

DABNEY LOUNGE

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# DEDICATION

As we begin this pictorial parade of people and pleasant events at Tech, memories that will become increasingly hallowed to those who are passing from her portals for the last time as students, let us pause to pay homage to the Associates of the Institute.

Seldom mentioned and even less frequently seen, it is little wonder that their silent, purposeful efforts for the upbuilding of Tech so often pass unnoticed.

While the world acclaims the feats of our great scientists and engineers; while the prowess of our philosophers and physicists fills history's pages; let us reflect for a moment on the tireless devotion of these men to an ideal—our own Tech.

Without them . . . who knows?



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GEORGE W. DOWNS, JR.



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HAROLD LEON LEVINTON

WILLIAM BURDETTE McLