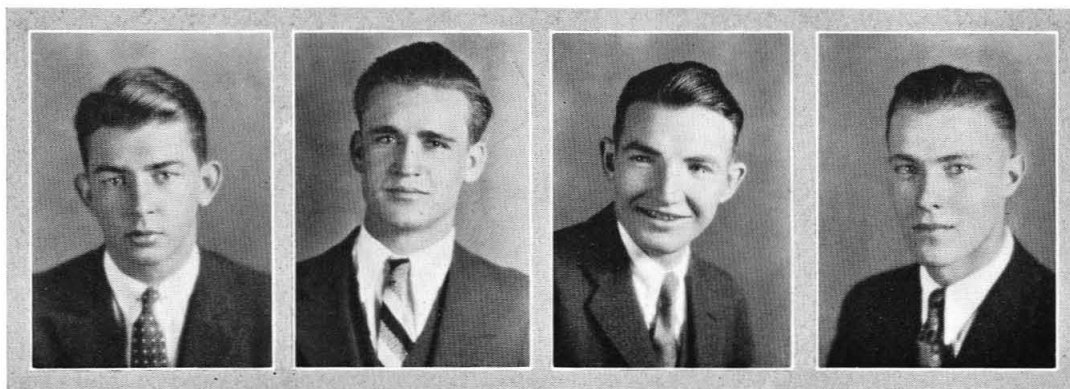
The Club

With the removal of fraternities and the arrival of the new student houses, many of the men not living on the campus found themselves completely isolated from that bit of social life which makes our college experiences of the utmost value. It was to supply this necessary factor that the old dorm was rejuvenated and renovated into suitable club-rooms for the non-resident men. In order to keep the non-resident men in close contact with the social activities of Tech, the organization of the Non-Resident Club was completed.

Under the able leadership of M. T. Davis, president; Pat Lyons, secretary; and Sam Johnson, treasurer, the new club has been socially, athletically, and politically prominent from its beginning. The non-residents have sponsored and taken a part in many successful affairs; the most noteworthy of these being the Treasure Hunt and the Barn Dance. The latter was carried out in true rustic style, both in the decoration of the barn and the costumes of the dancing couples. The Treasure Hunt proved to be a delightful treat in



THE CLUB



DAVIS

JOHNSON

LYONS

MEAD

its design and entertainment. On the night of the Registration Day of the term, a very novel get-together was devised in which the old dorm was featured as a gambling dive and all the non-residents, as stags, were to be the gamblers. The non-residents were not raided.

Politically, the non-residents have lived on amicable terms with the new houses to the extent that the non-residents were able to see many of their men in campus offices. At no times has the political dissension between the various houses and the Non-Resident Club assumed proportions unworthy of a friendly student group.

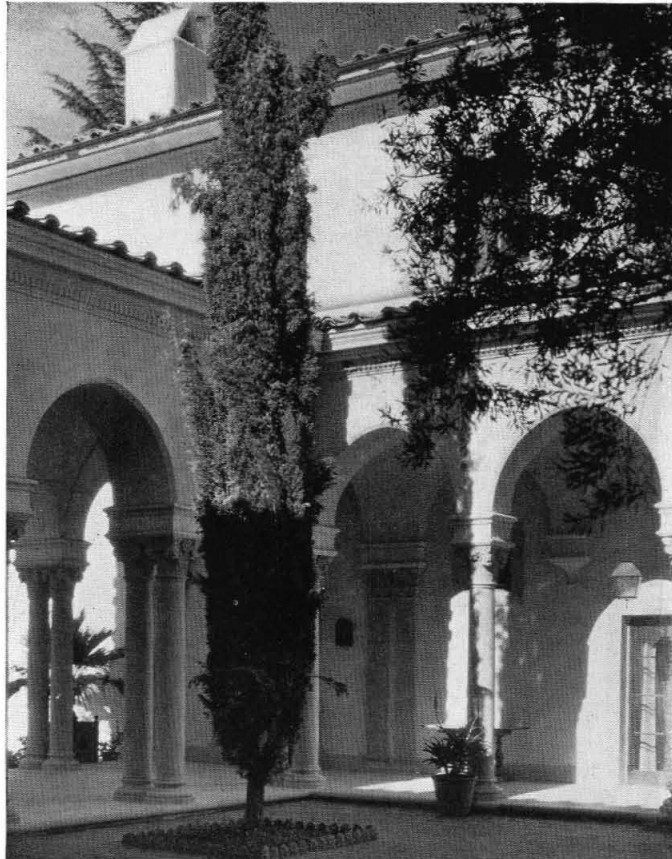
One look in the Non-Resident Lounge on any afternoon or evening will show how fully the club is caring for the recreational needs of the men. The lounge is always full of men playing cards, chess, checkers, or card games, while other men spend their time in lively discussions or in listening to the radio. With the help of Bob Lehman, Tech graduate, the non-residents have been able to secure and enjoy the facilities of the lounge and dining room. As indicated by the expressions of the men, the lounge is one of the most comfortable and "homey" places on the campus.



VIEWS



Fine Arts



Glee Club
Orchestra
Band
Debate
Drama

GLEE CLUB



PEARSON, ARNERICH, SNOW, ROACH, WARREN, BECKER, WOOD, FITCH
DANE, LIND, RADFORD, NIES, PRUDAMES, PATTON, JENNISON, HUNTER
SHRECK, MILLIKAN, SKAREDOFF, WEINSTEIN, LIEN, COX, WHERRITT, THOMAS
CARPENTER, *Director*

Glee Club

Struggling against the very greatest odds, the Cal Tech Glee Club managed to pull through one of the most successful years in its history in 1932, both in respect to the number of programs given and to the quality of the club. The greatest part of the credit for this fine showing must be given to Mr. Allen Ray Carpenter, the director, for it was through his tireless efforts that the club showed the great improvement that it did. Without his help the achievement of this would have been impossible. Credit should also be given its officers, Harold Roach, president, Carl Lind, treasurer, and Charles Thomas, secretary-librarian, and also to the pianist, Dixon Oulton.

Because of the fact that it was necessary to start with a great number of new voices, most of the old ones having been lost through graduation, few programs were given the first two terms of the year, but the time was spent in whipping the club into shape and developing

the coordination of the various voices. It is here that credit must be given those who turned out consistently for practice during the year and without whom it also would have been impossible to make such a successful year.

The Club was well received at the Stickney Art Institute in Pasadena where the first program of the year was given shortly before the close of the second term. Following this program, which also included numbers by a women's trio and a violinist secured by Mr. Carpenter, the engineer-songsters became art critics and reviewed the art work being done by the students at the Art Institute. The evening was then well rounded out with delicious refreshments and dancing.

With the opening of the third term, it was found that the schedule of programs was so filled that it was impossible for the Glee Club to fulfill all the invitations to sing. Another well-

GLEE CLUB

received program was given immediately after the opening of the third term at the John Muir Technical High School, where the Club performed before the student body. Leon Becker was temporary pianist at this program in the absence of Dixon Oulton and played a piano solo.

The annual exchange program given at Occidental College, again proved to be a very delightful affair. The Club was given an added thrill by being entertained at a luncheon given by the Occidental Women's Glee Club in the Student Union following this program. The Glee Club always has something to look forward to when it goes over to Oxy.

Each year the Glee Club holds its customary ditch day, and this year was no exception. A program was given at Orange High School, and it was decided, since the weather was favorable and the distance from Orange short, to make a complete day of it, and immediately following the program, the Club members wended their way to Balboa where they proceeded to get as red as Indians.

This year again a very interesting afternoon was had at Broadoaks where a program was given to a very appreciative audience. The remainder of the afternoon following the program

was disposed of by refreshments and by dancing with some of the members of Broadoaks School. The most disagreeable part of this program, the Glee Club found out, was tearing themselves away from Broadoaks.

Other programs were given during the following weeks during the remainder of the third term at the Pasadena Masonic Temple and at the Athenaeum. The Glee Club sang for a gathering of fellow engineers at the Athenaeum during a meeting of the Los Angeles branch of the American Society of Civil Engineers.

Another big night was held when the Club gave its annual Home Concert in Culbertson Hall. This concert proved to be the best yet, and was enjoyed immensely. In order to give the program some variety, various other musicians were again secured by Mr. Carpenter for the program, and thus it was made complete in every detail. Following this concert the year was ended when the Club again sang during commencement exercises.

Such an array of programs and the success made this year shows the possibilities for the growth of a glee club at Tech, and with the majority of the members now in the Freshman and Sophomore Classes, the Glee Club can look forward to a splendid season next year.

Glee Club 1931-1932

H. ROACH.....	<i>President</i>
E. B. Fitch.....	<i>Manager</i>
C. LIND	<i>Treasurer</i>
C. THOMAS	<i>Librarian</i>

Anderson, Thomas F.
Cox, William
Dane, Paul
Fitch, Elliott B.
Holman, Rudolph
Hopkins, John
Hunter, Francis
Jennison, James
Lien, Elvin
Lind, Carl F.

Millikan, Max F.
Monning, John
Nies, Nelson
Oulton, T. Dixon
Patton, Warren
Pearson, Harold
Prudames, E. Mott
Radford, James
Rice, David
Roach, Harold

Schreck, Robert
Skaredoff, Nicholas
Snow, Neil
Thomas, Charles
Warren, Kenneth
Weinstein, Nicholas
Wherritt, Robert
White, Wayne
Wood, Ruben
Wright, Eldon

ORCHESTRA

The Orchestra

The orchestra was under the able direction of Mr. Reginald Bland for the sixth consecutive year.

With the influx of a large number of freshmen the Orchestra started the year off strong. Though no outside concerts were presented this year, this organization made a remarkably fine showing on

the several occasions in which they gave local performances.

Management of the group this year has been in the hands of Reginald Bland, director; Dixon Oulton, president; Ted Mitchel, manager; and Francis Wyatt, librarian.

Personnel

Violins: John Lisol

N. B. Dewees

Robert H. Dourson

Bass: Reginald Bland, Jr.

Saxophone: Russell Kennedy

Flute: Ray Cripps

Clarinets: Robert Herrera

W. G. Cox

D. H. Miller

Oboe: Glen Woodward

Bassoon: R. E. Wood

Percussion: Henry Bruderlin

Harold Boehmer

Horns: Francis Wyatt

Trumpets: Robert Hallanger

James J. Halloran

Trombones: Grant Holt

Ted Mitchel

Piano: Dick Oulton

Wind Bass: Laurence Gould



HOLT, CRIPPS, GOULD, KENNEDY, WYATT, McRAE
BLAND, DEWEES, LISOL, DOURSON, COX, MILLER, HERRERA, WOOD, BLAND, *Director*

BAND

Band

Although the Tech Band has been very active and prominent in student affairs during previous years, this has been its most successful year in the history of the Institute.

The year started out with a student conductor, Ted Mitchel, wielding the baton. Meanwhile the Executive Council was investigating the relative merits of several candidates for the directorship of the Band. Their choice was Mr. Audre L. Stong, a man who has been successful with the Pasadena Junior College "Bulldog" Band. He assumed control on November 12, 1931, and from then dates the "Rejuvenated Tech Band." The showing made by the Band at the Loyola football game, after only one rehearsal with Mr. Stong more than justified the Council's selection.

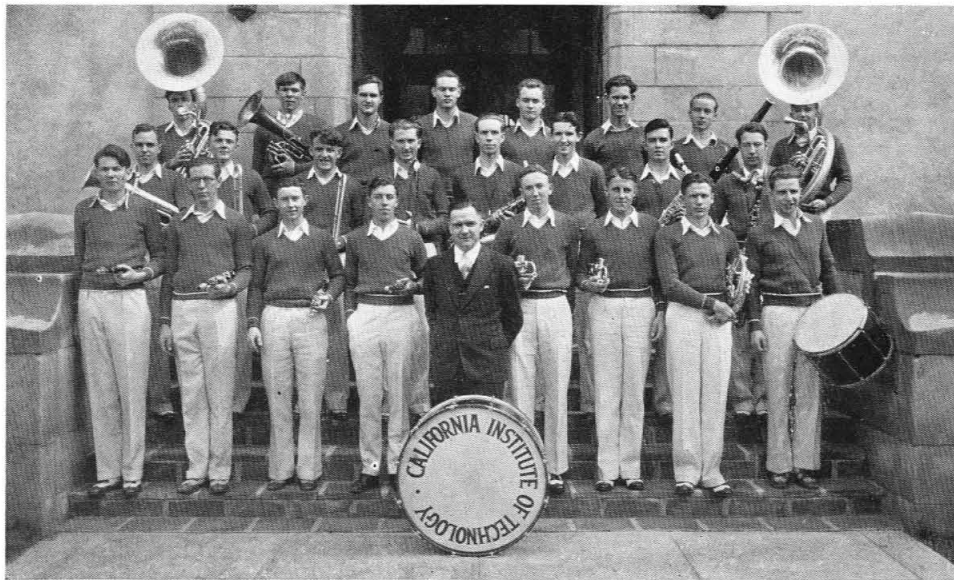
During the week following the Loyola game, Mr. Stong was able to secure new uniforms for the organization; and the student body was greatly surprised when the Band appeared at the San Diego game in full uniform.

After several weeks of intensive training the Band was ready to take its place among the best

in the Southland. The progress it had made was recognized when it was chosen to fill one of the most honored places in the Tournament of Roses Parade on January 1, 1932, that of the Official Reviewers' Band.

After several other outside engagements, such as the concert at one of the programs during the dedication of the new Civic Auditorium and the Flintridge Riding Club Horse Show, the Band climaxed its season by a performance at the last Monday assembly of the second term, in which a varied program was offered, including several popular numbers.

If Mr. Stong and the members of the Band can succeed in convincing the faculty committee of the cultural values of the work they are doing, academic credit will be given next year. It is possible that a course in music appreciation will be offered to supplement the practical experience offered in the musical organizations of the Institute. These courses would be a much needed addition to the Humanities Division, to say nothing of the individual cultural attainment realized by the participants.



GOULD, ATKINS, CRIPPS, WHISTLER DONAHUE, HERRERA, WOOD, DUNBAR
SMITH, HOLT, ISHAM, MITCHELL, PELZEL, KENNEDY, WILSON, DENNETT
GREEN, MILLER, WEBSTER, COX, MR. STRONG, CALLIS, HALLANGER, WYATT, BOEHMER

VARSITY DEBATE

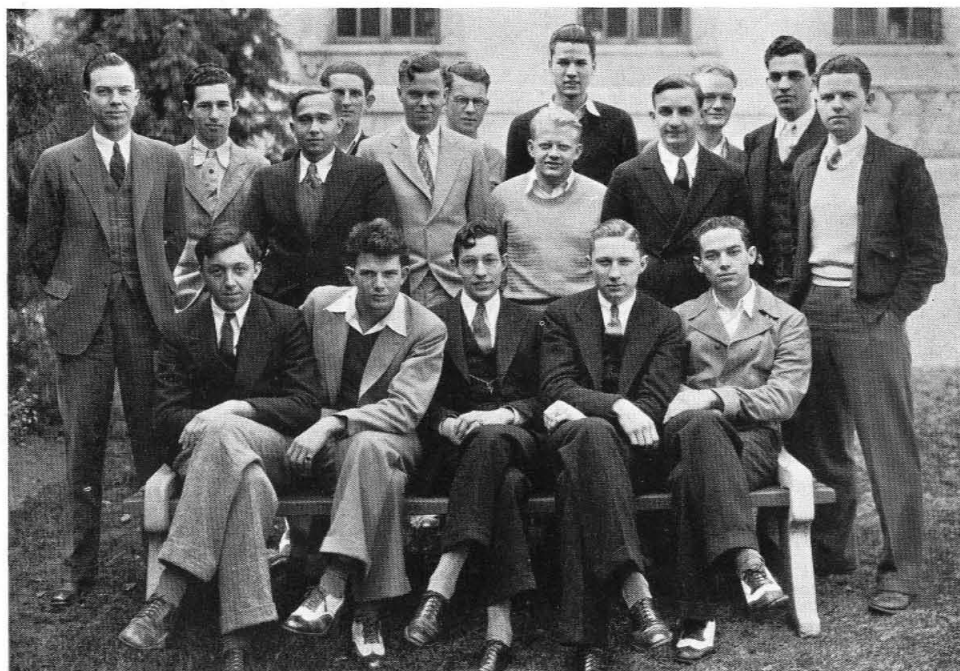
Varsity Debate

The only way to obtain successful results is to start with ambitious aims, and Dr. Allyn Loosely, the debate coach, did so by planning to give every man the most experience possible. The result was a most gratifying interest in debating and a season which did honor to the Alma Mater.

The most intensive work of the season occurred during the Southern Conference Tournament at California Christian College on February 19th and 20th, in which Tech participated in ten wit-matching contests, thrashing out the topic, Resolved, That Congress Should Enact Legislation for the Centralized Control of Industry. Prudames and Brown, on the affirmative side, and Harsh and Miller, on the negative side, began the tournament, meeting Cal Christian and La Verne. The opposing cases were not startling,

but they suggested omissions and improvements which made Tech's cases nearly invulnerable. In the evening the men were relieved by Killgore and Johnson, on the affirmative, and Roach and Sheffet, on the negative. After the tournament closed, Tech was found to have won two decisions from Pasadena, one from Redlands, and one from La Verne.

The season was a great success in giving everyone wide experience. The older men: Killgore, Johnson, Roach, Sheffet, Harsh, Prudames, and Miller, all had a half dozen or more intercollegiate debates. The other men: Arnerich, Brown, Desmond, Dunbar, Harris, Isenhower, Lien, Schiller, and Warren, all had chances in from one to five varsity debates and in numerous practice contests, some of which will long be remembered as heated "highs" and "lows" in the history of argumentation.



DR. LOOSLEY, ROACH, SHEFFET, DESMOND, ARNERICH, WARREN, HARRIS
DUNBAR, JOHNSON, LIEN, HARSH, KILLGORE
SCHILLER, MILLER, PRUDAMES, BROWN, ISENHOWER

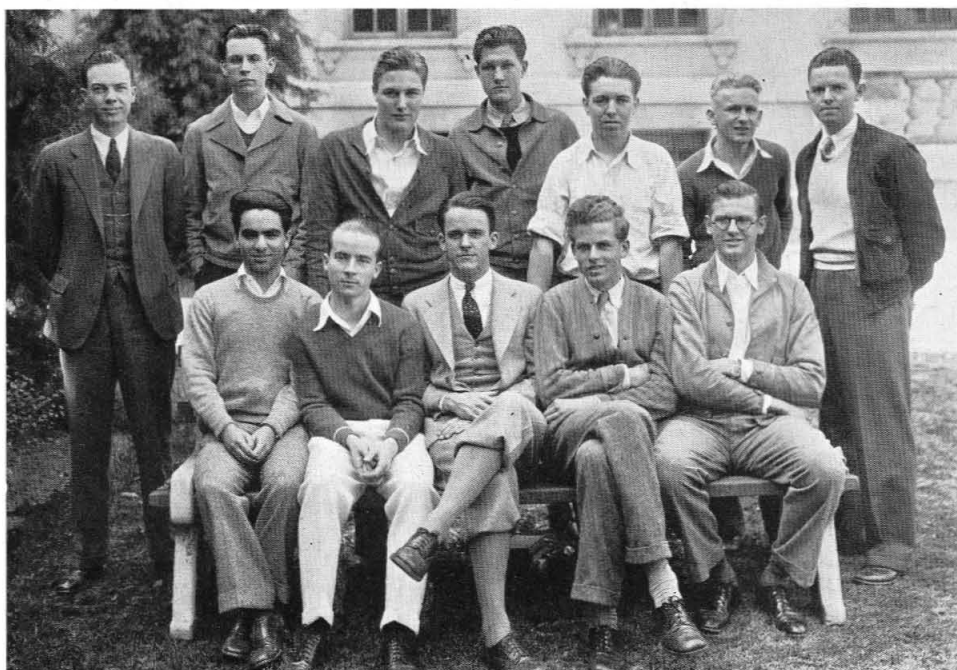
Frosh Debate

Apparently this year's freshmen are of a very argumentative nature. At least this would seem to be the logical conclusion to draw from the number of men who turned out in January to learn the gentle art of persuasion. Some fifteen to eighteen talkative souls began in the second term to absorb the principles of forensics. Cecil Killgore, a senior member of the varsity debate team, had the job of shaping these potential "Clarence Darrows" into acceptable debaters. When the theory of argumentation had been pretty well covered, practice debates were held to get the men used to the practical difficulties of the thing.

In the third term the Tech debaters met teams from many other conference schools, acquitting themselves well in almost every encounter. Mr. Allyn C. Loosely, the varsity coach, took charge toward the end of the season, doing much to im-

prove the team. The Tech policy of having all the men debate as often as possible instead of limiting the work to about four men was carried out this year as in the past. Also whenever possible each debater was given an opportunity to debate both sides of the question, a practice which led to much confusion but which was very valuable in developing debating ability.

The conference question this year was, resolved: that the several states should enact legislation providing for compulsory unemployment insurance. The timeliness of the subject made it doubly appealing both to the debaters and to those who could be induced to listen to the debates. Some of the more promising men on the team were Pitzer, Cox, Levy, Warner, Millikan, and Wood. If these men stay out for debating next year the varsity ranks will be swelled by a group of able debaters.



DR. LOOSELY, CONDON, OLIVER, COX, PALMER, OLSON, KILLGORE
LEVY, WOOD, MILLIKAN, PITZER, STUPPY

DRAMA

“THE CLOUDS”

BY ARISTOPHANES

DIRECTED BY MR. THOMAS B. HENRY

DRAMATIS PERSONAE

Strepsiades, <i>an old man seeking a way to avoid the payment of his debts</i>	MAX F. MILLIKAN
Pheidipides, <i>his spendthrift son</i>	MERRILL BERKLEY
Boy, <i>servant of Strepsiades</i>	KENNETH P. WARREN
Student of Socrates.....	KENNETH PITZER
Socrates.....	HAROLD SCHILLER
Just Argument, <i>presenting the ideas of the older education</i>	REUBEN WOOD
Unjust Argument, <i>presenting the ideas of the new education</i>	JAMES RADFORD
Pasias, <i>a creditor of Strepsiades</i>	NICHOLAS WEINSTEIN
Amyntias, <i>another creditor</i>	ROBERT C. WARNER
Chorus of Clouds.....	HENRI A. LEVY
	LAWRENCE FLEMING
	JOHN PIERCE
	WILLIAM WHEELER
Students.....	EDMOND SHANAHAN
	JAMES BROWNE

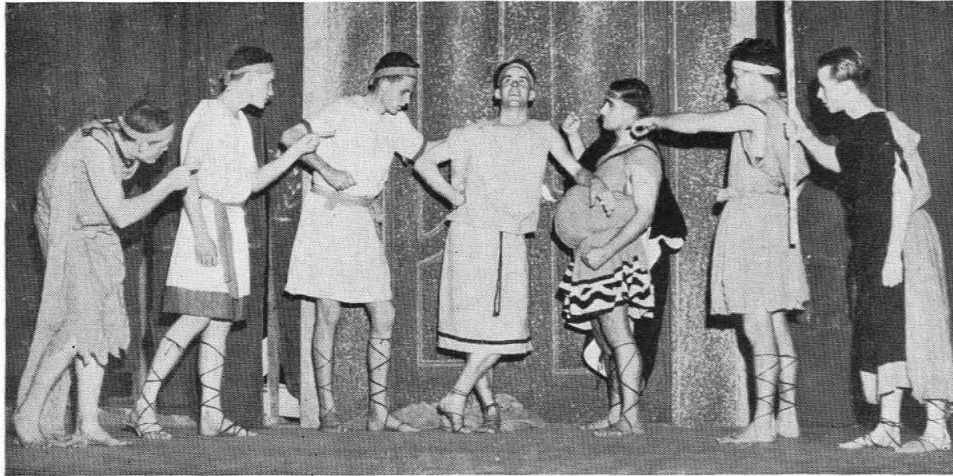
The Clouds

One of the most successful Pi Kappa Delta productions ever staged in Culbertson Hall was presented to capacity audiences on the afternoons and evenings of November 19, 20 and 21, 1931. Aristophanes' "The Clouds," the ninth annual classical play presentation to be sponsored by the California Gamma Chapter of Pi Kappa Delta, was staged by students of the

Institute under the direction of Mr. Thomas Browne Henry, well-known Pasadena Community Playhouse actor and director.

Each one of the roles of the Greek classic was filled by a student whose subsequent aptitude for the character he portrayed is evidence of the excellent judgment and direction of Mr. Henry. The large cast performed admirably,

DRAMA



GREEK DEPRESSION

with the result that the production approached a degree of perfection hardly to be realized of a college dramatic group. The entire hall was utilized in order to permit the "clouds" and other characters to move with ease on and off the stage proper. The interpretation of the Greek classic, as acted by the students and directed by Mr. Henry, successfully produced the desired comedy effects and created a Grecian atmosphere in which any ancient Greek actor might have felt at home. The success of "The Clouds" from all view-points was reflected in the responsive pleasure and enjoyment with which all of the play-goers received the enterprise.

In "The Clouds", Aristophanes, the greatest writer of the Attic comedy, satirizes the new culture. The sophists were teachers very popular among the younger Athenians, but considered by their elders as subversive of religion and morals. Aristophanes was the great defender of orthodoxy against the new physical school. The plot deals with an old man, Strepsiades, who is anxious to find some way of avoiding the payment of the debts brought on him by an extravagant wife and a spendthrift son, Pheidipides. The parts of the old man and the wasteful son were played by Max Millikan and Merrill Berkley, respectively, who portrayed their parts with spontaneity and brilliant action.

In order that the old man may learn how to cheat his creditors, he comes to Socrates, who is unjustly, as it seems to us, taken as a representative of this class of Sophists. Harold Schiller, as Socrates, does extra-ordinarily fine work in a grotesquely humorous part. To the average Athenian of those days, it is likely enough that Socrates, the most distinguished teacher of the time, would be considered a sophist. In any case, the license of the Attic comedy permitted the playwright to say almost anything he pleased; and Plutarch tells us that Socrates himself, when asked if he were not indignant at the play, replied he was chaffed as well in the theatre as at a wine party.

Like all of Aristophanes' plays, this one throws most interesting side lights upon the customs and views of the Greeks of 423 B.C. The scientific and philosophical speculation of that time are brought out in the play by the introduction of the "Arguments," a couple of creditors, and an amazing collection of "Clouds" who were the hokum gods of the sophist school. The most popular set of characters on the stage was the Chorus of Clouds, whose subtle wit and fantastic facial expressions brought roars of laughter and enthusiastic applause from the audience. The students who composed the chorus did excellent work in coordination of speech and action.

DRAMA



In its presentation of an annual Greek or Roman classic, Cal Tech has the distinction of being the only school in Southern California in which the students have successfully and accurately portrayed the free style and easy manner of the Athenian or Roman actors. Much of the attainment of perfection is dependent upon the ability of the director, but the ultimate success of the presentation lies in the acting of the players. Every member of this year's cast played his part with great spirit, entering into the fun and humor of the raucous satire by which

the sophists, with Socrates at their head, are ridiculed.

The large support given the annual Pi Kappa Delta play, coupled with the quality of the entertainment and the entertainers, has been responsible for the continuance of this form of drama. In appreciation of the interest shown by Tech students in supporting the play, a dance was staged in the Dabney Lounge immediately following one of the evening performances of "The Clouds."

DRAMA



“*Rosencrantz and Guildenstern*”

CAST OF PLAYERS

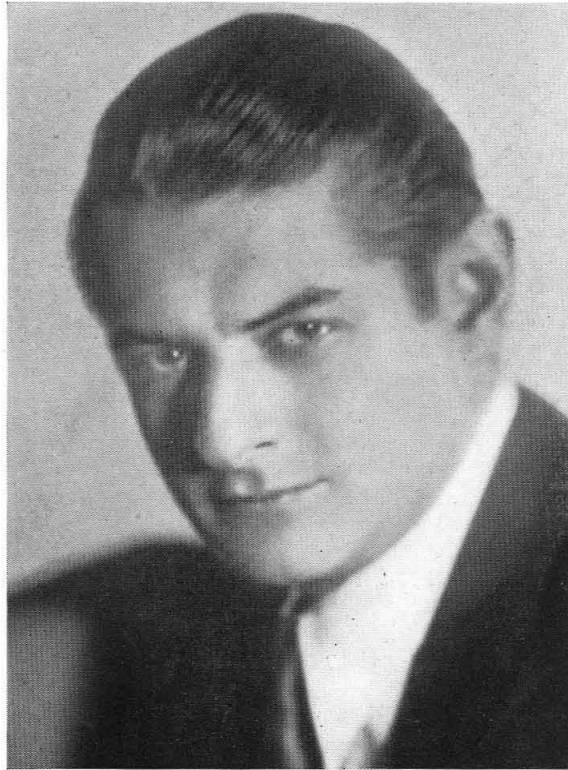
King Claudius.....	MERRILL BERKLEY
Queen.....	OLIVER DUNBAR
Rosencrantz.....	MAX MILLIKAN
Guildenstern.....	NICHOLAS WEINSTEIN
Ophelia.....	HAROLD SCHILLER
Hamlet.....	JOHN PIERCE
Players.....	FRED DETMERS
	LAWRENCE FLEMING

For the past several years the students have had only two opportunities of appearing in plays: a Greek or Roman classic sponsored by Pi Kappa Delta in the first term and a modern play under the auspices of the Institute Dramatics Club, staged during the third term. In order to relieve the lengthy interim between the two dramas, a group of Tech students decided to present a short play during the second quarter. W. H. Gilbert's "Rosencrantz and Guildenstern," a farcical take-off on Shakespeare's "Hamlet," was chosen, and Dr. Harvey Eagleson, English professor, was elected to undertake the direction of the one-act comedy.

Through the efforts of Dr. Eagleson and the abilities of the student-actors in their respective parts, the play was soon in shape for formal presentation. The play was booked for one of

the Friday assemblies, after the cast obtained permission to use the costumes of the Pasadena Community Playhouse. The opus was a great success and was well-received and enjoyed by the student-body. The "ad-libbing" and humorous lines of each character provoked the laughter of the audience, attesting the excellent direction of Dr. Eagleson and the accomplished acting of the members of the cast.

From the manner in which the students delighted in this form of entertainment, it is quite probable that a short play will continue to be produced during future second terms of the school year. The enthusiastic desires of the student-actors to apply themselves in dramatic work is indicative of the development and expansion of an artistic phase in the students' engineering and scientific instruction.



THOMAS BROWNE HENRY, *Director*

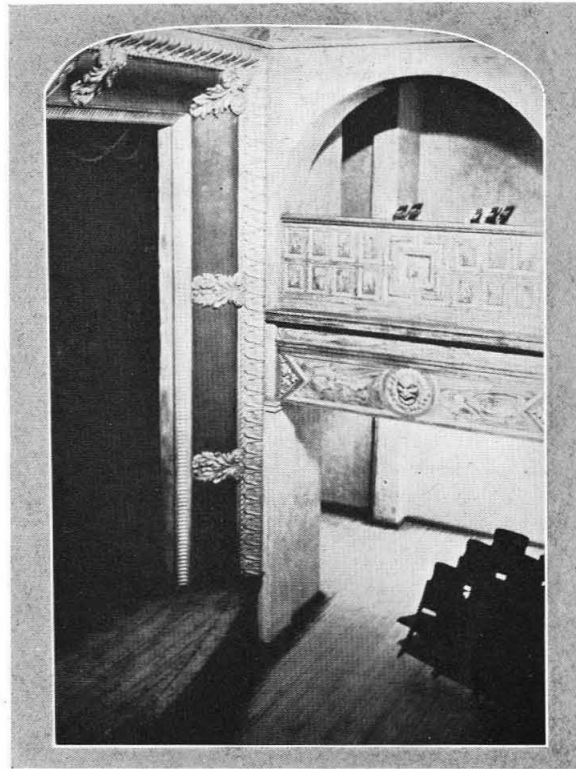
“*The Queen’s Husband*”

Under the auspices of the Institute Dramatic Club, a three-act comedy was presented with great success in Culbertson Hall on the afternoon and evenings of May 13 and 14. “*The Queen’s Husband*” by Robert Sherwood, this year’s dramatic selection, was received by the audiences with great pleasure and approbation. Much of the success of the opus was due to the tireless efforts and excellent direction of Mr. Thomas Browne Henry, Southern California actor and director. Through the assistance of the Pasadena Community Playhouse, four young women of the Playhouse School of the Theatre willingly offered their services in filling the female parts of the play. Institute students filled the male roles, with the result that both school groups cooperated in producing a successful show. The fine work of both the young men and women added life, zest, and spirit to an exciting, swiftly-moving plot.

The character of the play about which the plot evolves is the King, or rather, “the Queen’s husband,” who invariably irks the Queen with his own petty, unkingly interests. His Majesty, excellently performed by Max Millikan, Institute freshman, is one of those royal personages desiring plebian enjoyments in spite of his wife’s vain endeavors to keep him aristocratically dignified and plumed. Her Majesty was ably portrayed by Miss Doris Smith, senior student of the School of the Theatre.

As a private secretary of the King, Frederick Granton understands and sympathizes with His Majesty’s attempts to enjoy himself. The Princess Anne, daughter of the royal pair, has fallen in love with Granton, and the two have decided to elope while the Queen is away on a business trip to America. Merrill Berkley, who has played in several of the Institute productions, is to be found in the role of Frederick Granton, ably representing the love-sick, likeable

DRAMA



secretary, who is willing to follow the Royal Family into exile, through a revolution or into any other venture they are forced into. As Princess Anne, Miss Billie Bellport, senior of the School of the Theatre, offers an excellent interpretation of the Princess' wishes to throw over her royal obligations by marrying Granton, instead of acquiescing in her mother's desire to see her wed to the Crown Prince of the adjacent kingdom.

Into the Royal Household's troubles is injected another thorn in the shape of General Northrup, Prime Minister of the kingdom. He is belligerently hostile to the communistic tendencies of the people and decides to take drastic action by assuming the dictatorship. Bryant Fitch, Institute senior, plays the stormy, obstinate role of the dictator, and his fine acting is supplemented by the good work of Grover Secord, student of the Junior Class, who portrays the foppish Lord Birten, Foreign Minister. It is the latter who has arranged the terms by which Prince William of Greck, played by Harold Schiller, will agree to marry the Princess Anne.

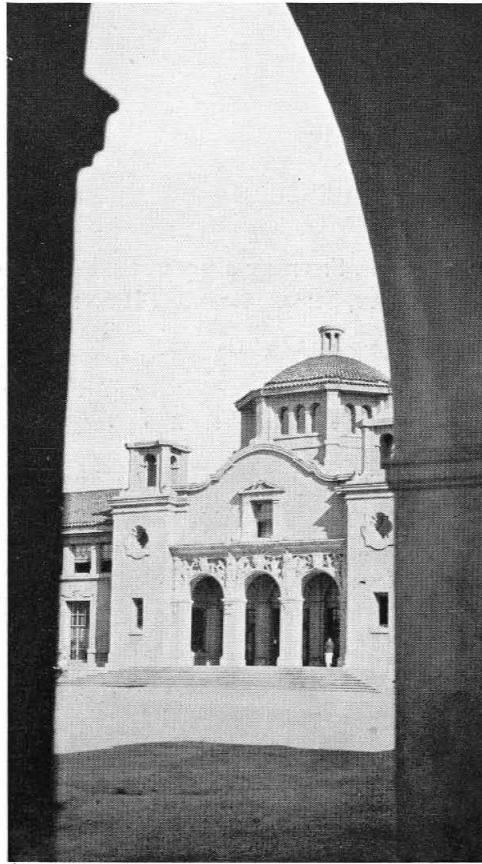
While the Queen is in America, the Liberal leaders in Parliament are deliberately antagonized by General Northrup into declaring an open revolt. Fortunately, the King, who knows how to handle a crisis of this nature much better than he can handle the Queen, induces the rebels under Dr. Fellman and Mr. Laker, played by John Pierce and James Radford, respectively, to submit their grievances to arbitration. Finally, in order to rid the kingdom of Northrup's leadership and to frustrate the Queen's wishes as to the Royal Wedding, the King takes over the situation by ingeniously forcing the Prime Minister to resign and, then, by marrying Anne to Granton.

The humor of the situations is increased to an hilarious degree by the introduction of His Majesty's servant, Phipps, played by Nicholas Weinstein. The checker games between the King and Phipps produce laugh-provoking situations of great merit. Others in the play are: Petley, played by Rupert Brown, Major Blent, played by Dave Clark, and the two maids-in-waiting, played by two School of the Theatre seniors, Misses Eloise Wilson and Virginia Reilly.

VIEWS

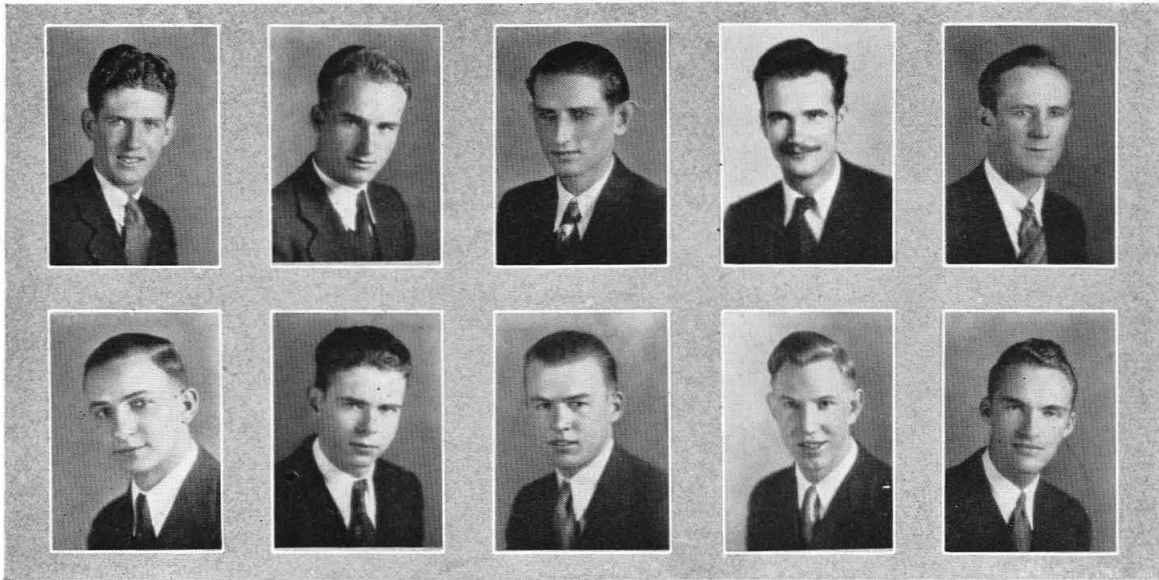


Organizations



Tau Beta Pi
Honor Key
Pi Kappa Delta
Press Club
Drama Club
Cosmopolitan Club
Y. M. C. A.
Chem Club
Professionals

TAU BETA PI



BRADBURN, JONES, SHEFFET, SHOCKELY, PICKERING
HARSH, CAREY, SHULL, BOWLER, HARTMANN

Tau Beta Pi

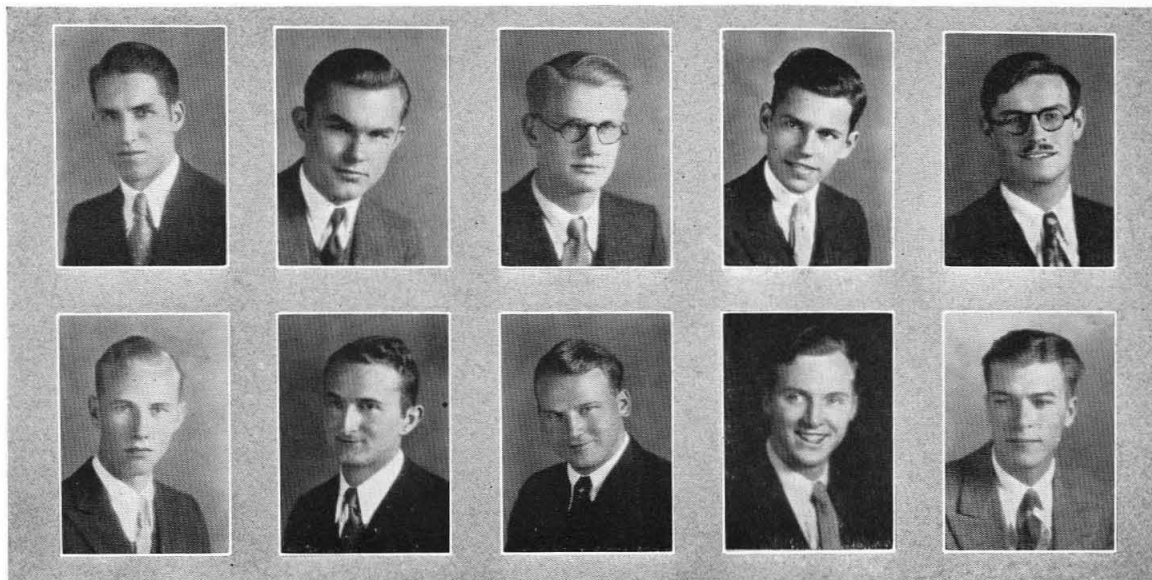
Cal Tech is the seat of the California Beta Chapter of the Tau Beta Pi Association, membership in which affords a high honor to a man in an engineering school. This is the foremost scholastic organization for undergraduates in the engineering schools of America. It owes its beginning to Professor Williams of Lehigh University in Pennsylvania, who, as a Phi Beta Kappa, saw the need for a similar organization among engineering schools. Accordingly the association was founded in 1885. Since then it has spread over most of the United States, having now fifty-six chapters. At the Institute the membership is theoretically unlimited in number, but is usually from ten to twenty-five.

Although Tau Beta Pi is similar to Phi Beta Kappa in many of its aims, it is more like a fraternity in the methods of its actions. To be eligible, a man must rank scholastically in the highest fourth of his class if he is a senior, or the highest eighth if he is a junior. Mere attainment of this degree of scholarship, however, does not automatically admit a man. The Chapter chooses its members from this group, considering their character, interest in school activ-

ities, and general culture of the candidates. After a preliminary vote by the Chapter, those still in the running are quizzed separately as to their knowledge of many and varied things. A final vote is taken, and the new pledges are announced. This voting segregates the "grinds," to a large extent, from the truly able men with wide interests, and makes a selected group of the best all around men on the campus. The time of selection of men varies for the two classes. The seniors are selected and passed upon during the fall term, and initiated a short time later. The juniors in general wait until the second term for their selection and are as a rule initiated shortly before the close of the term. To let the student body know that Tau Beta Pi is initiating new men, an enormous facsimile of the emblem and key of the fraternity is hung up in the foyer of Throop Hall. This symbolical emblem is shaped like the bent of a trestle. In the form of a small gold key, one is given to every member to be worn on the watch chain as a mark of distinction.

Tau Beta Pi gives at least two dinners during the year, has frequent "smokers" where its members are brought into pleasant, informal touch

TAU BETA PI



RULE, HEGARDT, CLAUSSEN, LIPP, CORYELL
OESCHLAGER, CAWLEY, PRUDEN, GOODMAN, ANDERSON

with alumni members in the faculty, as well as many outstanding personalities who visit the Institute. The Tau Beta Pi formal dance is one of the highlights of the spring social season.

Thus it can be seen that the Chapter plays an active part in school affairs and is of value to its members over and above the honorary distinction.

OFFICERS

C. W. JONES.....	<i>President</i>
W. F. PRUDEN.....	<i>Vice-President</i>
I. SHEFFET.....	<i>Cor. Secretary</i>
J. R. BRADBURN.....	<i>Rec. Secretary</i>
WILLIAM SHOCKLEY.....	<i>Treasurer</i>

GRADUATE

Lucas A. Alden, '31

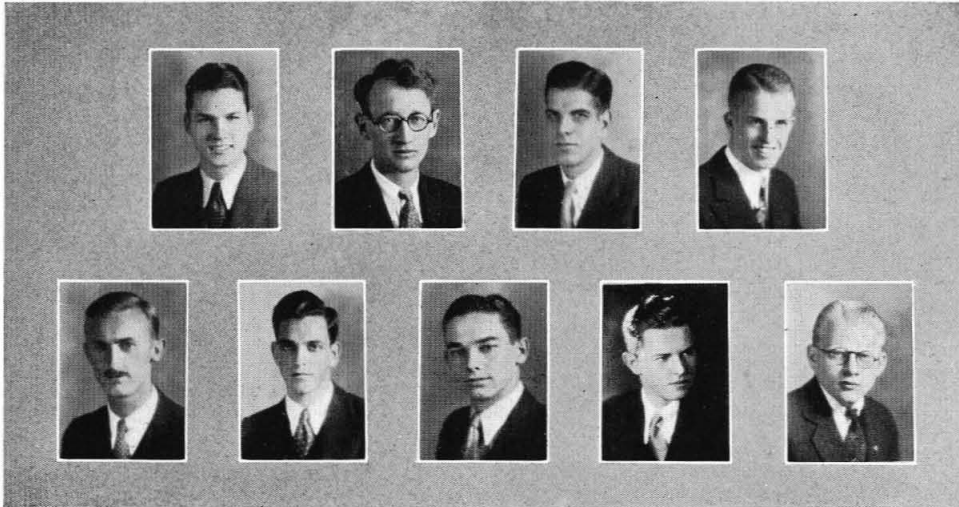
CLASS OF 1932

David W. Anderson	Clark Goodman	William H. Pickering
Gordon E. Bowler	Charles M. Harsh	Worrell F. Pruden
James R. Bradburn	Karl E. Hegardt	Bruce H. Rule
Robert V. Carey	Charles W. Jones	Joseph Sheffet
Clifford C. Cawley	James E. Lipp	William Shockley
William H. Claussen	R. T. Oeschlager	George O. Shull
	Charles D. Coryell	

CLASS OF 1933

H. S. Backus	Gregory K. Hartmann	Wendal A. Morgan
David F. Bender	John D. Mendenhall	John R. Pierce
Ralph E. Byrne	William A. Mersman	Charles E. Tillman
Trent R. Dames	William W. Moore	Moses Widess

HONOR KEY



ARNERICH, ATWOOD, BARTON, FREEMAN
GRAFF, HARRIS, ISENHOWER, KILLGORE, LIEN

Honor Key

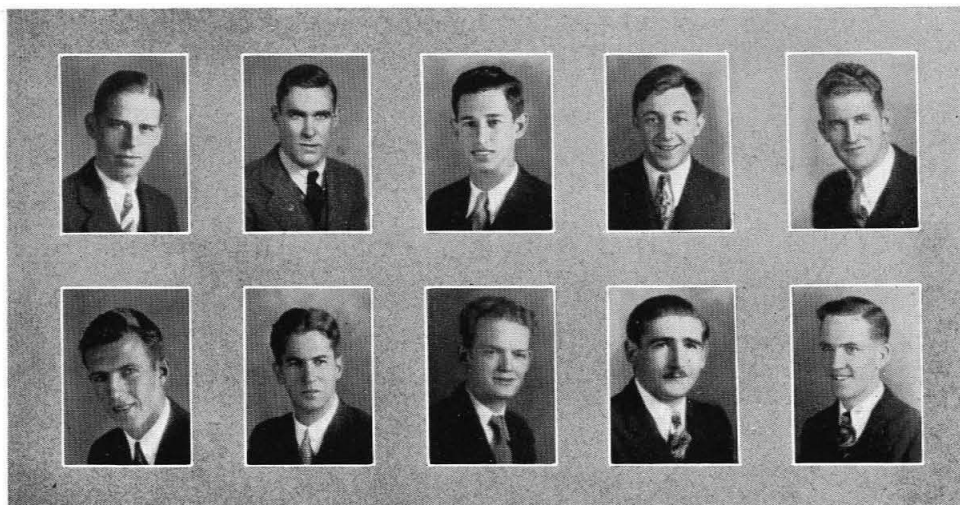
There has been established at Tech an honor organization whose members are those men who have rendered distinguished service and labor to the student body. Those who strive to be of use in the varied functions of the student body, those who sacrifice their time and effort that Tech may be a better school, and those whose aim it is to work with all they have for the honor and prestige of Tech, merit distinction. Always desirous of honoring, where honor is deserved, its stalwart sons, the student body grants recognition and expresses appreciation to these worthies in the form of the Honor Key. The Honor Key, as an emblem of extra-curricula activity, is in the form of a gold pendant, distinguishing its wearer as one of the many who have given extra time and effort to Institute functions.

Thousands upon thousands of men, scientists and engineers, stand witness to the fact that the ability to co-operate with fellow men and the ability to lead in thought and action are unquestionably highly valuable assets in this struggle for existence that we call life. The many

social, technical, artistic, and athletic organizations on the campus have been instituted with the thought in mind to afford an opportunity for leadership and ability to be asserted and that this in turn would be of great value to the student body in the co-operation of students, the diversity of pleasurable artistic participation, and the exemplification of what every technically trained man should desire for himself as regards the personal expression of thought and talent.

It has become increasingly difficult in the past few years, during which the Institute scholastic standards have been raised, for students to participate in campus activities, but this in itself raises in student esteem the man who can both study, and at the same time, work on the publications staffs or partake in dramatic enterprise. As it has become more and more difficult to win an Honor Key, so has eligibility become more exclusive, till it has been found advisable to limit the number of keys issued each year to five percent of the student body, with the Executive Committee granting final decision to those who merit the distinction.

HONOR KEY



MONNING, PARSONS, ROACH, SCHILLER, SCHOELLER
SMITH, TERRILL, WARREN, WEINSTEIN, WHERRITT

This year nineteen men were granted keys. These men were selected for their interest and activity in athletics, or the gentler campus avocations. It is due to the labors of these individuals that the student body is at all able to produce theatricals, publish a weekly and an annual, promote victorious teams, and support its musical organizations. But these men are not alone responsible for the results of student body func-

tionings and due credit must be given to those men who give their time and effort and are not granted Honor Keys. The men who have been fortunate in securing Honor Keys for this year have gained their prizes by persevering in any number of different fields. The following list contains the names of the nineteen men who have earned the signal honor which they have merited.

SENIORS

Arnerich	Freeman	Roach
Atwood	Graff	Schoeller
Barton	Killgore	Wherritt
	Parsons	

JUNIORS

Monning	Warren
Terrill	Weinstein

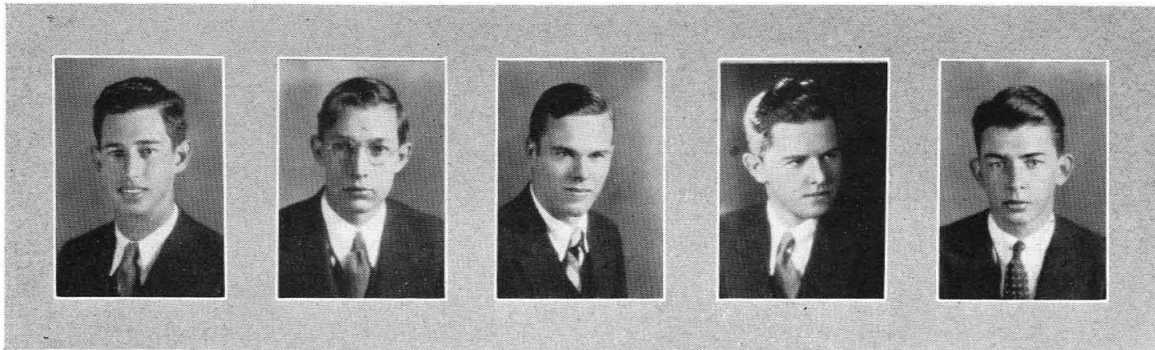
SOPHOMORES

Lien	Schiller	Smith
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FRESHMEN

Harris	Isenhower
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PHI KAPPA DELTA



ROACH

PRUDAMES

JOHNSON

KILLGORE

DAVIS

Pi Kappa Delta

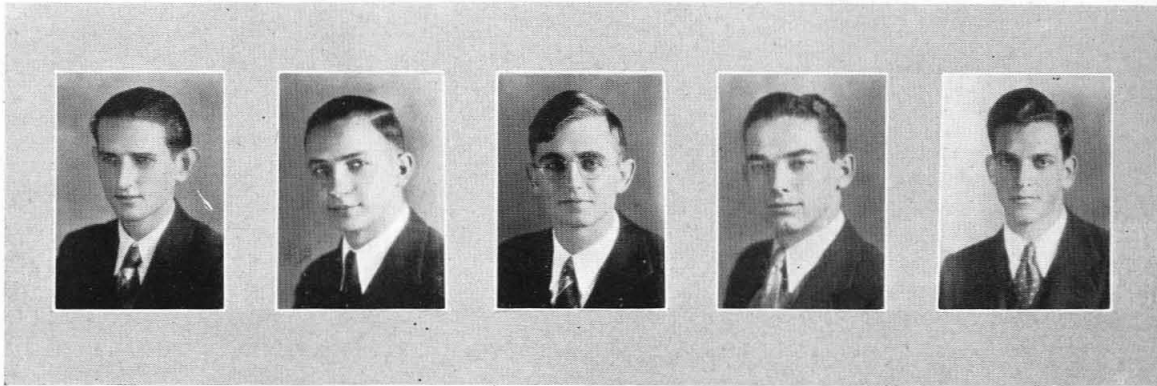
"The mastery of his own powers of speech is to the individual human being the most important of all skills, and . . . the index of the whole man," to quote Dolman, President of the National Association of Teachers of Speech. This is symbolic of the idealism that has been placed before the members of the Caltech Chapter of Pi Kappa Delta since its inception in 1921 by Dr. John Macarthur, Dean of Freshmen. Dr. Macarthur was himself at one time National President of Pi Kappa Delta.

The purpose of this organization has been from the beginning to foster a higher spirit of intercollegiate oratory, debating, and public speaking among the several rather widely separated college groups with whom the Caltech teams are brought in contact. The development of a spirit of intercollegiate friendship and goodwill has always been of primary importance in this institution. The debates sponsored have an additional merit in that they offer much enlightenment on questions of vital importance to the general public with whom Pi Kappa Delta attempts to establish more intimate relations. The question this year was "Resolved that Congress should enact legislation for the centralized control of industry."

In addition to its activities in the forensic field, Pi Kappa Delta greatly enhances the prestige of the Institute through the presentation each year of a classical play. This year, "The Clouds" by Aristophanes was chosen and most commendably presented. People came in such numbers from all over Southern California to see this delightful reproduction of the classic that Pi Kappa Delta was able to send three representatives to the biennial National Convention instead of the usual two. According to our own Dr. Millikan, "Nothing is more important for an understanding of life than some comprehension of the thoughts and springs of conducts of men of bygone days. Because of the genius of Gilmore Brown, the men of the California Institute are in a unique position to introduce to this very modern corner of the modern world a bit of thought, feeling, and life of the men of Ancient Greece."

The prodigies of our local chapter who were sent this year to the National Pi Kappa Delta Convention at Tulsa Oklahoma were Cecil Killgore, Mott Prudames, and Stanley Johnson. Their efforts certainly were a credit to the Institute. Out of one hundred and two representative teams from all parts of the country they were

PI KAPPA DELTA



SHEFFET, HARSH, GETZMAN, ISENHOWER, HARRIS

ranked thirteenth, having lasted six rounds of grueling competition. Besides debating, Killgore entered the Oratorical Contest, while Prudames engaged in Extemporaneous Speaking. In both of these our representatives lasted three rounds. At the Convention Degrees of Honor in Pi Kappa Delta were awarded. Cecil Killgore received the Degree of Special Distinction, while Mott Prudames received that of Honor.

Pi Kappa Delta encourages men to grapple with world problems and at the same time brings

them into stimulating contact with men of the highest character and ability.

In the word of Alexander Meikeljohn, President Emeritus of Amhurst College: "It seems to me that stronger than any other group, tougher in intellectual fiber, keener in intellectual interest, better equipped to battle with coming problems, are the college debaters—the men, who apart from their regular studies, band themselves together for intellectual controversy with each other and with their friends from other colleges."

MR. GILMORE BROWN	FACULTY	DR. JOHN R. MACARTHUR
OFFICERS		
CECIL KILLGORE		<i>President</i>
HAROLD ROACH.....		<i>Vice-President</i>
JOSEPH SHEFFET		<i>Secretary-Treasurer</i>
MOTT PRUDAMES.....		<i>Publicity Manager</i>

MEMBERS CLASS OF 1932

Harsh, Charles M.	Prudames, Edwin M.
Killgore, Cecil	Sheffet, Joseph
Roach, Harold	

CLASS OF 1933

Davis, Madison T.
Getzman, Edwin S., Jr.
Johnson, Stanley

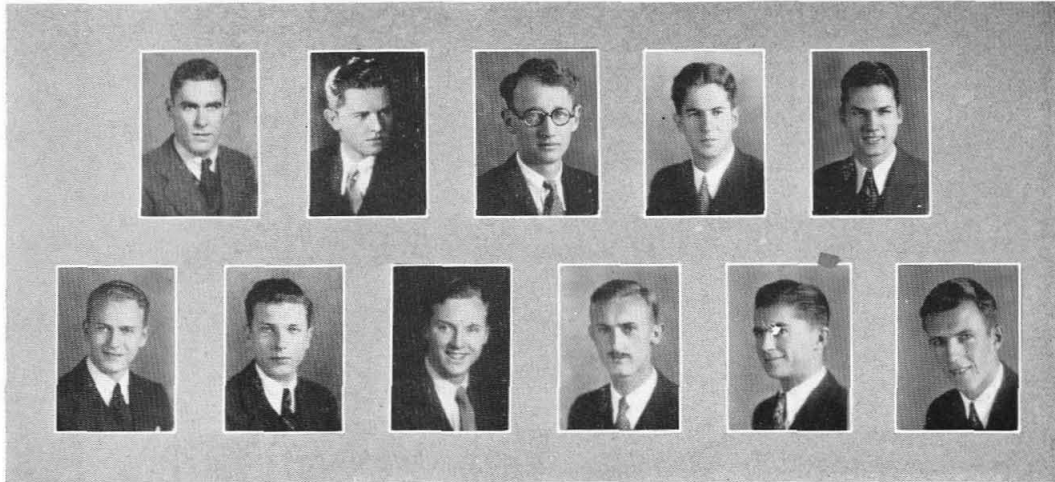
CLASS OF 1934

Desmond, Jack M.
Dunbar, Oliver C.
Lien, Elvin B.

CLASS OF 1935

Harris, William R.
Isenhower, Gerald V.

PRESS CLUB



PARSONS, *President*; KILLGORE, *Vice-President*; ATWOOD, *Secretary*; TERRILL, *Treas.*

ARNERICH

HAYNES, CRUTCHFIELD, GOODMAN, GRAFF, RUSSELL, SMITH

Press Club

The Press Club is an honorary organization made up of men who have shown an active interest in literary accomplishments. Most of its members are chosen for their distinctive work on Tech publications.

The Club does all in its power to make these publications the best that can be made, which the perusal of either of them will show to be the case. The fact that the California Tech has been asked to enter a display in national exhibition, and that last year's annual won an All American rating, indicates that really good work is being done.

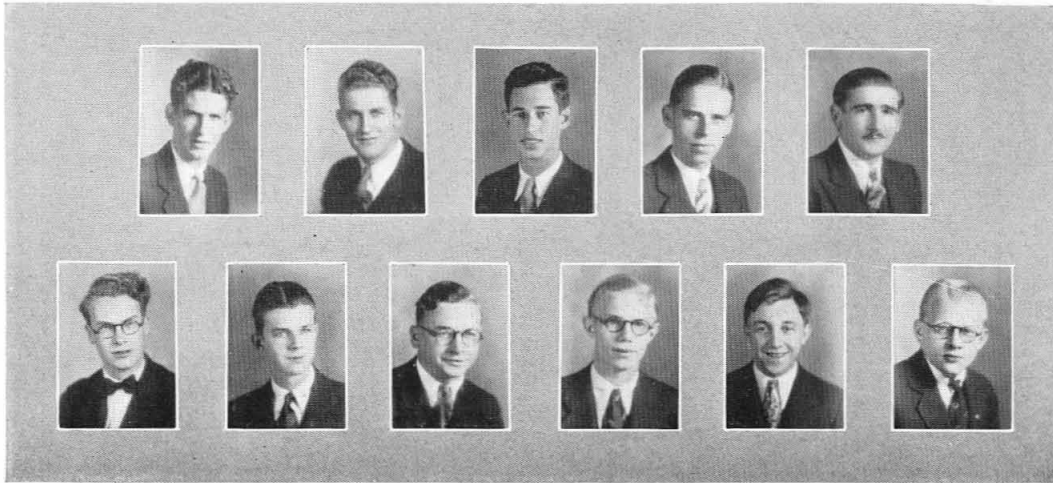
Although the Press Club fosters the highest type of journalism, and newspaper work, it does not confine its attention solely to this, but maintains a vital interest in literature as well. Quite frequently meetings are held in which prominent literary and journalistic men speak, and discussions take place in which worth while topics are reviewed. It is not uncommon that members of the Institute Humanities staff such as Dr. Harvey Eagleson and Prof. George R. MacMinn take part in the meetings and add much of value to

the discussions. Prof. MacMinn, who conducts classes in journalism and is an honorary member of the Press Club, is vitally interested in the Club, and it is because of him that the club has been as successful as it has in the past.

In a technical school where such things as literature and journalism are likely to be given a secondary place, such an organization as the Press Club is extremely valuable for it not only fosters closer contact between faculty members and students on extra-curricular subjects, but permits one to further his interest and his ability to understand and participate in such subjects.

The club has enjoyed the past year under the guidance of Paul Parsons, president; Cecil Killgore, vice-president; Al Atwood, secretary; and Tom Terrill, treasurer. Al Atwood has been editor of this year's Big T, while Tom Terrill has been Editor of the California Tech. Although next year's officers have not been chosen as yet, it appears that the Club will have a successful year next year for there has been considerable interest in journalism recently.

PRESS CLUB



BRADBURN, SCHOELLER, ROACH, MONNING, WEINSTEIN
BERKLEY, CARLETON, SHERBORNE, POULSON, SCHILLER, LIEN

MEMBERSHIP

FACULTY

Dr. Harvey Eagleson Mr. Louis W. Jones
Mr. William Huse, Jr. Prof. Clinton K. Judy
Prof. George R. MacMinn

OFFICERS

Paul Parsons *President*
Cecil Killgore *Vice-President*
Albert W. Atwood, Jr. *Secretary*
Thomas S. Terrill *Treasurer*

SENIORS

Arnerich, Paul	Harcher, John
Atwood, Albert W., Jr.	Lind, Carl
Bowler, Gordon E.	Killgore, Cecil
Bradburn, James R.	Parsons, Paul
Goodman, Clark	Ritter, John
Graff, Donald B.	Roach, Harold
Haynes, Benarthur C.	Schoeller, Philip

JUNIORS

Berkley, Merrill	Poulson, Donald
Carlton, Lee	Russell, Richard
Clark, Willis	Terrill, Thomas
Monning, John	Weinstein, Nicholas

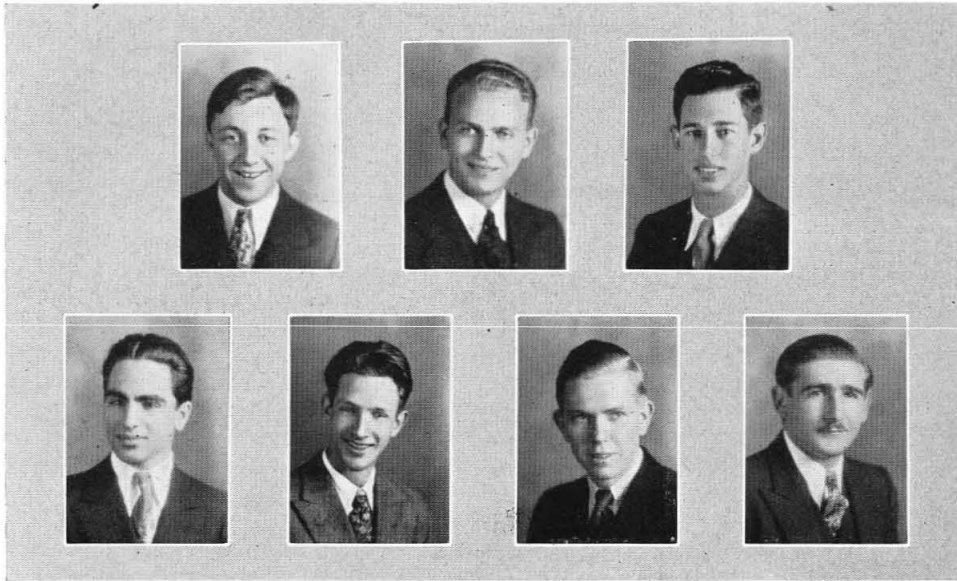
SOPHOMORES

Crutchfield, Richard	Schiller, Harold
Lien, Elvin B.	Sherborne, John
Myers, Bryant	Smith, Sidney

FRESHMAN

Binkley, Jack	Harris, William
Etz, Arthur	King, Fred
Millikan, Max	

DRAMA CLUB



SCHILLER, HAYNES, ROACH
LEVI, FITCH, TILLMAN, WEINSTEIN

Dramatic Club

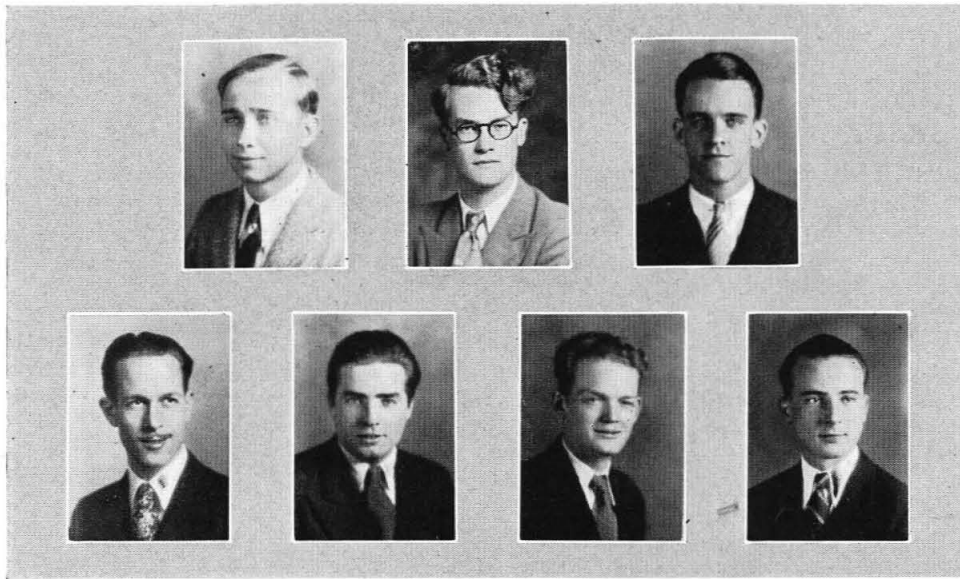
"The Clouds," "Rosencrantz and Guildenstern," and "The Queen's Husband" comprise the results of the activities of the Dramatic Club for this year. Although the first named is sponsored by Pi Kappa Delta, the cast was largely drawn from the membership of the Dramatic Club. The second production was given in the second term as a Friday Assembly, and received much well-earned praise. The third play was a modern theatrical, which is produced annually by this organization during the third term.

The Dramatic Club was organized in 1925 as an honorary society under the auspices of the English department. Since that date it has occupied its time with its several productions, with visits to the various theaters in and about Pasadena, and with discussions during meetings with the notables of the theatrical world in Pasadena. It was felt that certain enjoyment could be given the members of this club through a series of

dramatic readings. Acting upon this suggestion, and with the aid of the faculty of the Humanities Division, many pleasant evenings were spent after club meetings listening to these renditions. Much benefit in literary appreciation was derived from club meetings as a result of these programs.

Each year new members are selected from the student body to take the places of those who graduate. These students are chosen because of active participation in any dramatic production on the campus. It is always remembered that the spirit of participation is far more commendable than mere material participation, and that small parts ultimately are just as important as major roles. Membership in the Dramatic Club, rather than being a goal in itself, should merely exist to further the interests of dramatics and to afford an opportunity for the further expression of talent and ability.

D R A M A C L U B



DUNBAR, BERKLEY, MILLIKAN
SHERMAN, ETZ, WARREN, WOOD

Through proximity and long standing, friendships between the Dramatic Club and the Pasadena Community Playhouse, much aid has been obtained from that civic organization. The Dramatic Club feels greatly indebted to the Playhouse for its co-operation and acknowledges how great a factor it has been in the Club's theatrical successes. Not only has excellent directorial aid been granted by the Playhouse, but also feminine aid, especially for the modern plays.

An insight into the lives and thoughts of great playwrights, a taste of the personifications of great characters, the joy of participation, the joy derived by giving pleasure to others, recreational amusement, literary training, all these and many more are the advantages and enjoyment the Dramatic Club has given its audiences, its patrons, and its members.

OFFICERS

BENARTHUR C. HAYNES.....	<i>President</i>
CHARLES TILLMAN.....	<i>Secretary</i>
HAROLD ROACH.....	<i>Treasurer</i>

MEMBERS

Merrill Berkley	Kenneth Pitzer
Robert Boykin	James Radford
Oliver Dunbar	Harold Schiller
Arthur Etz	Robert Sherman
Bryant Fitch	Kenneth Warren
Lawrence Fleming	Robert Warren
Henri Levy	Nicholas Weinstein
John Pierce	William Wheeler
Ruben Wood	

COSMOPOLITAN CLUB

Cosmopolitan Club

The purpose of this organization is two fold; first, to unite the American and Foreign students of the Institute, and second, to develop a true cosmopolitan spirit by securing an adequate understanding of the customs and habits of the different peoples of the world.

During the past year the club held monthly meetings, and one large banquet in the Dug Out. The speaker for the evening was Miss Maud Rus-

sell, and her address was entitled, "The First Twenty Years of the Republic of China." Other Activities of the Organization were as follows: meetings with other Cosmopolitan Clubs, informal group meetings led by a faculty member, and participation in the Southern California Cosmopolitan Conference held at U. S. C. This group is also a member of the Junior Council on International Relations which is headed by Dr. Richard Pomeroy, a graduate of the Institute.

FACULTY MEMBERS

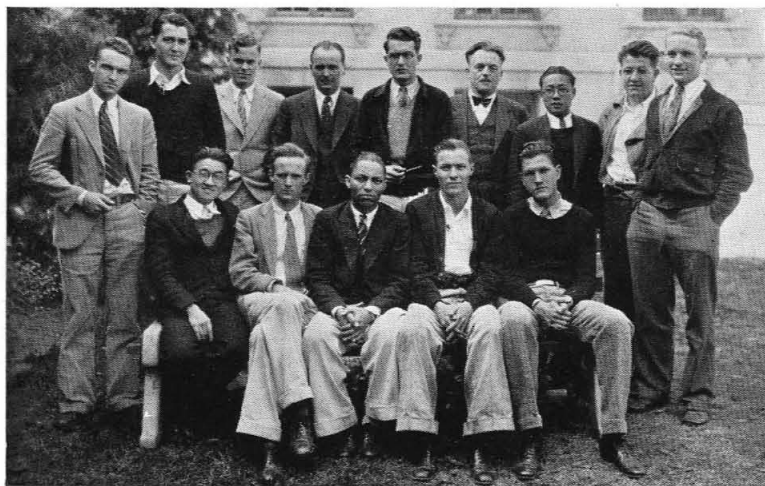
DR. CLYDE WOLFE DR. FREDERICK L. RANSOME DR. ALLYN C. LOOSELY

OFFICERS

GRANT D. VENERABLE.....*President*
SHERMAN COX.....*Secretary*
GREGORY HARTMAN.....*Treasurer*

MEMBERS

H. F. Anderson	L. A. Pipes	Dr. S. C. Woo
Carlos Alphonso Bulnes	N. N. Skaredoff	Robert Mead
Vittaly G. Gabriel	F. K. Skoog	Robert Freeman
William Mersman	Nico Van Wingen	Charles Schwieso, Jr.
Charles Perrine	M. Widess	William Pickering
	David Y. K. Wong	



HARTMANN, HUTCHISON, JOHNSON, SCHWIESO, VAN WINGEN,
BUNGAY, WONG, TEJADA, THOMAS
OHASHI, PICKERING, VENERABLE, MEAD, COX

Y. M. C. A.

The work of the Institute YMCA begins each year with the Freshman Committee and the Handbook Staff. These two important parts of the "Y" organization begin their work for the next school year in the spring term, organizing the Idyllwild conference for the Frosh and having the Handbook ready for distribution by the first week in September. Besides organizing and carrying through the Freshman Registration Day with the student officers, the "Y" cabinet write each incoming student a personal letter of welcome.

During the year the program of the "Y" is centered in bi-monthly meetings and in special conferences. Many speakers are brought to the campus during the year, to speak on the "ex-curricula" side of student life. Miss Maude Russell, of China; Mr. Jerry Voorhis, of the Voorhis School for Boys; Mr. Francis Henson, of New York City; Rev. Alan Hunter, of Hollywood; Dr. Fred Woellner, of U. C. L. A.; Dr. Harry Laidler, of New York; and Dr. C. H. Robertson, of China, were among the speakers brought to

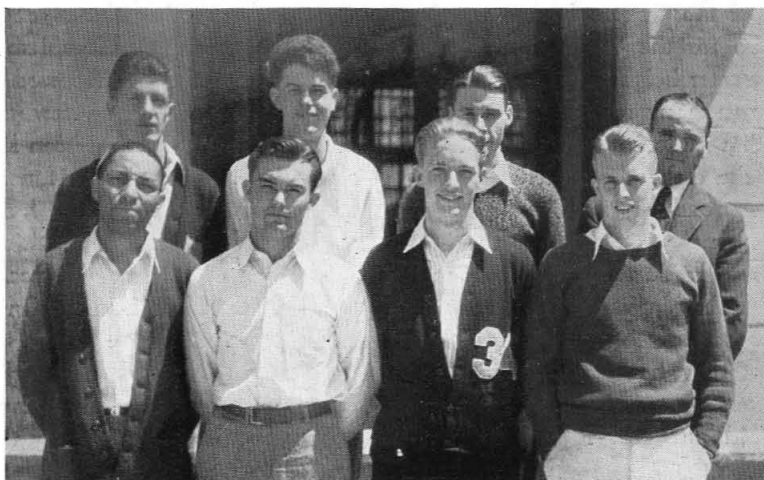
assembly or to regular meetings. A special lecture series on personal religion was set up around Dr. George Irving, and Dr. Paul Popenoe of the Human Betterment Foundation gave a series of lectures.

Conferences away from the campus related to religious activities drew Tech men during the year. The Asilomar Conference at the Christmas Holidays; a conference with Francis Miller of the World's Student Christian Federation at Balboa; a conference with Dr. T. Z. Koo of China, an Economics Parley; several Junior Council of International Relations meetings are among those which deserve mention.

The work of the "Y" is done by a student cabinet and the general supervision of the program is carried out by the Advisory Board of which Mr. Fritz Karge, Tech '18, is the Chairman. Charles Schwieso, Jr., the secretary of the Association is available for the many problems which confront students in the way of finance, employment or in the more intricate realms of personality.

OFFICERS 1931-1932

ROBERT FREEMAN	<i>President</i>
JAMES STANLEY JOHNSON.....	<i>Vice-President</i>
ED CRAWFORD	<i>Secretary</i>
KARL HEGARDT.....	<i>Treasurer</i>



CRAWFORD, LEWIS, BUSHNELL, SCHWIESO
 VENERABLE, HEGARDT, THOMAS, FREEMAN

VARSITY CLUB



FREEMAN

GOODMAN

Varsity Club

A small golden pendant, facsimile of the varsity worn by varsity letter winners, is the distinguishing mark by which the prominent Varsity Club members can be recognized. The fortunate few that are eligible to wear these distinctive "T's" are elected by the active members of the Club from the athletes who have earned a varsity award in football, basketball, baseball, or track. Senior managers and outstanding minor sports lettermen are the only exception to this rule.

Always active in student government and social affairs, the Varsity Club has become one of the most active clubs on the campus. With the added advantages of the student houses which form meeting places for the Club, the Varsity Club has risen to greater heights and now forms a social bond between many worthy men. Thus the Varsity Club fills quite competently an obvious gap left by the disbanding of the social fraternities, and the trend points to the Varsity Club becoming even more important in the future. Plans have been made to have an Annual Alumni Banquet for the Varsity Club members so that the men may get together and discuss the thrilling times that they have had in athletic competition. The meeting together of these men will have a two-fold purpose: it will form a tangible bond between the men that have worked together, and it will reawaken the fighting spirit and desire to win fair and cleanly which intercollegiate competition had instilled in them.

The Varsity Club not only forms the nucleus of the most outstanding social group on the campus, but also does much to promote the intercollegiate athletics. The main purpose of the Varsity Club is to extend and stress the advantages that intercollegiate competition can give to the participants. In no form of endeavor is the spirit of fair play developed as it is in intercollegiate competition. The Varsity Club, with a watchful eye on character, sponsors intercollegiate competition as being one of the most efficient ways to round out a man's life.

At the luncheon meetings, which are held each month, many other things of practical importance are spoken of. Problems concerning the athletic situation are discussed and often Coach Fox Stanton will say a few words of interest. This year the men have been helped very materially by Dr. Floyd L. Hanes in his talk on caring for the athletically buildied body after active intercollegiate competition has ceased.

The end of a successful year was capped by the Varsity Club Dance. On the evening of April twenty-third, a group of jolly merry-makers got together to enjoy the last social function of the year. For many of the men this was the last chance to enjoy the pleasures that the Varsity Club had provided throughout the year. These men, however, had gained a spirit and comradeship that would remain and guide them for the rest of their lives.

VARSITY CLUB

Varsity Club

OFFICERS

BOB FREEMAN.....*President*
CLARK GOODMAN.....*Vice-President*
EDGAR CRAWFORD.....*Secretary-Treasurer*

HONORARY

W. L. STANTON
H. B. CROSBY

H. Z. MUSSELMAN
R. W. SORENSEN

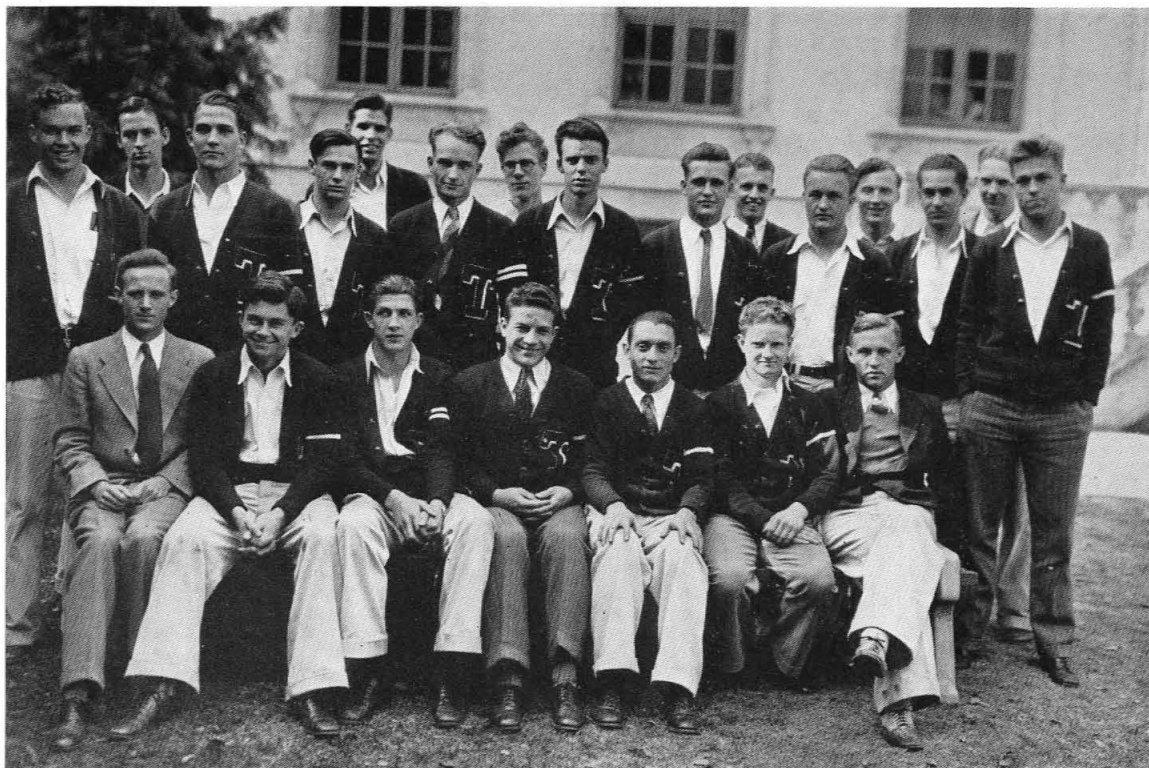
LAYTON STANTON
DR. FLOYD L. HANES

MEMBERS

S. Bamberger
M. Barton
L. Behlow
T. Bernstein
H. Bruderlin
R. Carey
P. Craig
E. Crawford
T. Crawford
J. De Milita
B. Freeman
C. Goodman

L. Goss
D. Graff
E. Green
E. Harshman
F. Hunter
T. Iwasaki
S. Johnson
C. Jones
W. Kent
R. Mass
E. Mathews

J. McLaughlin
J. Mendenhall
L. Morris
W. Pickering
C. Prior
R. Russell
R. Sharp
W. Shuler
F. Skoog
H. Smits
C. Spicer
G. Watson



BEHLOW, BARTON, HUNTER, FREEMAN, GOODMAN, KENT
MCLAUGHLIN, BRUDERLIN, SHARP, JONES, PRIOR, JOHNSON, CRAIG, MATHEWS, BERNSTEIN
PICKERING, RUSSELL, CRAWFORD, MENDENHALL, DE MILITA, BAMBERGER, MAASS

CHEM CLUB

The Chem Club

Since its organization in 1917, the Chem Club has been an important factor in the life of many an Institute student. During the fifteen years of its existence, it has served to provide a means for keeping the club members in touch with contemporary developments in science, especially in the field of chemistry. Furthermore, the Chem Club has done much toward promoting fellowship among students interested in scientific work.

The first of these objects is fulfilled in the technical talks given during the club meetings by members of the Institute staff, by men from the industrial field, or occasionally by members of the club itself. These meetings were held in former years during one noon hour each week; last fall, because of the change in living conditions on the campus, it was found necessary to change the long established custom and to meet only once every two weeks during the fourth hour on Friday morning.

The past year's series of talks was opened with a lecture by Professor Linus Pauling; interesting talks also have been given during the year by other eminent members of the Institute staff. Besides, the club members were fortunate enough to have Dr. Otto Schmidt present at one of the meetings and of having the opportunity of hearing some remarks from him. Among the speakers from the industrial field were included several Tech alumni.

The second of the objects of the club, the promotion of fellowship among its members, has found its fulfillment in the informal lunching together which follows each meeting, in the hikes that have been held from time to time, and in the smoker which was held during the third term. On the whole, the past year has been a very successful one for the Chem Club.

OFFICERS

WILLIAM R. BERGREN.....	<i>President</i>
WILLIAM H. CLAUSSEN.....	<i>First Vice-President</i>
HARRISON S. BACKUS.....	<i>Second Vice-President</i>
WILLIAM J. THOMAS.....	<i>Secretary</i>
BRYANT FITCH.....	<i>Treasurer</i>



IN THE FROSH CHEM LABORATORY

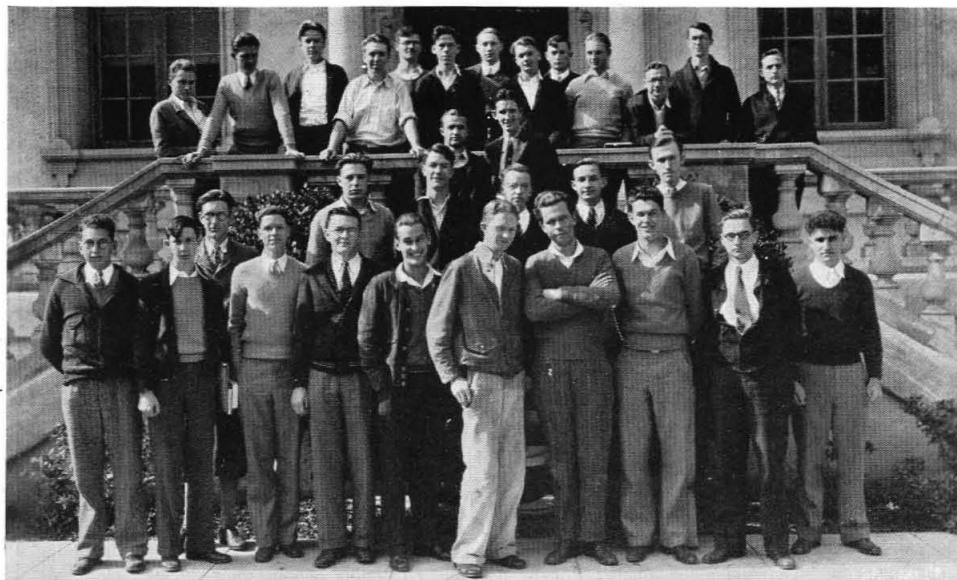
CHEM CLUB

MEMBERSHIP

Thomas Anderson
Thomas Andrew
Emmer Arnold
Horace Babcock
Harrison Backus
Henry Bellis
David Bender
William Bergren
Rupert Brown
Henry Bruderlin
Lee Carleton
William Claussen
Charles Coryell
James Davies
Thomas Deahl
Arthur Dean
Albert Dekker
John Dickson
Russell Doescher
Willis Donahue

Duncan Douglas
Victor Emmel
Harry Estes
Bryant Fitch
Rubin Frieman
Charles Gibbs
Howard Gluckman
Adrian Gordon
Charles Harsh
Robert Herrera
Gerald Isenhower
James Jennison
Russell Kennedy
William Kent
Harold Kelly
William Keyes
Fred King
John Kulberg
Robert LaRue
Wyatt Lewis

Elvin Lien
John Lisol
Earl Olds
Ellsworth Palmer
Robert Pelzel
C. H. Prior
Samuel Rosen
Dante Sarno
Jack Schwartz
Jan Schaafsma
John Sherborne
George Shull
William Stone
Laurence Stuppy
Henry Suhr
William Thomas
A. E. Thompson
George Van Osdol
Chester Wilson
Glen Woodward



DONAHUE, SCHAAFSMA, LISOL, PALMER, CORYELL, KEYES, BROWN, DAVIES, WILSON,
THOMPSON, SHERBORNE, STONE, THOMAS

ARNOLD, KENNEDY

FITCH, DICKSON, DEAHL, ANDERSON, HARSH, BACKUS

GLUEKMAN, EMMEL, JENNISON, BABCOCK, DEKKER, KENT, BERGREN, LEWIS, ESTES,
DOESCHER

American Institute of Electrical Engineers
C. I. T. Student Chapter

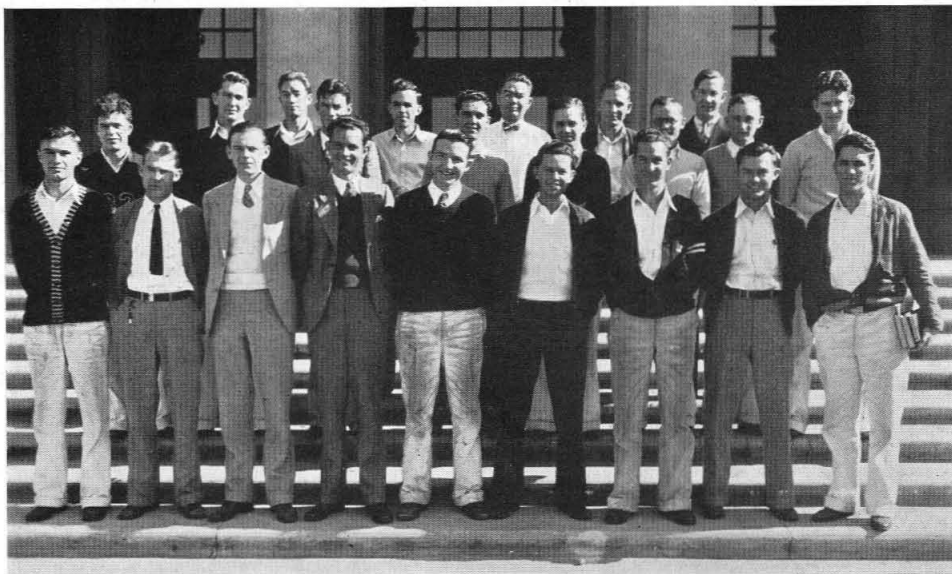
Because of the large number of graduate electrical engineers studying at the Institute this year the local organization has had a far larger membership than ever before. A number of very successful meetings have been held.

A variety of topics have been presented and discussed at the regular meetings. Mr. Howell, representing Sterling Motors, discussed the design and developments in their newer motors. One meeting period was given to a motion-picture showing in detail the construction of the S. S. President Coolidge by Westinghouse Mfg. Co. Mr. Gaylord, chief electrical engineer on the Los Angeles Aqueduct, presented some of the electrical problems they have to face on the great new water project. A discussion of the problems in construction of long distance cables was discussed by a representative of the Bell Telephone Company.

Together with several inspection trips and regular meetings a successful year was completed

with the annual joint A. I. E. E. Conference held in connection with the student electrical engineers of S. C. This annual gathering is composed of prominent professional electrical engineers as well as students of the University of Southern California and Cal Tech. It serves the purpose of acquainting the students with the actual problems that arise in the engineering world and with the latest developments in the field. The conference was held this year at S. C., after the meeting an inspection trip of the campus was conducted, special demonstrations being presented in the electrical engineering laboratories.

The new living conditions on the campus have caused almost a complete abandonment of the old luncheon meetings, only a very few having been held this past year. The old timers look with sorrow at the passing of these monthly luncheons.



HUTCHISON, BERRY, GOULD, GRIEST, RANDALL, BOWLER
 ADAMS, WOLFE, LIND, SMITH, MORGAN, DETMERS, BRADBURN
 SCHUHART, BARNETT, HODGE, ST. CLAIR, LYONS, KILLGORE, MATHEWS, HEGARDT, RULE

A . I . E . E .

OFFICERS

PATRICK B. LYONS.....*President*
ROBERT W. ST. CLAIR.....*Secretary-Treasurer*
PROF. ROYAL W. SORENSEN.....*Faculty Counsellor*

MEMBERS

Adams, William A.	Libby, Alexander F.
Amann, Jack	Lind, Carl F.
Atwood, Albert W., Jr.	Lyons, Patrick B.
Berry, William L.	Mathews, Thomas E.
Bowden, F. W.	McLaughlin, James P.
Bowler, Gordon E.	Miller, Glen W.
Bradburn, James R.	Morgan, Wendel A.
Bruderlin, Henry H.	Myers, Glen, Jr.
Buffum, Charles E.	Olmsted, Ennis
Chesson, George H.	Randall, John A.
Graff, Donald B.	Read, G. Wilber
Griest, R. Howard	Rule, Bruce
Hegardt, Karl	Schuhart, Mervin A.
Hodge, Mills S.	Searle, Richard A.
Huntley, Walter P.	Shuler, William
Hutchison, John A.	Smith, Warren H.
Iwasaki, Tetsuo	St. Clair, Robert W.
Killgore, Cecil	Wolfe, Halley
Lewis, George E.	Wright, Eldon E.



LEWIS, MACKEOWN, ELLIOTT, GAINDER, VAIL, SORENSEN
LINDVALL, MAXSTADT, HAEFF, BREITWIESER, OLMSTEAD, MORGANSTIERNE
JOHNSON, MILLER, BATCHELDER, COBINE, GIEBLER, MILES
KUHN, SHEFFET, HOUSE, SWIFT, AMANN, TARBET

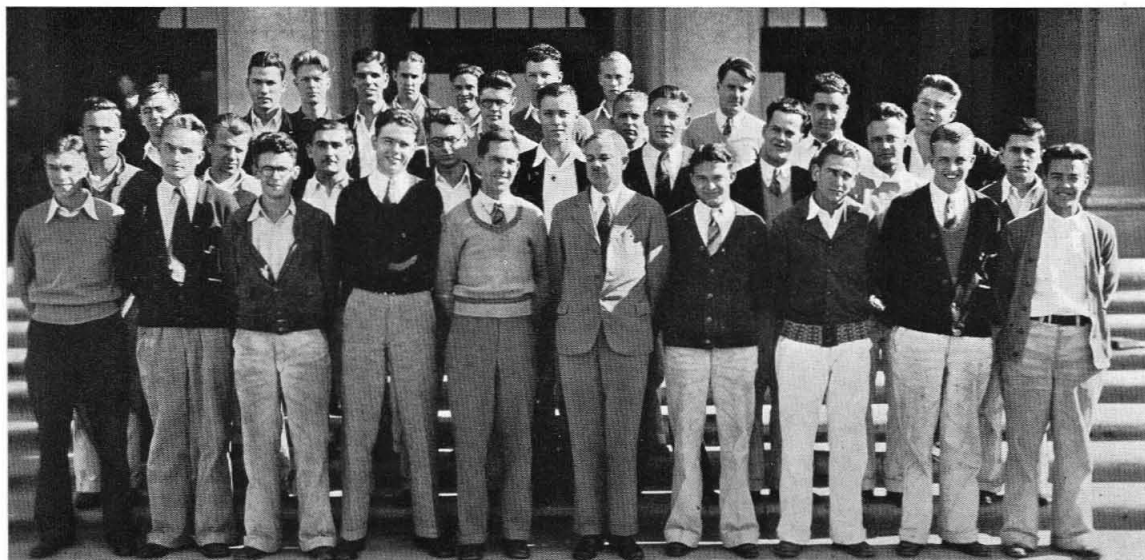
American Society of Mechanical Engineers
C. I. T. Student Chapter

OFFICERS

ROBERT C. WHERRITT.....*President*
BENARTHUR C. HAYNES.....*Vice-President*
STANLEY KEENAN.....*Secretary-Treasurer*
W. F. SCHULTZ; D. WASHBURN.....*Publicity*
R. CAREY; W. C. ROBINETTE.....*Program*

MEMBERS

Arnerich, Paul Frank	Getzman, Ned	Polk, Wendell R.
Barton, Millard V.	Graham, Andrew R. (Jr.)	Pownall, Henry
Bovee, John L. (Jr.)	Haynes, Benarthur C.	Rice, Winston R.
Burman, P. G.	Herlin, Roby G.	Robinette, W. C.
Carey, Robert V.	Hibbs, Frank J.	Rockefeller, W. Curtis
Childers, Eugene	Jones, Charles Wright	Schultz, William F.
Crater, Myron	Keenan, Stan	Terrill, Thomas
Dack, Bruce M.	Lipp, James E.	Washburn, Dana E.
Efromson, Phil. C.	Lockhart, Ray	Watson, George G.
Fletcher, Robt. O.	McCleery, Walter L.	Warfel, John
Foss, Edwin	Macdonald, Robt. G.	Weinstein, Nicholas
Freeman, Robert B.	Mead, Robt. R.	Wherritt, R. C.
	Oelschlager, Ray	



WASHBURN, MAHR, KEENAN, FOSS, OELSCHLAGER
GETZMAN, ARNERICH, BARTON, VAN REED, POWNALL, SCHULTZ, ROBINETTE
WARFEL, BURMAN, WEINSTEIN, MCCLEERY, MEAD, MACDONALD, CRATER
ANDERSON, JONES, SWART, CAREY, WHERRITT, PROF. DOUGHERTY, POLK, HIBBS, FREEMAN, ROCKEFELLER

*American Society of Civil Engineers
C. I. T. Student Chapter*

OFFICERS

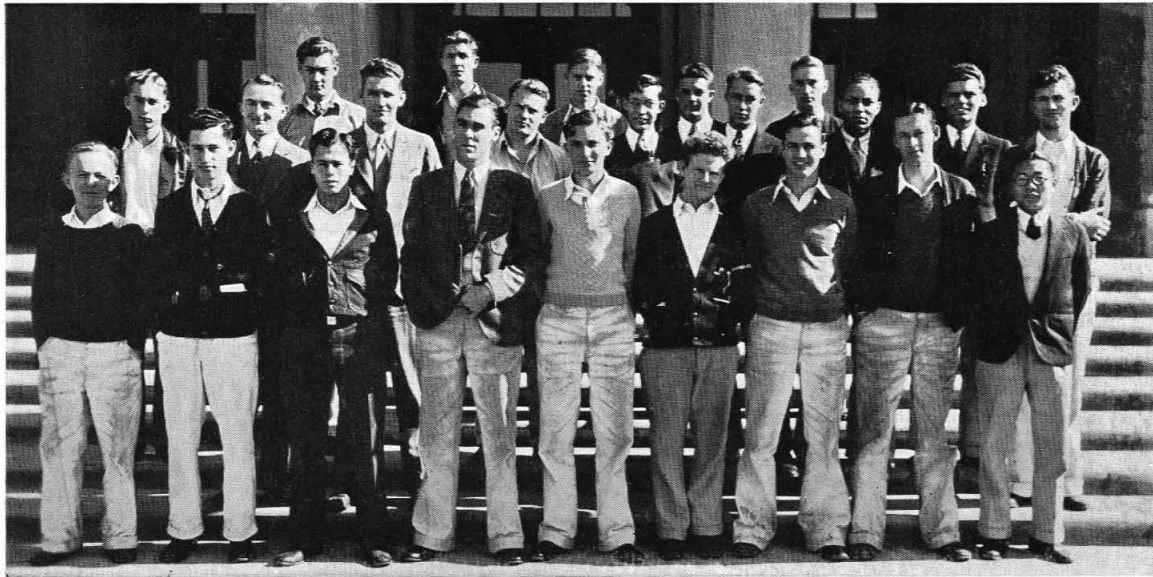
PAUL PARSONS.....*President*
CLIFFORD CAWLEY.....*Vice-President*
RICHARD THOMAS.....*Secretary*
WORRELL PRUDEN.....*Treasurer*

MEMBERS

Ayers, John
Bamberger, Sidney
Behlow, Lewis
Boothe, Perry
Cawley, Clifford
Chambers, Jack
Cox, John
Crawford, Edward
Crutchfield, Richard
Dames, Trent
Hamlin, Fred

Hofman, Oliver
Kartzke, Paul
Leeper, Laverne
Lewis, Charles
Mendenhall, John
Monning, John
Moore, William H.
Parsons, Paul
Pickett, George
Prudames, E. Mott
Pruden, Worrell

Roach, Harold
Saylor, William
Scholtz, Walter
Schoeller, Philip
Sluder, Darrell
Spicer, Charles
Thomas, Richard
Venerable, Grant
Wheeler, William
White, M. P.
Wong, David



HOFMANN, CRAWFORD, MONNING, MENDENHALL, SPICER
MOORE, CAWLEY, SCHOELLER, PRUDEN, PRUDAMES, PICKETT, VENERABLE, CHAMBERS, HAMLIN
COX, ROACH, SCHOLTZ, PARSONS, DAMES, BAMBURGER, AYERS, BEHLOW, WONG

VIEWS

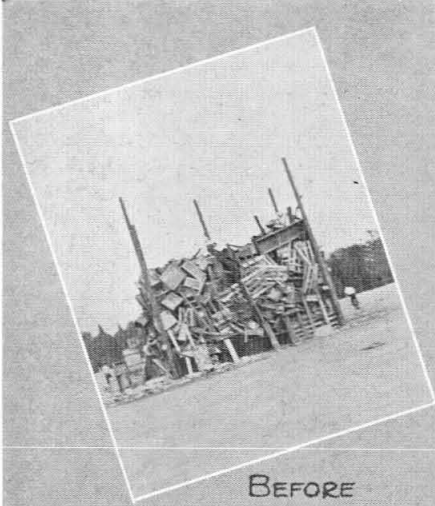


Snapshots

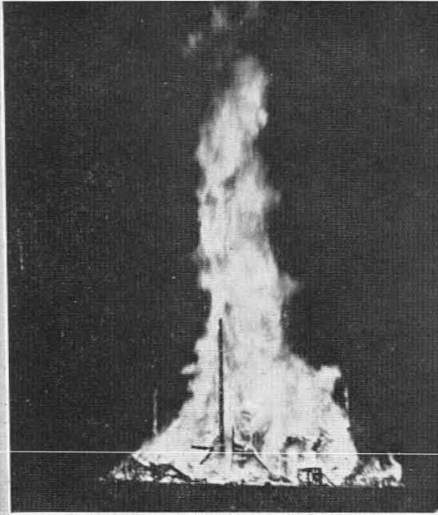


JACK'S CHAMBER

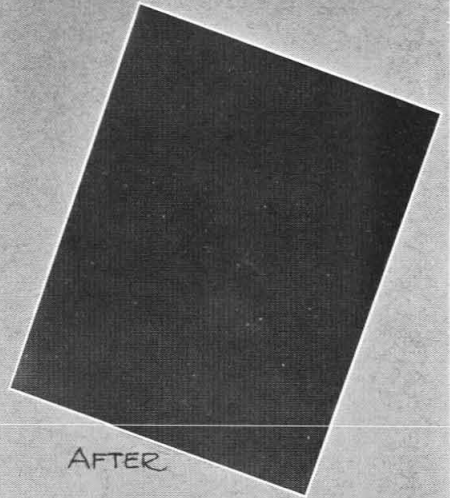
*by the
Candid Camera Man*



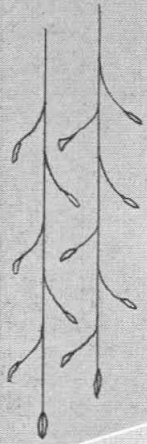
BEFORE



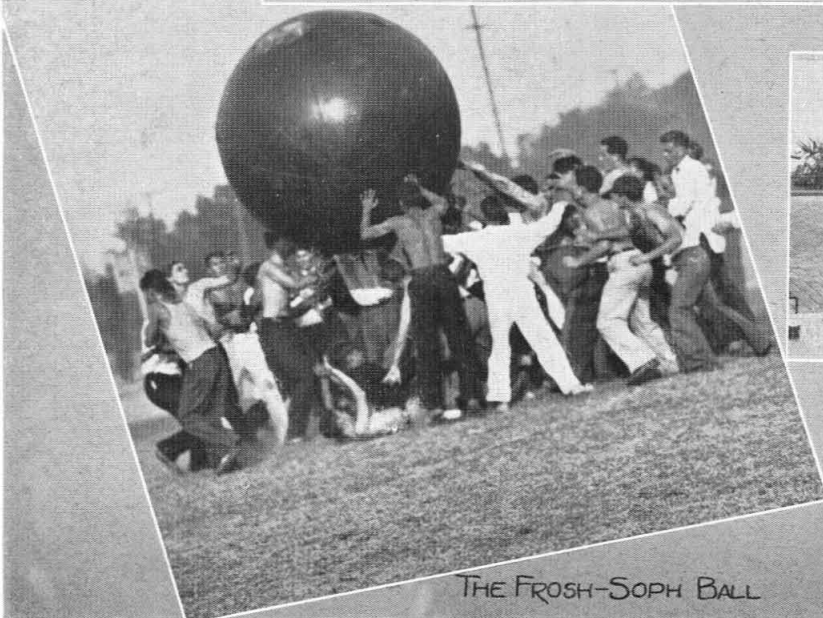
AND



AFTER



DRACGO ZO



THE FROSH-SOPH BALL



COMPOSING
"THE
TIGER RAG"

WICKED
WIGET





REDLANDS
CAL. TECH.
4 QUARTER

HOLD 'EM GANG!

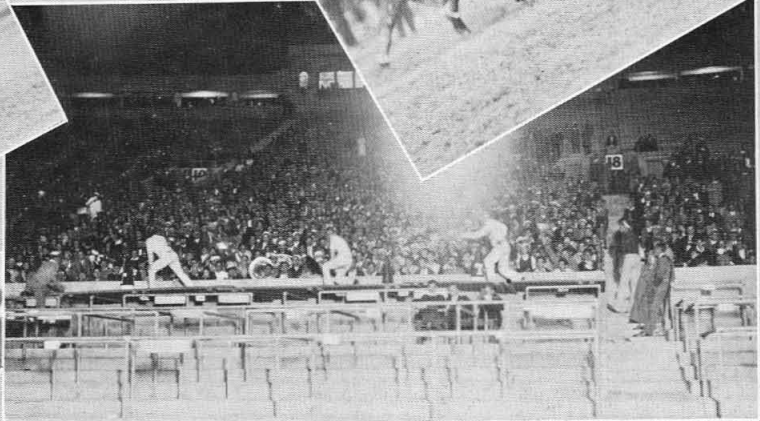


TIT
FOR
TAT

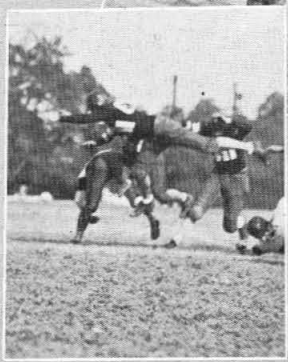


JUST PLAYIN' AROUND

KEELEY



THREE (COUNT 'EM) YELL LEADERS



A FAIRY STORY



ALL THE WAY
FROM THERMOPYLÆ



DABNEY LOUNGE



NOT BAD LOOKING-
I MEAN THE GIRL



A FORMAL



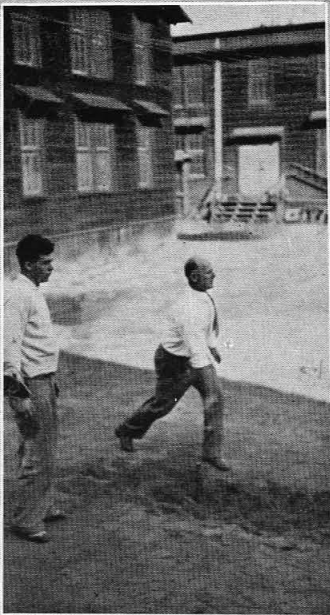
BIRTH COMES
TO THE ARCHBISHOP



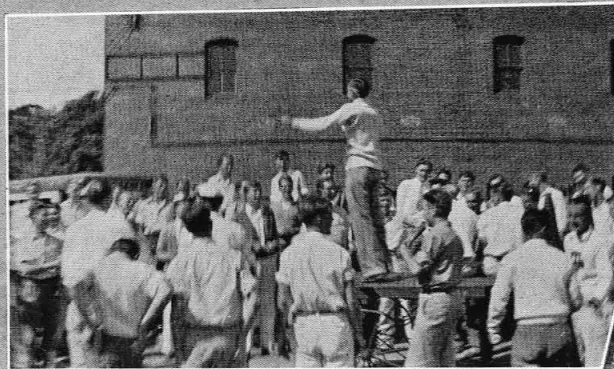
AT THE HOME FOR INDIGNANT SAILORS



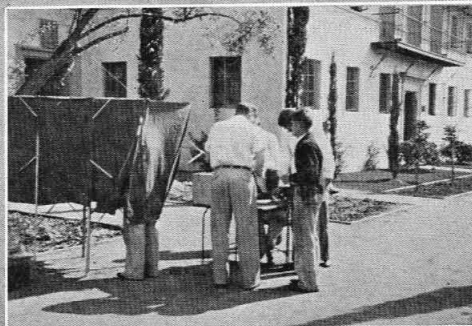
AT LAS'!



TIME OUT



GIVING THE MEN THE MORGAN JITTERS



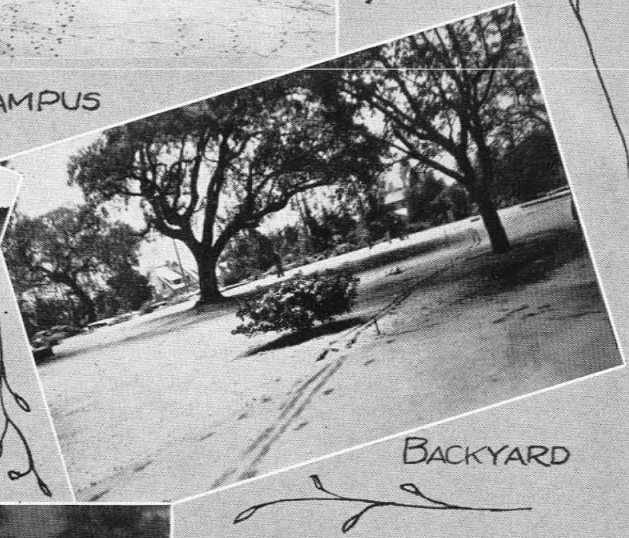
BETWEEN
YOU AND ME AND
THE POST, I THINK



THE CAMPUS



ATHENÆUM



BACKYARD

FOR THE FIRST
TIME IN FORTY-SEVEN
YEARS, SNOW FELL IN

THE CITY OF PASADENA
ON FRIDAY MORNING,
JANUARY 15, 1932.



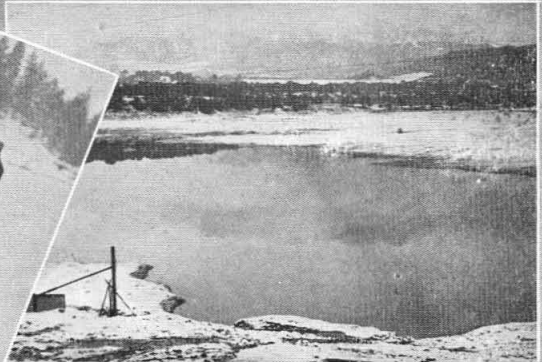
THOSE WERE
THE DAYS

"I'LL TELL
MY MOTHER"





BROODING



LAKE PASADENA!



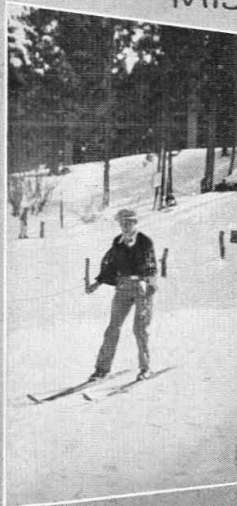
RENT YOUR SKI'S
MISTER?



AW!



A BIG PINES SNOW STORM



OH BOY



WHOOPS, MY DEARS!



DRIBBLING

DROPPING

DROOLING

"LOOIE'S HUNGRY FIVE"

LOST-ONE BALL

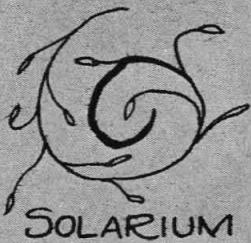
ONE OF THE TRAVEL PRIZES

A LOOSE MOMENT

FOUR OUT OF FIVE PLAY IT



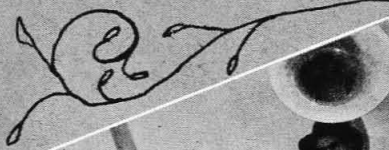
THE NAVAL RESERVE



SOLARIUM



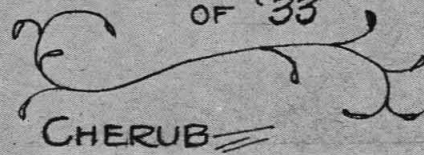
THE HACHA-HACHA BOYS



POSING



THE SPIRITS OF '33



CHERUB



GONE BUT NOT FORGOTTEN

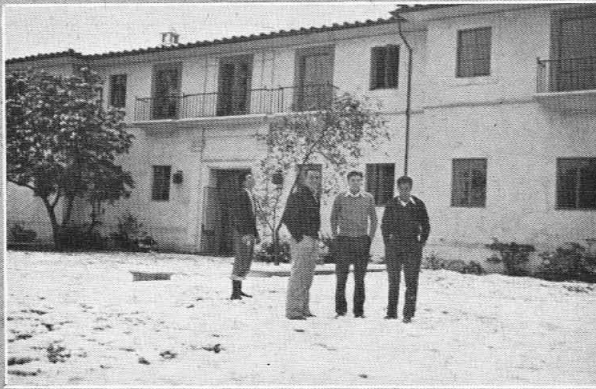




LATE FOR DESSERT

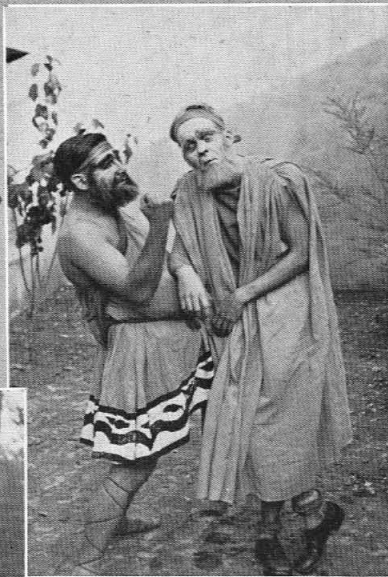


NEW CLOTHES

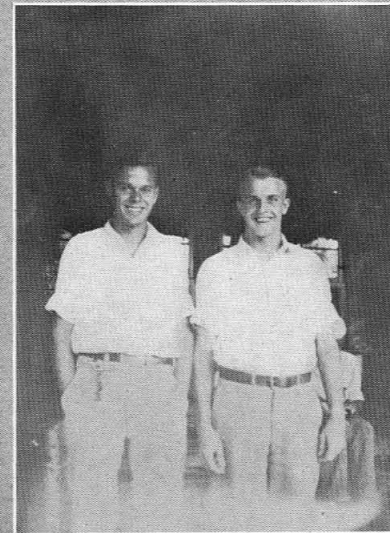
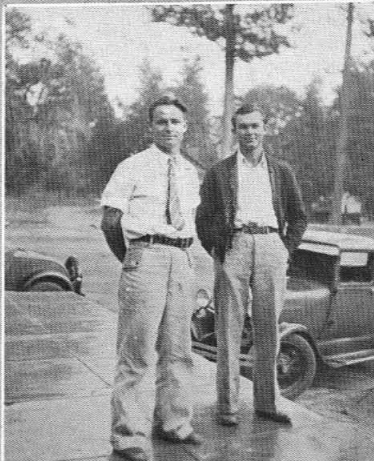


SHIVERING

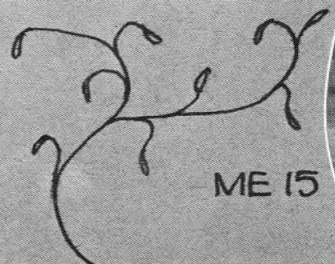
CREDITOR AND DEBTOR



A COUPLE OF -



THAT STRASSKA SMILE



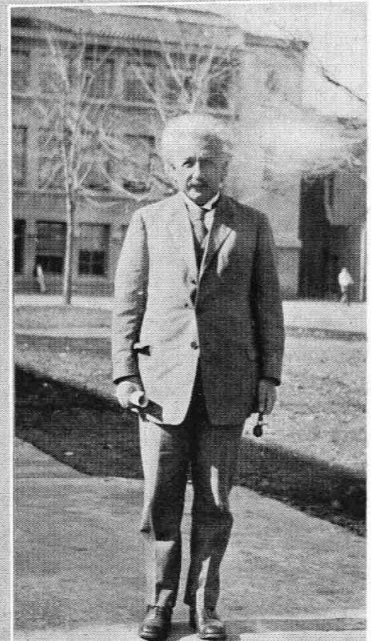
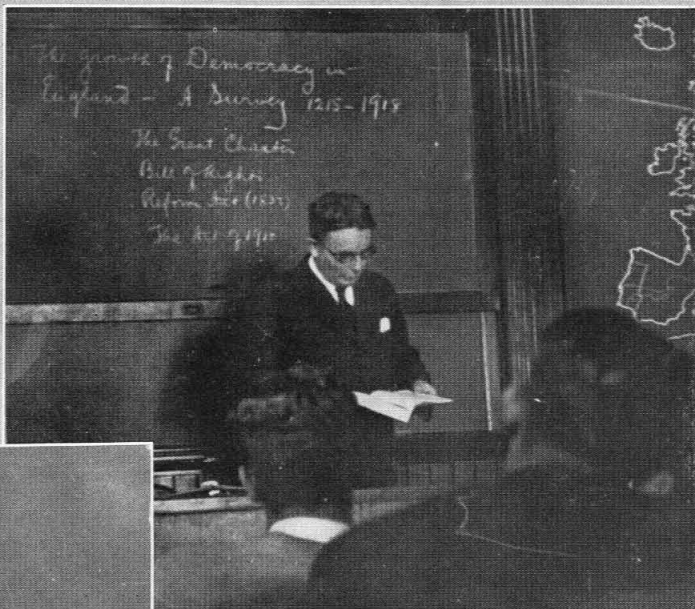
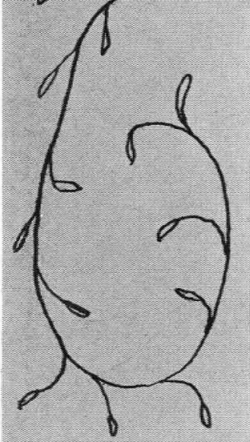
ME 15





"PARADISE LOST"

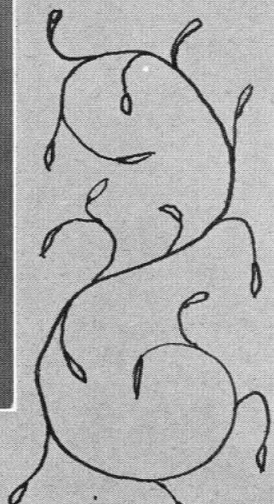
"PARADISE REGAINED"

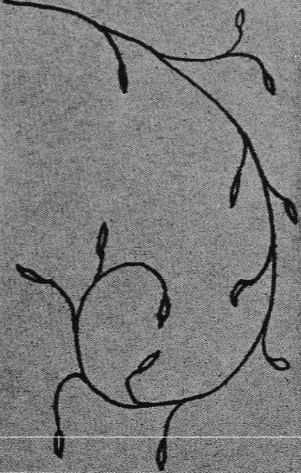
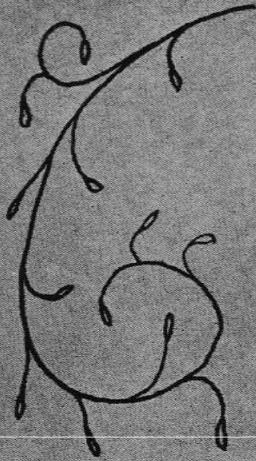


LECTURE HOUR

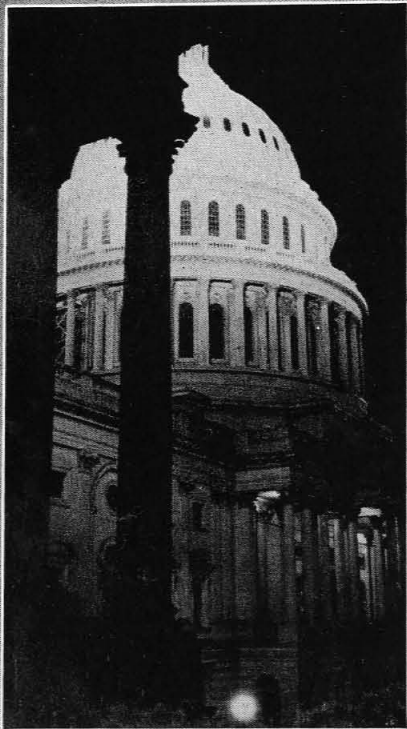


SACERDOTAL
DIGNITY

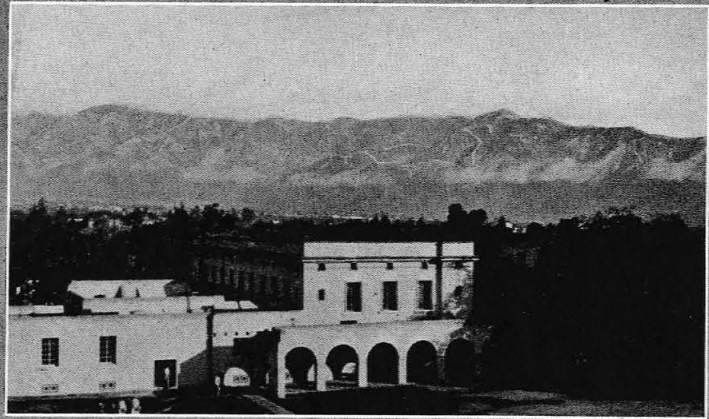




THE PASSING SHOW



CITY HALL AT NIGHT

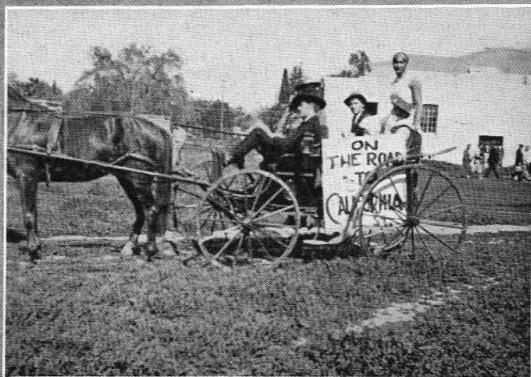


PANORAMA



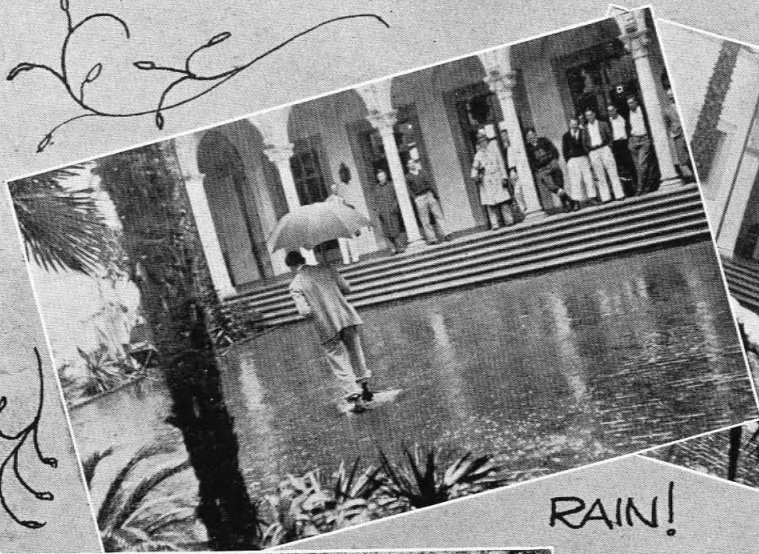
HOW, WHEN, WHERE, AND WHY.

WAY OUT WEST

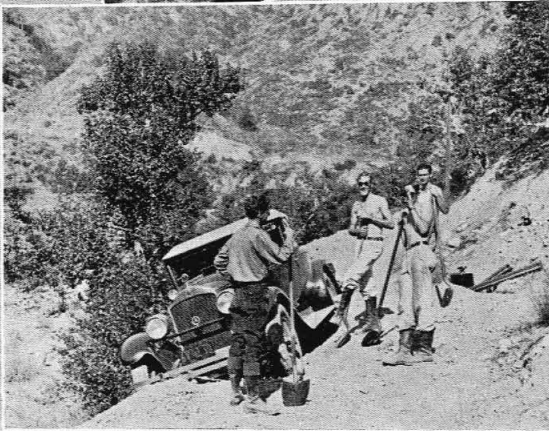


SUN BATH

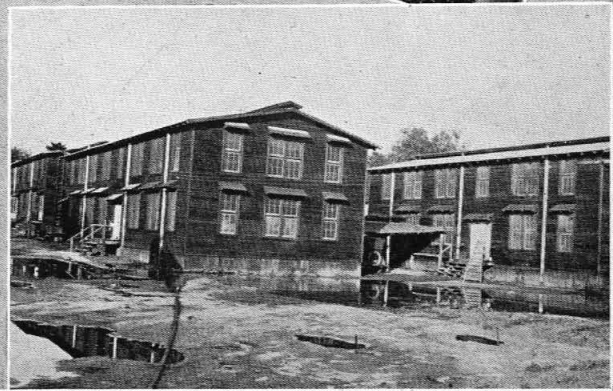




RAIN!



WHAT IT TAKES TO
MOVE MOUNTAINS



FROM BARRACKS
TO BOAT-HOUSE
IN TWO INCHES

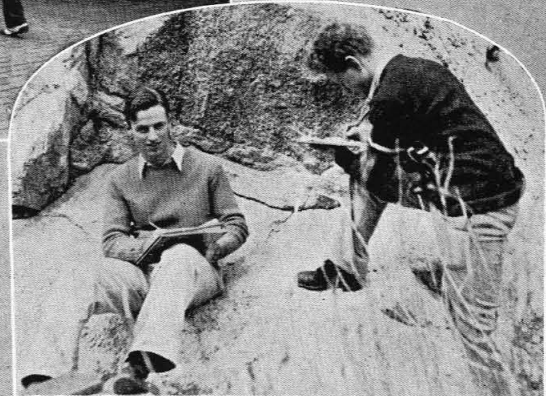
IF YA GOTTA GO —



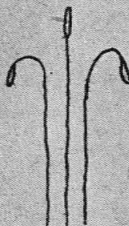
— YA GOTTA GO

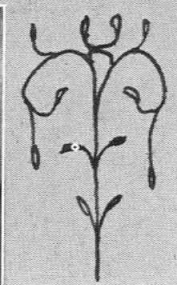


MEAL TIME & MONKEY SHINE



ON THE ROCKS

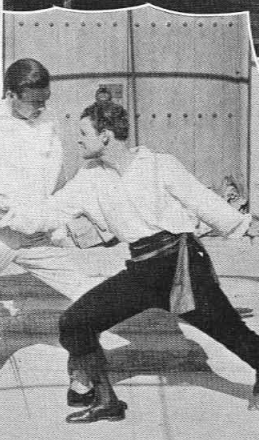
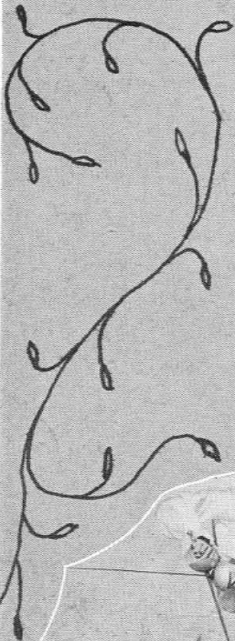




BAR-ROOM CLASSICS



THE KING AND THE QUEEN

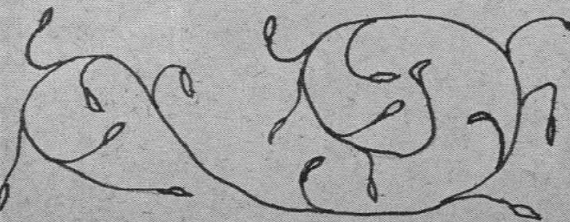
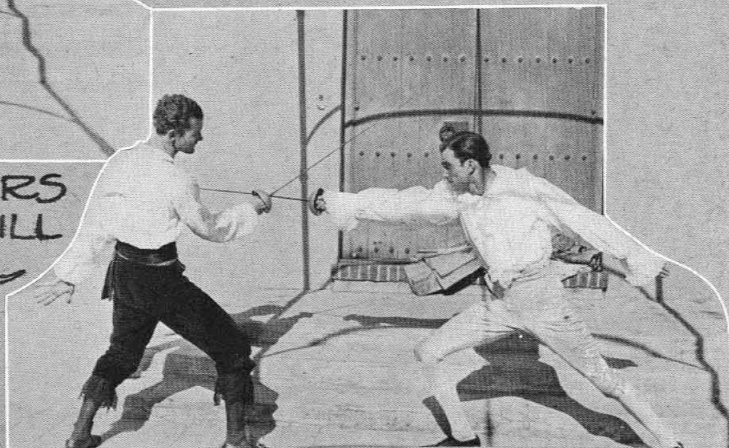


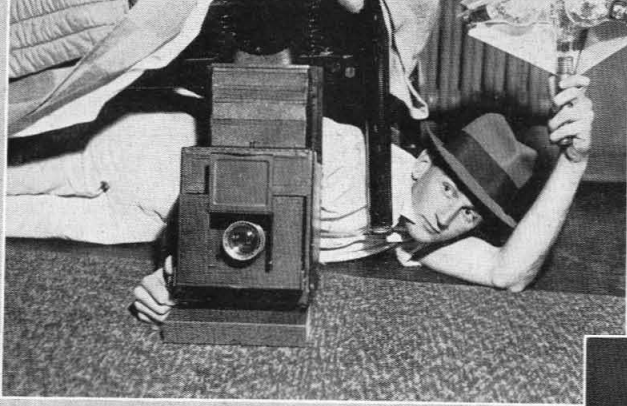
GILBERT'S "ROSENCRANTZ AND GUILDENSTERN"



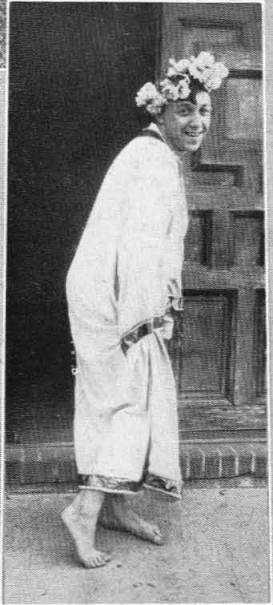
TOM LIEB

TWO PLAYHOUSE FENCERS EXHIBITING THEIR SKILL



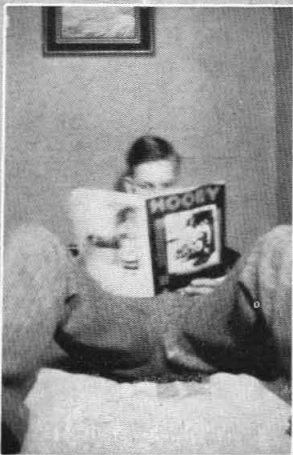
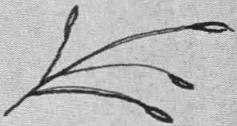


THE CAUSE OF IT ALL



OPHELIA

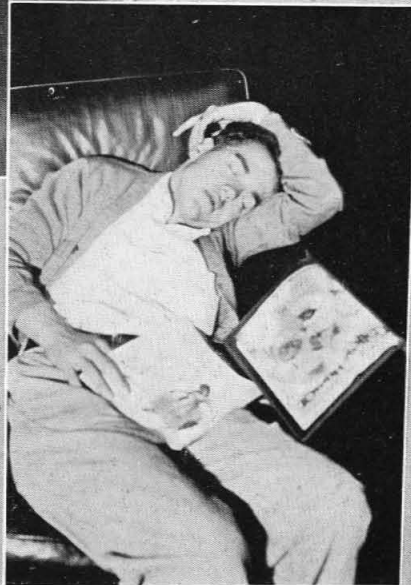
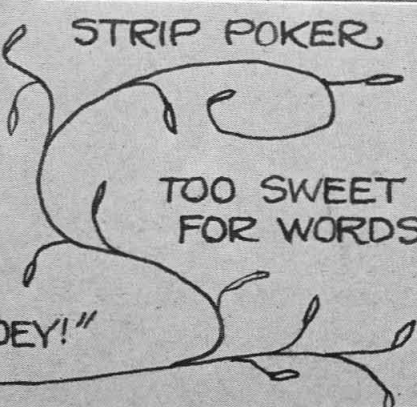
OH HO!
YOU DIRTY
VILLIAN—
YOU!



STRIP POKER

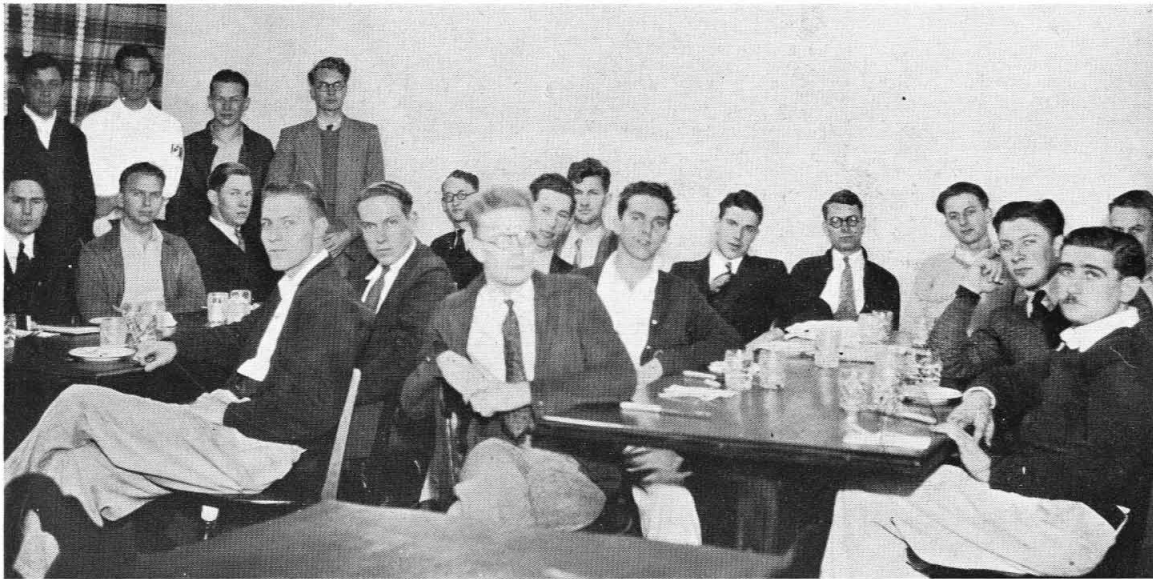
TOO SWEET
FOR WORDS

THAT'S RIGHT—"HOOEY!"





Student Publications



BIG T STAFF AT LUNCHEON MEETING

The Big T
The California Tech

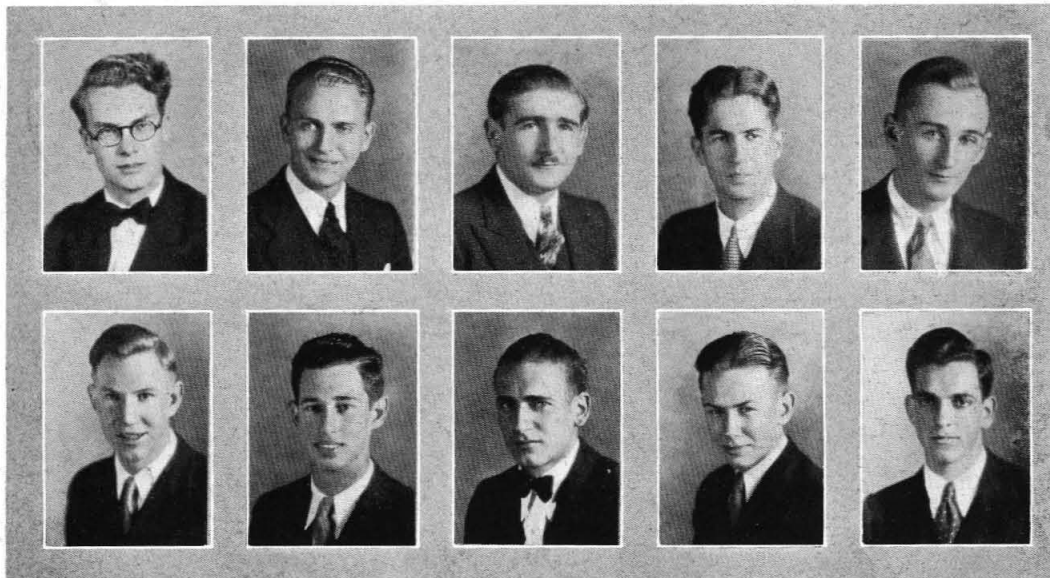


ALBERT W. ATWOOD, JR. (Editor)

The Big T

This year's staff has had to meet many difficult problems in the planning and financing of the yearbook. It was early seen that it would be necessary to cut the budget by a large sum compared to that which was expended on last year's book. This meant many modifications in the editorial and decorative divisions of the annual. In spite of the decreased budget the staff has done its utmost to maintain the standard set by last year's All American annual.

It has become customary in Cal Tech annuals to carry out some scientific theme as the motif of decoration. This year Astrophysics was chosen as being the newest of sciences to be found on the Tech campus. The editor was fortunate in obtaining two men to work on this theme. Frank Hibbs, a senior whose hobby is astronomy, acted as technical adviser, while Clarence Heizer, a talented artist, actually put the ideas on paper.



BERKLEY	HAYNES	WEINSTEIN	TERRILL	DETMERS
<i>Asst. Editor</i>	<i>Photo Editor</i>	<i>Humor Editor</i>	<i>Sports Editor</i>	<i>Snapshot Editor</i>
BOWLER	ROACH	HIBBS	ALLARDT	HARRIS
<i>Senior Editor</i>	<i>Managing Editor</i>	<i>Art</i>	<i>Art</i>	<i>Mounting</i>

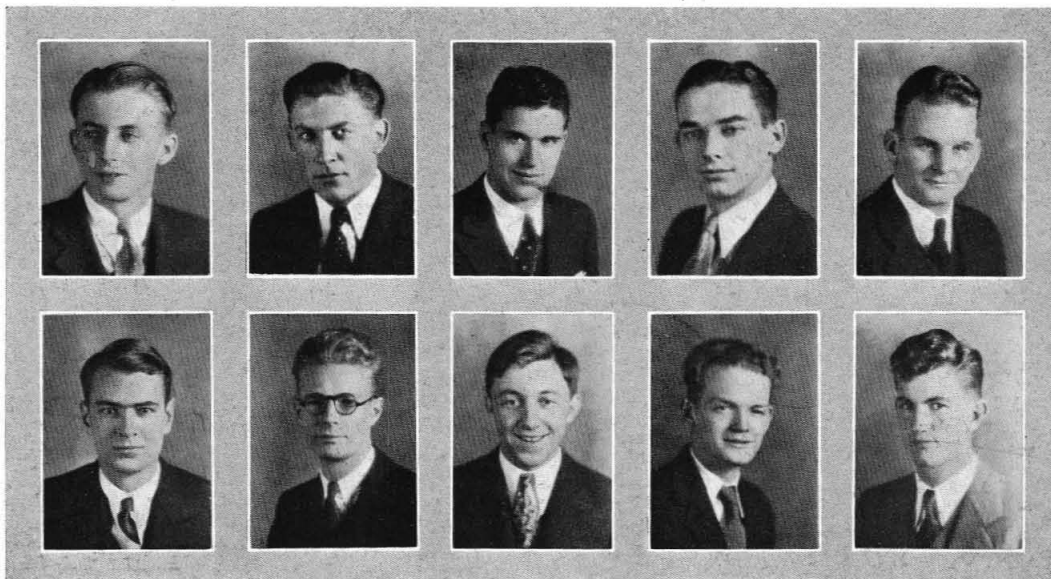


ROBERT O. FORT (Business Mgr.)

Even journalists must have their fun now and then so last fall due to the courtesy of the Community Playhouse the entire staff was presented with tickets to the fascinating presentation of Molnar's *The Play's The Thing*.

Much credit is due Albert Atwood, editor and Bob Fort, business manager, for giving so un-sparingly of their time and best efforts in their attempt to put out a fine annual and still make it

pay. There are of course many men who had a hand in creating this annual but to Merrill Berkley, Ben Haynes, Tom Terrill, Fred Detmers, Gordon Bowler, and Harold Roach, who bore the brunt of the burden, the Student Body owes many thanks. On the Business Staff McCleery, Macdonald, Isenhower, Grossman, and Clark are especially to be mentioned for their able work.



GROSSMAN	MACDONALD	CLARK	ISENHOWER	SECORD
<i>Advertising</i>	<i>Advertising</i>	<i>Circulation</i>	<i>Advertising</i>	<i>Advertising</i>
MCCLEERY	PATTON	SCHILLER	WARREN	HAMLIN
<i>Business</i>	<i>Photos</i>	<i>Activities</i>	<i>Secretary</i>	<i>Photos</i>

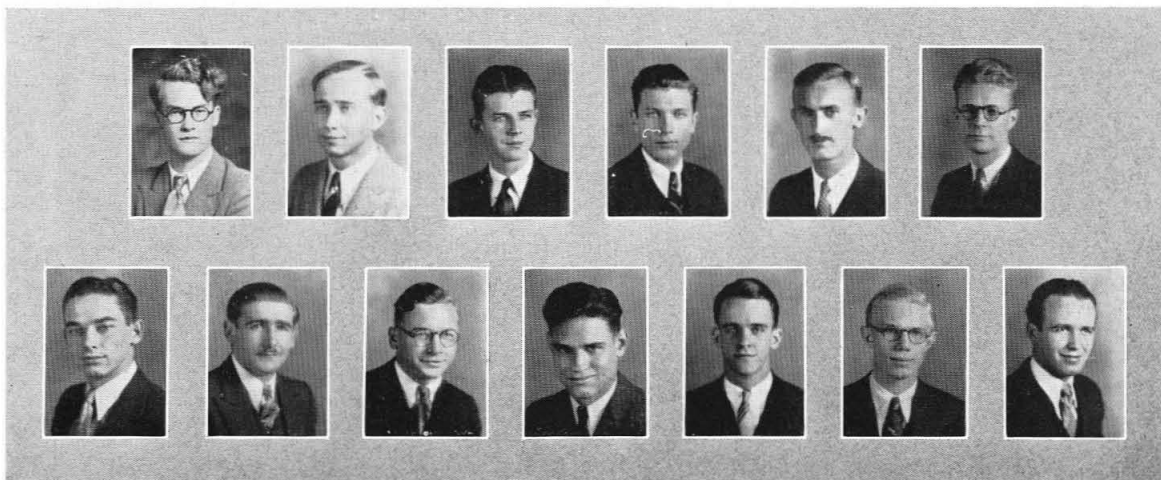


THOMAS S. TERRILL (Editor)

The California Tech

Success finally consented to shine favorably upon the efforts of the Associated Students to publish a weekly newspaper. During the past year, the California Tech has undergone surprising rejuvenation both editorially and financially. The financial department has made its publication so prosperous, that a bewildered student body is referring to the sheet as a "shopping news."

T. S. Terrill acted in the capacity of Editor-in-Chief up till last March at which time Lee Carleton took over the reigns of the editorship. Cecil Killgore was the Business Manager during this period. Between the two of them, they managed to get the paper out on time all during their term of office and make it pay at the same time. The Associated Students are appreciative of the efforts of these men and offer them a vote of thanks.



BERKLEY DUNBAR CARLETON CRUTCHFIELD GRAFF PATTON
Reporter Ast. Copy Ed. News Ed. Sports Ed. Reporter Reporter
 ISENHOWER WEINSTEIN SHERBORNE KEENAN MILLIKAN POULSON RITTER
Reporter Ast. Sports Ed. Make-Up Ed. Reporter Reporter Editorials Drama Ed.

CALIFORNIA TECH

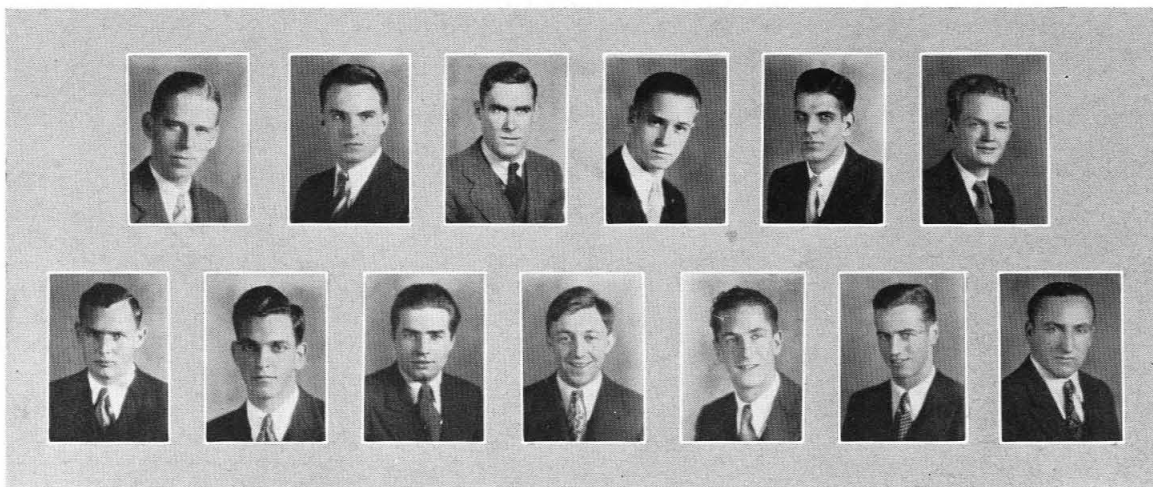


CECIL KILLGORE (Business Manager)

Not quite so far out in the front where they can be seen by the audience, are the editorial and business staffs. Excellent work was done in both departments by the undergraduates serving. On the editorial staff Lee Carleton served as News Editor. Carleton's service has been long and reliable and he was justly deserving of the editorship to which he has been elected. John Sherborne served faithfully as Make-up Editor, while the inimitable Hal Schiller handled the uninspiring task of copy reading. John Ritter

supplied the columns with theater write-ups, while Don Poulson edited the editorial page.

Sports news forms an important element in the news service rendered by the California Tech. Excellent matter was written and published, for one term by Walt Scholtz, and for the remaining two terms by Dick Crutchfield. Aided by Nick Weinstein as assistant sports editor, these worthies have supplied the campus with sports stories galore.



MONNING	MYERS	PARSONS	NEWTON	BARTON	WARREN	
<i>Circulation Asst.</i>	<i>Adv. Mgr.</i>	<i>Layout Mgr.</i>	<i>Assistant</i>	<i>Accountant</i>	<i>Secretary</i>	
CORTELYON	HARRIS	ETZ	SCHILLER	MATTHEWS	AYERS	ROBERTS
<i>Reporter</i>	<i>Assistant</i>	<i>Reporter</i>	<i>Copy Editor</i>	<i>Adv. Mgr.</i>	<i>Ast. Adv. Mgr.</i>	<i>Copy Mgr.</i>

F U T U R I S

What does the future hold for astronomy? Will man make as much advancement during the next two or three hundred years as he has during the last? Two thousands of years have passed since Thales took the study of the stars out of the realm of mysticism, and gave it the rudimentary beginnings of a science, but even now few people realize the important part astronomy plays in our lives. It gives us our time, guides our ships, increases our knowledge of atoms and energy, and does countless other unsung deeds. There can be no doubt, but that it will play a far greater part in the future.

The scene illustrated by the artists seems fantastic and unreal, but is it? Does the future hold the mystery of the Martian Canals, the key to the history of the lunar mountains, the secret of the atom? Men shall see in their giant telescopes of the future what we can only imagine.





Eyesight and Education

ELBERT HUBBARD SAID: "The world reserves its richest reward for but one thing, and that is initiative—the ability to do the right thing without being told."

This accomplishment comes principally by understanding gained through education and training, and when the opportunity to learn is present we should make the most of our good fortune.

Many unsuccessful students are unaware that defects in vision may have contributed to their failure. At the first sign of eye strain and attendant discomforts, it behooves those engaged in study to consult a qualified eye physician, and if glasses are prescribed, to have them made and fitted by a Guild Optician.

This procedure insures the ultimate in comfort, good appearance and TRUE ECONOMY.

Your family doctor or any Guild Optician will direct you to competent Eye physicians.

ARTHUR HEIMANN

GUILD OPTICIAN

36 NORTH MADISON AVE. ♦ PASADENA

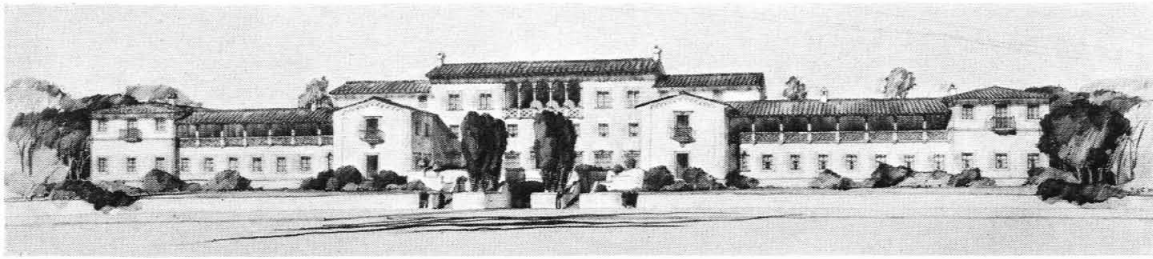
PHONE WAKEFIELD 7304

In Los Angeles: 542 South Grand Avenue

Parking facilities free to patrons



HUMOR



WE have all been intensely interested in the development of the new Student Living Houses, but few of us stop to consider which organizations have made our living in these new homes just a little bit more comfortable as a part of their perennial planning. Hence to these firms, which are listed below, we are especially indebted.



CROWN HOTEL AND RESTAURANT SUPPLY

BARBARA ANN BAKERY

ROAL LAUNDRY
House Linen and Student Laundry

CROWN CITY DAIRIES

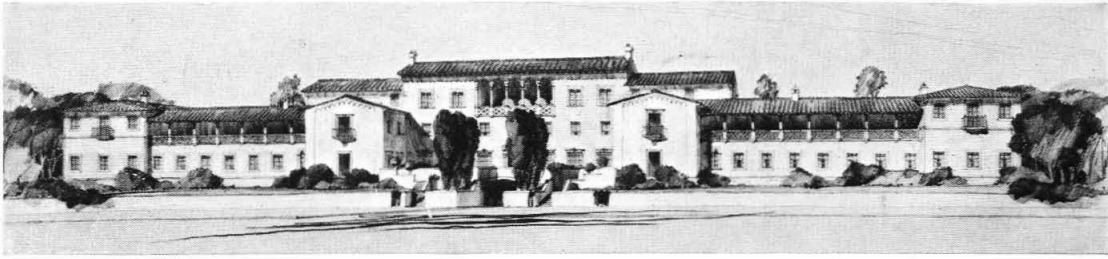
ROY E. DYER
Fresh Fruits and Vegetables

WM. C. CROWELL
Builder





HUMOR



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ROY E. DYER

SHELLING FRESH PEAS AND LIMAS

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The Royal

for

“UNEXCELLED LAUNDERING *and*
DRY CLEANING

Telephone Colorado 4311





HUMOR

Wm. C. Crowell

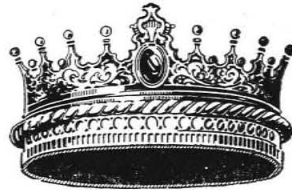
Builder

495 So. BROADWAY
PASADENA, CALIFORNIA

VETTERL BROS.

Phones {STERLING 3716
{NIAGARA 3531

COMPLIMENTS



Crown Hotel and Restaurant Supply

"THE BEST" in FRESH and SMOKED MEATS

1368 NORTH LAKE AVE.

PASADENA, CALIFORNIA





HUMOR

DISTINCTLY DIFFERENT

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BREAD

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BARBARA ANN BAKING CO.

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Remember us*

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*Dance and Entertainment
Programs given particular care
“Quality Printing at Fair Price”*

WE PRINT THE CALIFORNIA TECH

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1108 Fair Oaks Ave., South Pasadena

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ELIOT 2552



Nil Nite
 IN AWARD SWEATERS
 THE GREATEST NAME



ON this name rests not only the responsibilities incident to leadership, but also a trust, if you please . . . for is not the son entitled to as near perfection in his Award Sweater as the father?



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 OLYMPIA . . . WASHINGTON

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WHERE THE EDITORS SPEND THEIR
 VACATIONS

(Our Personal Suspicions)

THE NEW YORKER

Palm Beach,
 Bermuda,
 Lake Placid,
 The roof of the Waldorf Astoria,
 Under a convenient table.

VANITY FAIR

The Riviera,
 St. Moritz,
 Place de la Concorde,
 Piccadilly,
 Under a convenient table.

BALLYHOO

Sewage disposal plant,
 Greenwich Village speakeasies,
 North River piers,
 Columbia Burlesque shows,
 Under a convenient bed.

—Widow.

Ed: What would you call a young girl's recollections of her former sweethearts?

Eddie: Laps of memory.—Dodo.

The hasher is the man that gets all of the seconds and most of the firsts.—Chaparral.

"She claims old French ancestry."

"Yes, she's so Frank that she calls a spade a pique."—Chaparral.

THE WONDER CAR OF THE CENTURY

Will be on display at the Club all summer

The Cooperative Motors, Ltd.

Take pleasure in announcing

THE LAVINIA STRAIGHT

FLUSH

A full house on wheels—box cars galore. And how about a poker tournament? Come around and take a ride in this wonderful new car. It rides—easy, so easy, that for your safety we ask that you bring and wear rubber bathing suits. If you are satisfied, you may enter the contest of declamatory expressions for the benefit of the depressed and ignorant.

Ride in one today—you have missed nothing yet. Examine the structure throughout—look at those exquisite rubber springs—all colors, of course. And those lights, plenty of red ones to denote your occupation—busy signs. Read our descriptive booklet on the uses of the Lavinia Straight Flush—nothing like it.

One of the most distinctive features is the Pick and Bowl (Pickering Bowler Co.) Ignition System, installed by the inventors themselves. A real touch of personal service. Guaranteed to give you a real shock.

And then there is the exclusive mirror system. See anything anytime you please. Especially useful when on dates. Dark lanterns for night riding. May we take you out today and cover you up with our blanket, sure-fire accidental death, free with every ride?

THE COOPERATIVE MOTORS LTD.

GREGORY K. HARTMANN, *Tech Dealer*

“Service any time any place”

What the hell!

23 HUNDRED

years ago, Aristotle wrote, “the diet which has the most milk in it is best suited for human beings.”



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Doctor: Nurse, how is that little boy who swallowed a quarter this morning?

Nurse: No change yet.

—Dodo.

“Heard the new Eskimo song?”

“What is it?”

“When your blubber has gone.”

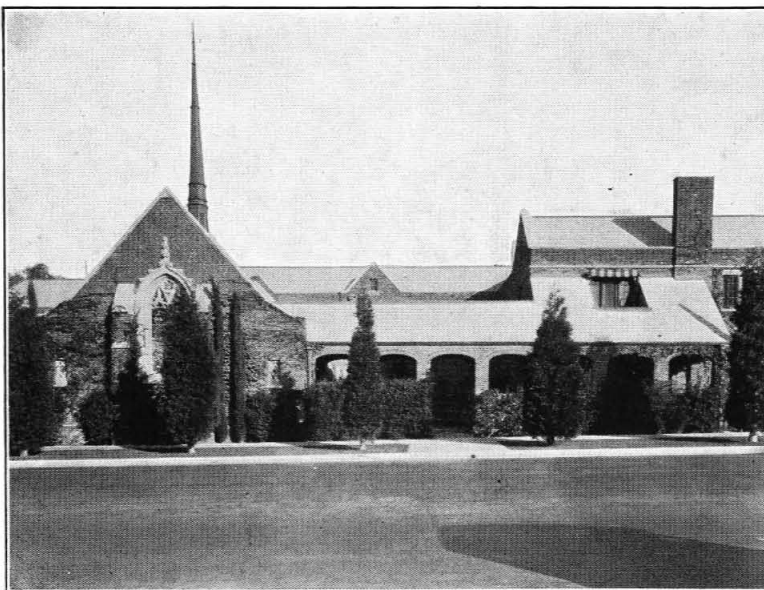
—Ski-U-Mah.

RELATIVITY

And don't you remember the student who everybody thought was a relative of Einstein because he spoke something that sounded like German?

She was only a baker's daughter, but how she needed dough.

—Dodo.



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Wake up quick, wake up!

—take a bath.

—*Annapolis Log.*

Can't.

Why not?

Ain't sleeping. —*Norwestern Purple Parrot.*

“Do you know why there are more automobile wrecks than train wrecks?”

He: You've a faculty for making love.

“No, why?”

She: Oh—no—only a student body.

“Because the fireman isn't always hugging the engineer.”

—*The Satyr.*

—*Colorado Dodo.*

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A policeman brought in a negro woman. The desk sergeant scowled and roared at her.

"Liza, you've been brought in for intoxication."

"Dat's fine," beamed Liza. "Boy, you can start right now."
—*Y. M. I. Skipper.*

To think that I should end by entering the clergy," sighed the oyster as he slipped down the minister's throat.
—*Wampus.*

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Mrs. Schnitzel lived in a tenement with eight children. Her husband did too. But her husband had once been on a farm in his youth. Mr. Schnitzel decided to take his wife out to the country to see what a bull was like. Mrs. Schnitzel had always wanted to see a bull, so they loaded the eight children into a wheezing Ford and started out to the country.

Finally a farm house came in sight. Mr. Schnitzel stopped and told the farmer:

"My wife has never seen a bull, living as she does in the city. Will you take her out to your pasture and show her a bull?"

"Certainly," the farmer agreed. Then he stopped short. "Say are all these your children?"

"Yes," Mr. Schnitzel replied, his chest puffing with proud fatherhood.

"Well, you come along with me," the farmer said. "I want to show you to that bull."

—*Sour Owl.*

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 If she is wrong—Rectifier.
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 If she fumes and sputters—Insulator.
 If she wants a holiday—Transmitter.
 If she talks too long—Interrupter.
 If she is narrow in her views—Amplifier.

—*Wampus.*

"Pawdon me, Mrs. Astor, but that never would
 have happened if you hadn't stepped between
 me and the spittoon."

—*Zip'n Tang.*

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Three rodents with defective vision
 Note the manner in which they flee.
 They all pursued the spouse of the agriculturist,
 Who severed their extremities with a kitchen
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 In the entire span of your existence, have you
 ever seen such an unusual phenomenon as
 Three rodents with defective vision?

—*Red Cat.*

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What a thrill of ecstasy went through her as she stood there beneath the waters of the shower bath.

What a sensuous pleasure the limpid water conveyed.

How it tingled her hair.

And around the delicate pink lobes of her ears.

And down her dainty swan-like neck.

Across her gleaming white shoulders.

Down, down, over her well shaped back.

Over her—

Hey, who turned on the cold water!

—*Pennsylvania Punch Bowl.*

He: "Remember that night I met you?"

She: "Yes."

He: "Remember how we loved each other as soon as we met?"

She: "Yes."

He: "Remember how I kissed you?"

She: "Yes."

He: "Remember—"

She: "Yes."

—*Ala. Rammer-Jammer.*

She: Do you care for pink stepins?

He: Now, let me see.

—*Red Cat.*

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Sorry, suh, but if I takes any mo' ice, dat corpse in the baggage car ain't going to keep.

—Blue Gator.

“The radio will never take the place of newspapers.”

“Why?”

“You can't start a fire with a radio set.”

—Parry's Pickings.

Yea, the Cremo theme song is just a spittune.

—Voo Doo.

“You can kiss me if you promise not to ask for any more.”

“What? I mustn't have any more?”

“No, you mustn't bother about asking.”

My dear Mrs. Smith: Appreciating the honor, nevertheless I must refuse to act as pallbearer at your husband's funeral. My position makes it impossible for me to be seen publicly holding a bier.

Very sincerely yours,

—George Wickersham.

She: Fresh! Who said you could kiss me?

He: Everybody.

He: One more kiss like that and I'll be intoxicated with love.

She: Well, maybe we'd better cut the next one.

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HUMOR

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I wonder if the guy that found out a cat had nine lives was a scientist or a murderer.

—Dodo.

First Stnog: "When my boss dictates he always kisses me to indicate a period."

Second Stnog: "I used to let my boss do that too, but he started putting in exclamation points!"

"Rollo seems to be very happy in his new work. What does he do?"

"He is doing literary work. He takes young lady authors around and gives them experience for their confession stories." —Octopus.

Student: History has often been changed by a kiss.

Coed: So have history marks.

"Those must be pretty fancy pink undies you have under that frock."

"Wrong again, brother: that's sunburn." —Ala. Rammer Jammer.

"Did you tell your husband the story of all the fraternity men you used to know?"

"Yes, but I left out a few chapters."

A great many people nowadays who go about with their noses in the air do so because they can't afford handkerchiefs. —Yale Record.

Josephine: I had a stiff neck last night.

Eddie: How do you feel this morning?

Josephine: All right, only my neck is stiff.

Both: Silence.

He: Is it all over?

She: No—just a little on your shoulder.

—Pennsylvania Frivol.

"Every time I look into your eyes, my dear, I want to teach them the language of love."

"Well, I'm sure you'll find them very willing pupils."

The trouble with most people who try to be blasé is that they never get beyond the first syllable.

Frosh: How did you find Professor Einstein?

Senior: Brushed the hair aside, and there he was. —Black and Blue Jay.

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Now don't be bashful. Take a careful stock of yourself. Are you sure you fulfill all the characteristics of the female above?

If you do, sister, I'll pay you fifty dollars spot cash for a reply to this article. All you have to do is drop me a line and tell me the hiding place of that dizzy, long eared son of a dishwashing cowpuncher who dug you up for me on a blind date last Saturday night! —*Yellow Jacket.*

Night Watchman: Young man, are you going to kiss that girl?

He (straightening up): No sir.

N. W.: Here, then; hold my lantern.

—*Green Gander.*

Mathewson: Would you mind if I put out the light?

Girl Friend: Would you?

"Oh doctor, I've swallowed a prune seed."

"I'll look it up in the appendix."

She: This dance floor is certainly slippery!

He: It isn't the dance floor. I just had my shoes shined.

Customer: Hey, waiter, were these catfish dead before they were cooked?

Waiter: Sure, I skinned them alive and they died of embarrassment. —*Skipper.*

THE GANGSTER SPEAKS

"How are your children getting along?"

"Oh, fine. Tony wants to be a racketeer, and Molly wants to be a chorus girl."

"But what happened to Al?"

"Oh, we had to kill him. He wanted to go to college." —*U. S. C. Wampus.*

Prof.: Who wrote this paper on "The Real Purpose of Life?"

Frosh: I did.

Prof.: But I received another just like it.

Frosh: Yes, sir, we both had dates with the same coed. —*Cornell Widow.*

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How will I know him.

He has a mermaid tatoood on his stomach.

—Texas Ranger.

Kit: "Gee, but that date last night was fresh."

Kat: "Why didn't you slap his face?"

Kit: "I did; and take my advice, never slap a guy when he's chewing tobacco." —Batallion.

"Charlie is going to call on me tonight."

"I hope his intentions are honorable!"

"Why, you spiteful thing!"

Farm Assistant: There was a mouse in the bucket of milk.

Farmer: Did you take it out?

Assistant. No, sir; but I put the cat in:

—Wampus.

"Hi, there, big boy, how'd you like a red-hot date with a cute little devil?"

"Fine baby. O. K."

"Go to hell, big boy, go to hell."

—Bison.

Husband: What kind of a day did you have?

Wife: Rotten; The iceman didn't come, there were no canvassers, and now you come home dead tired.

—Brown Jug.

"So this is what you do when everyone is out of the house?"

"No, this is what we do when we hear someone coming in."

Reporter: "I've got a perfect news story."

City Editor: "The man bit the dog?"

Reporter: "Naw, a bull threw a congressman."

—Battalion.

"You know, Henrietta, every time I see you my heart beats faster. I feel the urge to do bigger and better things. I feel so strong and virile. Do you know what that means?"

"Sure. It means in about five minutes you and I are going to have a wrestling match."

—Ohio State Sun Dial.

Bowler: "Can you get me a date with a good girl?"

Robinette: "Well, I can get you a good date."

—Penn. State Froth.

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I hear Jose got caught cheating in anatomy exam.

Go on, I'm breathless.

They found him in class with some French postcards. —*Mugwump.*

Man, very hoarse with cold, not able to talk above a whisper knocks at doctor's home at night the doctor's wife comes to the door. "Is the doctor at home?"

Wife also whispers, "No, come in." —*Arizona Kit Kat.*

Beauty: The thousand and oneth time, a woman says "Yes."

Admirer: Give me a kiss, honey?

Beauty: A thousand times no!

Admirer: Oh, boy! Give me a kiss, honey!

American: I have a yen for you.

Mademoiselle: How much is that in American money?

Do you ever ask the boss for advances on next month's salary?

No, I ask him for salary on next month's advances.

"Okay, I'll marry your daughter, but I don't see the sense of having all the relatives at the wedding."

"Why not?"

"Because it takes only one to hold the gun."

Have you heard the bootleggers' song?

No, what is it?

Reaching for the Moon. —*Ski-U-Mah.*

I hear Dot is going to be married.

Who's the lucky man?

Her father. —*Lampon.*

"Darling, I can't seem to persuade you to marry me and I've tried everything under the sun."

"Then why not start trying things under the moon?"

Lawrence (hands over her eyes): If you can't guess who this is in three guesses, I'm going to kiss you.

Betty: Jack Frost, Davey Jones, Santa Claus. —*Claw.*

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COLORADO 1307

King Solomon, to stenographer: "I'm having a conference this evening. Mimeograph 3,000 excuses, and 14 roses to my wives."

—Dirge.

Who was that dame you had at the dance?
She's the one who has my pin. Want an introduction?

No, just ask her what I did with my vest.

—Siren.

Rastus, what for you all sharpenin' that razor?

Woman, there's a pair of shoes under that bed. If the's no niggah in them shoes I'm going to shave.—Log.

Frosh: At last! A new way to spell raspberries!

Soph: How?

Frosh: Pththththththththth.—Frosh.

Somebody told us about the plumber who went out to a secluded spot to pet and forgot his wench.

A bachelor is a guy who didn't have a car when he was young. —Beanpot.

He placed his arm around her waist,
And on her lips a kiss;
Then sighed, "Tis many a draught I've had,
But not from a mug like this."

—Longhorn.

Ants may be industrious, but they sure spend a lot of time at picnics.—Jack-o-Lantern.

And then there was the contortionist who dreamed he was eating dried peaches and chewed his ears off in his sleep.—Pointer.

Irate Father (to couple): Say, what's coming off in there.

Son: Nothing, damn it.—Widow.

"Does that rouge of yours come off very easily?"

"No, indeed, I always put up a struggle."

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HUMOR



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Rastus (to interne): I'se done come to see Liza.

Interne: I'm sorry she's convalescing, and cannot see anyone.

Rastus: Oh, dat's all right. I'll just wait till she gets thru. —*Punch Bowl.*

—◆—
 She wore a dress.
 I laughed at it
 For brevity's
 The soul of wit. —*Widow.*

He: What are you thinking about?

She: The same thing as you.

He: Well, I'm sorry, but it is impossible. I'm in training. —*Battalion.*

Jean: "I never saw anybody like Geraldine."

Kathleen: "My dear, I never saw anybody even pretend to like her. —*Rice Owl.*

She: Would you love me if I didn't have a cent.

He: Sure thing, old dear. But did you ever try using Life Buoy? —*White Mule.*

Those women will never be arrested for vagrancy.

How come, you never see them working?

They have visible means of support. —*Widow.*

—◆—
 He: Do you love me.

She: I love everybody.

He: Let God do that. We should specialize. —*Widow.*

—◆—
 He (playfully): "Let me chew your gum."

She (more so): "Upper or lower." —*Red Cat.*

—◆—
 ". . . and how is your husband getting along with his reducing exercises?"

"Splendid! That battleship he has tatoood on him has shrunk to a rowboat." — *Rice Owl.*

—◆—
 Ho: And dey call youse a boxer? Why?

Bo: Cause all me opponents is shipped home in boxes, dat's why.

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"Where do bugs go in winter?"

"Search me."

"No thanks—just wanted to know."

—*Sun Dial.*

She: You remind me of Samson.

He: Why? Because I'm so strong?

She: No. Because you have the jawbone of an ass.—*Dirge.*

FLIRTATIONS

A cautious look around he stole

His bag of chink he chunk;

And many a wicked smile he smole,

And many a wink he wunk.

—*Medley.*

There's no recollection of Cleopatra being illiterate, but she sure made her Mark.—*Dodo.*

"Naw, you can't cut my girl," snarled the pre-med, "I've got her all sewed up."—*Dodo.*

He: A star, a star!

She: You want a star:

He: That's right, do you know where the hell they keep it on this typewriter? —*Beanpot.*

"What would a nation be without women?"

"A stagnation, I guess." —*C.C.N.U.*

"Had a rather bad time last night at the Drakes' dinner. I told Mrs. Drake how well she looke in a bustle."

"What's wrong with that?"

"She wasn't wearing a bustle."

Lampon.

Dot: "Hey, Sadie, how'd everyone find out that rich fellow proposed to you?"

Sadie: "I just wrote a letter to myself marked personal." —*Dodo.*

Girls are like final exams, they keep a fellow up all night worrying about them, and then they ask him a lot of foolish questions.—*Beanpot.*

Hostess: "I'm so glad you came, Bishop. I was going to send you an invitation, but then I thought, 'Oh, what the hell!'" —*New Yorker.*

Sir, your daughter has consented to become the mother of her children.—*Tiger.*

On mules we find two hind legs behind

And two we find before.

We stand behind before we find

What the two behind be for.

—*Juggler.*

"Old Welmouth carried the look of a hunted man."

"Yes, poor fellow. The girls just found out he inherited a fortune." —*Dirge.*

Plumber: "Dontcha believe them cartoonists, honey. I ain't never found no lady in no tub."

They were alone together—just he and she—and the office door was locked. She gazed temptingly in his eyes. She trusted him. Her ruby red lips seemed to fascinate him. He bent over her, and drew nearer and nearer. He was her dentist! —*Dodo.*



HUMOR



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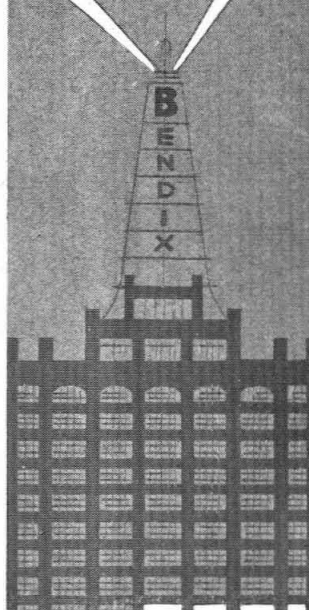
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COLORADO 2336

No. 1: Hey, what's the red light for?

No. 2: That's the fire exit, stupid.

No. 1: What do they use it for?

No. 2: It's where they put the fire out, of course.—*Bored Walk.*

Ah cherie—je t'adore.

Oh, shut it yourself, you opened it.—*Burr.*

Merely an engineer's daughter, but she has her bending moments.—*Voodoo.*

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"Sweetheart, I'm starving for your kisses."

"Well, control yourself. I'm no quick lunch counter."

"Why so silent?"

"I can't find a cuspidor." —*Dirge.*

Wife: Christmas will soon be here.

Hubby: Let's not talk shop.

"Aha, a Royal flush," said the count, as King George's suspenders broke." —*Dirge.*

There's a salesman outside with a woman.

Tell him I've got a woman.

A bachelor is a guy who didn't have a car when he was young. —*Salteaser.*

The little girl who used to want an all day sucker, now just wants one for the evening. —*Log.*

Shall I take you to the zoo?

No. If they want me they'll come after me. —*Siwasher.*

He: I'm a pauper.

2nd He: Congratulations. Boy or girl? —*Bison.*



HUMOR

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NEWS NOTE

The Association of Amalgamated Gold-Diggers has voted unanimously to give full support to the "Don't Hoard" movement.

—Texas Longhorn.

Inn: Why didn't Jones yell when he sat on the hornet?

Outte: He felt it beneath him.

—Dodo.

Joe reads me like a book.

What's that on your neck?

Oh, that's a book mark to show where he left off.

Soph: I hear you're worried about passing your exam in physical education. How come?

Coed: All the prof's evenings before the exam are taken up, and I can't get a date with him.

Burglar: Where have you been.

Partner: Robbing a frat house.

Burglar: Lose anything? —Wet Hen.

Beloved: So you think I have remarkably sharp teeth?

Lover: Yes, unless my ears deceive me.

He: You mean the world to me.

She: Well, you're not going to make any Cook's tours tonight. —Punch Bowl.

First: What do you sell?

Second: Salt.

First: Why, I'm a salt seller too.

Second: Shake. —Lafayette Lyre.

Josephine: If I kiss you would you run around and tell the boys?

Eddie: Sure, which fellows do you want to know?

His voice is just like his mind.

Yeah, it's in the guttural. —Froth.

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I sig the joys of soft ad suddy sprig;
(I sig them thru the dose). A welcome warb
We tedder to her spilig, verdal charb
(She deeds the warpth) the robid's od the wig,
The blissoles their cobbiggled scet exhale
Upod the air, ad everythig here blows—
The pik adebbodee, the pikker dose
The Easter boddet id Dorth-easter gale
The frogs are id the pod (ad id the throat),
The yug sprig labkid id the beadow sprigs—
(Ah, warb, the all wool labkid! Od the breeze
A byriad gerbs of idfluedza float,
Ad by the stove, id witter fladdel thigs,
I ped this soddet ere by figgers freeze.

—Widow.

Soph: If I said I was handsome, what tense
would that be?

Frosh: Pretense sir, pretense. —Lion.

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Napoleon: You know that pretty blonde over
there. She's a warm mama and how she does
neck . . ."

Frater: "Uh-huh. Know who I am? I'm her
husband."

Napoleon: "Uh-huh. Know who I am? I'm
the biggest liar in town. S'long."—*Beanpot.*

War Veteran (with an amputated leg): Yes,
I have a pocketbook made of skin from my own
leg. I don't believe there's another such intimate
souvenir in existence.

War Veteran (recovering from abdominal
wounds): Oh, I don't know. I have tennis rac-
quet at home of which I think a lot.

—*Belle Hop.*



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Old Timer: Is your married life one grand, sweet song?

Newlywed: Well, since our baby's been born it's been like an opera, full of grand marches with loud calls for the author every night.

—Froth.

Rastus had been arrested for speeding, and upon being fined he muttered something that sounded suspiciously like an oath.

"Repeat that!" thundered the judge.

"I didn't say nothin', Jedge."

"You did say something, and I want you to repeat it."

"Well, all I says, jedge, was: 'God am de jedge, God am de jedge'."—Log.

She was only a coach's daughter, but, oh! what a back field!—Medley.

Wife to hubby who has stumbled over a chair in the dark in trying to get to bed after a large evening.

"Is that you, John?"

"Ysh, m'dear, if 'taint I'm going to 'ply for divorshe."—Chaparral.

Do you like short skirts, Mike?

No, they get lipstick on me shoit, when I dance with them.—Tiger.

When the clock struck midnight, father came to the head of the stairs and in a rather bold tone of voice, said:

"Young man, is your self-starter out of order tonight?"

"It doesn't matter," retorted the young man, "as long as there's a crank in the house."—Dodo.

Our experience of the depression is that times are so hard than even the bad penny doesn't turn up any more.—Dodo.

Economical Fiance (to bride-to-be): How much do you think I ought to give to the minister?

Bride-to-be: Whatever it is worth.

Economical Fiance: But I can't tell that until afterwards.—Widow.

Kissing is the results of two sets of emotional cellular vibrations which attract each other and become harmoniously merged into a rich chord of contact.—Dr. Josiah Oldfield (Pittsburgh Press).

Mom, when is the Fuller Brush man gonna play pool with pop?

Why, Willie, what a foolish question.

Well, didn't you tell him th's afternoon that you'd give him his cue when you saw pop coming?—Banter.

1st Negro: What fo' dat doctah coming outa youah house?

2nd Negro: Ah dunno, but Ah think Ah's got an inkling.—Mercury.

Artist: May I paint you in the nude?

Model: Gracious no. I expect you to wear something.
—Rice Owl.



HUMOR

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"So you've decided not to marry Lola, after all?"

"Yes, I smelled liquor on her breath."

"I didn't think she drank."

"That's just it; she doesn't."

"What time is it?" boomed her father from the head of the stairs.

"Fred's watch isn't going."

"How about Fred." —*Carolinan.*

She: What do you think of "Il Penseroso?"

He: I always smoke Cremo's.

"Do you keep your love letters, baby?"

"No, they keep me."

Love may make the world go around, but it hasn't anything on swallowing a chew of tobacco.

—*Annapolis Log.*

Have you found the trouble, sir?

Yes, lady, you need some new teeth in your flywheel. —*Wampus.*

He: A nice girl shouldn't hold a young man's hand.

Rosa: A nice girl has to.

—*Jack o' Lantern.*

She: Where is your chivalry?

He: I turned it in for a Ford.

—*Wampus.*

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"Gosh, Romeo, you surely have lovemaking down to a science."

"Yes, I've learned the secret of perpetual emotion."

Finney: Say, Saylor was so high last night he's sold the Club.

Harris: Well, what are you worrying about that for?

Finney: I bought it.

"Well I think I'll put the motion before the house," said the chorus girl as she danced out on the stage. —Log.

Soph.: And what were your grades, pledge?

Pledge: Submarine.

First Dunk: What do you mean?

R. Byrd: Under C's.—Ski-U-Mah.

If all the lazy students of the world were laid end to end, they would stretch.—Red Cat.

One thing about "rushing"—the back-slapping doesn't stop after the boys are pledged. It just moves further down. —Voo Doo.

She: Would you rather be rich or handsome?

He: I'd like to be rich too.

The real cigarette test, says Will Rogers, is trying to borrow one from a Scotchman.

He: Let's play house. I'll be the walls and get plastered.

She: And me be the stove and get hot? No thank you.—Log (with variations).

Then there's the one about the Scotchman's horse who died just because he wouldn't eat a bit. —Lampoon.

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Red Agitator: Down with the capitalism!

Joe College: And down with punctuation, too!

—Punch Bowl.

We know that when the Travel Prize men went to Europe last year, they became so seasick they looked exactly like their passport photos.

Titus: Marry! 'Tis wet without!

Andronious: Without what?

Titus: Without a raincoat. —Dirge.

"You look rather broken up. What is wrong?"

"I wrote home for money for a new study lamp."

Well, what of it?"

"They sent me a study lamp."—Siren.

Bates: What can you tell me about nitrates?

Shuler: Well—er—they're a lot cheaper than day rates.

TO THE ENGINEERS

The Engineers are jolly fellows,
They pump hot air like a lot of bellows;
They talk so much and so horribly fast
That you often hear of one being gassed.
They always have a healthy cold,
For they cause such a draft that their feet get cold.

Their ears are long and they need a shave,
And when they're in public they sure don't behave;

Yet with a slip-stick they're not so bad
But they can't get a date for they're all a bit mad.

—Ripley.

A blush is a temporary erythema or calorific efulgence of the physiognomy eteologized by one perceptiveness of the sensorium when in a condition of shame, anger or other causes, thereby divesting the vasimotor filaments of their elasticity causing the countenance to become suffused with a radiance efermeating from an intimidated prae-cordia.—Humbug.

"Your teeth are like the stars," he said as he gazed at her upturned nose, "they come out every night."
—Dodo.

He came close to her—so close that he felt her warm breath on his cheek. Gazing deep into her soft brown eyes, he ventured to touch her cheek. She backed away startled, but he advanced, his eye gleaming with the longing of possession. He had her cornered now — she trembled with anticipation as he stretched forth his hand and—ha-ha, we fooled you dear reader; this is one time when "she" is not a horse.

—Wampus.

"Were you trying to catch that street car?"

"Oh, no indeed! I was merely frightening it away from this corner."
—Ranger.

We almost forgot to ask if you've heard the butcher song: "Butcher Little Arms Around Me."
—Dodo.



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She: My knee has improved a great deal since I had the operation.

He: Yes, hasn't it? I was just noticing the improvement. —Ollapod.

My father put stained glass in my bedroom window so nobody could look through it.

My, it's going to be cold dressing with the window wide open.

Pall: What did the doctor say when he was late on that last rush call?

Mal: Hello Baby. —Widow.

"Check your bag, mister?"
"Yeah, put it on ice." —Purple Parrot.

Snob: I don't associate with my inferiors, do you?

Other Girl: I don't know, I never met any of your inferiors.

Aren't you getting Harry and Billy confused? Yes, I get Harry confused one night and Billy the next.

Don't think your girl will coo like a pigeon just because she is pigeon-toed. —Rice Owl.

Restaurant Proprietor: My old Ford turned turtle last week.
Patron: Good grief. I though this soup tasted funny!

Pete: My wife doesn't understand me, does yours?
John: I don't know, I've never heard her mention your name. —Lyre.

Private: Sir, my friendship for your daughter seems to be leading to something deeper.
General: Yes, a six-foot grave.

Marriage, my children, is a public avowal of a strictly private intention. —Beanpot.

Publisher: Where did you get the plot of your second story?
Novelist: From the film version of the first. —Wampus.

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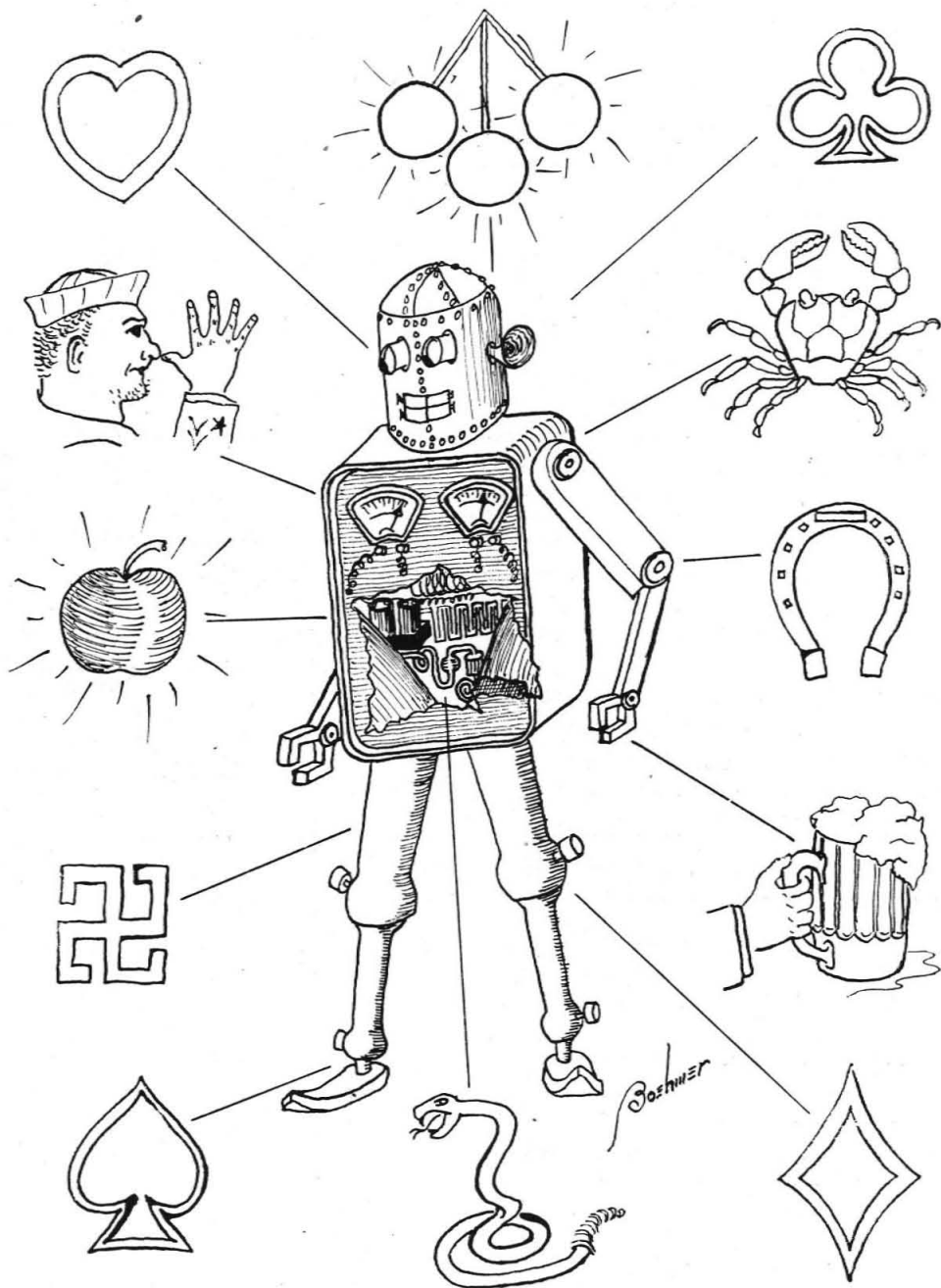
A divinity student named Tweedle,
Once wouldn't accept his degree
'Cause it's tough enough being called Tweedle
Without being Tweedle, D.D. —Record.

First Frat Man: Say, Jim, I wonder if I could borrow that blue necktie of yours?

Second Loafer: What's the matter, couldn't you find it? —Sk-iU-Mah.



HUMOR



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INTERVIEWING THE STARS

Question: What do you think of Einstein's theory?

ANSWERS

Fifi D'Orsay: "I theenk eet ees ver' fine, eef ya can get the purnt."

Greta Garbo: "I luff it."

George Arliss: "Superb, quite."

Clara Bow: "Swell!"

Harpo Marx: "Honk, honk."

Marie Dressler: "Get out of here, you insulting young pup!"

Bill Haines: "I think it's great. Ya gotta hand it to Albert. The kid's there."

Groucho Marx: "Now here you got a theory. On one hand there is relativity. On the other hand there's a wart. Now my Uncle David once told me that a wart on the hand is worth two on the under side of an African gnu, etc., etc."

Eddie Cantor: "Hello folks. I was just talking to Flo Ziegfield, and Flo says that the theory would make a swell tableau. Anyway, with my five daughters, I know all about relativity."

Marlene Dietrich: (Note: Miss Dietrich, being incapacitated by virtue of a sliver in her leg from the arm of a chair, was unable to reply.)

Zeppo Marx:

Carl Laemmle: "Stupendous! Magnificent! Greater than the Covered Wagon! Mightier than Ben Hur. Don't fail to read the Einstein theory. It will come to your library soon."—*Juggler.*

Scientists have discovered that insects talk. Two moths were found chewing the rag.—*Log.*

English Prof.: Please define "judicious."

Student: Hebrew chinaware, sir.—*Sour Owl.*

Waiter, this soup is spoiled.

Who told you?

A little swallow.—*Purple Parrot.*

Captain (to belated passenger who has suddenly appeared on the deck of the abandoned ship): "Jump man! Jump quick! Don't you see she's going down?"

Passenger: "Is my wife saved?"

Captain: "Yes."

Passenger: "Well, goodbye. I can't spend the rest of my life explaining why I let her take this steamer."—*Outspan.*

Kind Old Lady: And what is your name, little boy?

Jockey's Son: I'm Jerry Glutz, by Bill Glutz out of Sadie Schmidt.—*Froth.*

Now we know what happens to the little boys who get minus fourteen in their English grammar examination. They grow up and become song writers.—*Goblin.*

Stolen kisses may be the best, but I like a little whole-hearted cooperation.

—*Jack-o-Lantern.*

She: How old do you think I am?
 He: Oh, about twenty-one.
 She: How did you guess?
 He: I just counted the rings under your eyes.
 —*Royal Gaboon.*

Husband (returning at 4 A.M.): She's a great wife if she doesn't waken.—*Red Cat.*

Eggs marks the spots where the hen last laid!
 —*Beanpot.*

Prof. Eagleson: What can you tell me about John Milton?

Tom Terrill: Well, he was married, and then wrote *Paradise Lost*. His wife died and he wrote *Paradise Regained*.

INTERESTING FACTS

1. According to latest reports, the Mayflower wasn't a ship, it was a fleet.
2. Fleas have flexible knees.
3. Fountain pens sometimes leak. (Use Skrip, it's washable.)
4. You can sometimes hear three or four notes of the radio above the studying going on in the Houses.
5. Such food is obtainable elsewhere at lower rates.
6. Sunbathers have increased in number since the Culbertson system has become popularized at Tech.

"Why all the excitement?"

"Oh, a Japanese girl just gave some college boys the Kimona."—*Dodo.*

He: Hello.

She:

He: Oh, well.—*Banter.*

And there was the flag pole sitter who died and had to be brought down to half mast.
 —*Puppet.*

Oh, for those good old days, when a guy could worry like this over his income tax.—*Beanpot.*

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Lyrics by Joe Hog.

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Act II. Lake Scene on Beautiful Lake Fleming.

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Song, "The Moon is Low Tonight," sung by Finney and his Fishy Warblers, the flashy tribe of Lake Fleming.

Boats furnished through courtesy of Radio Station P.I.A.

Act III. The Crowning of the Queen of May.

Staged and presented by the Ricketeers for your approval. The duly elected Queen, below mentioned, on Scott Tissue Ballots, "useful in many ways," will be crowned with soup and fish at the Lake Fleming Navigation Co.'s new Clubhouse.

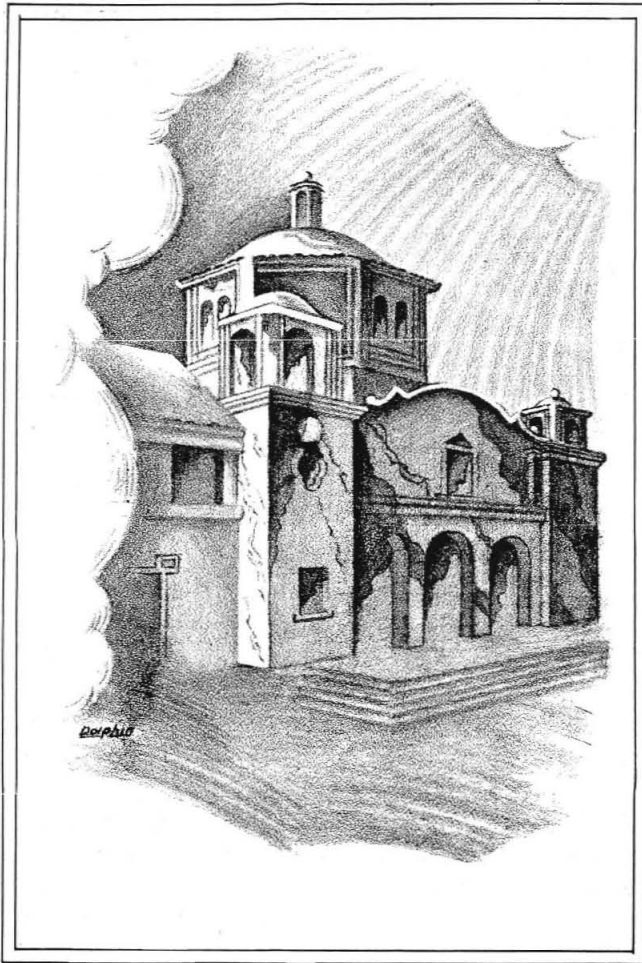
Jack V. Chambers (outside), after disposing of the Queen originally chosen, announces that for once he will be a lady and be the most lovely Queen of May.

Note: Music furnished by Brambles Roving Ramblers from Station P.I.A., introduced by Cecil Kilgore, the boy orator.

Dances arranged and executed by Ydrah and her Swarthy Swains, those hot tea dancers.

"But Sandy, I don't want to sit on your lap."

"Yis, but hoo wull I git my sailorr trouserss pressed?"—*Dodo.*



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APPRECIATION

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TO THE BUSINESS STAFF

Without your untiring efforts, the problem of raising the necessary budget would have been a herculean task. It is you, therefore, that I want to thank for your efforts and hope that we may always be friends.

ROBERT O. FORT
Business Manager
Big T of '32





APPRECIATION

Appreciation

Only by actually working on a publication can one obtain a clear conception of the tremendous number of details that must be taken care of and the long continued application and effort necessary to keep everything running smoothly. It is necessary that each member of the staff fulfill his duties well and promptly, for if he fails, it throws the entire schedule off. With one or two exceptions the staff has been a remarkably fine one this year and it has been a real pleasure to work with them.

The Editor wishes to express to all of those who have aided in the making of this book his deepest appreciation and gratitude for their helpful efforts. There are however those who deserve special mention for the superior work they have done. To Merrill Berkley, assistant editor, goes my hearty thanks for his work this year and my best wishes for a splendid book next year. To Tom Terrill, sports editor, a great deal of credit is due as he was most prompt in all his work. There is also to be mentioned Fred Detmers for his excellent and timely snapshots, Ben Haynes, photo editor, Harold Roach, managing editor, Kenneth Warren, secretary, and Nick

Weinstein, humor editor. Though new at publication work Gordon Bowler as Senior editor has done a splendid job in creating that division of the annual.

To Clarence Heizer, who has designed and performed the art work found in this annual, I express my deepest appreciation. It has been a pleasure to work with him and the results have been most gratifying. Thanks is also due Frank Hibbs for his assistance in design.

To Ben Hooper, engraver and old friend of The Big T, I wish to express my thanks for his many helps and excellent advice.

To George Rice, an old Tech friend, I wish to say how much I have enjoyed working with him. Though at times our problems seemed almost insurmountable, his cheery word and help has kept us going until we finally rounded the last lap.

To ever enthusiastic Bob Fort I wish to give my heartiest thanks for his supreme efforts to finance this annual and it has been a real pleasure to work with him.

ALBERT W. ATWOOD, JR., *Editor.*





THAT'S ALL

Finis





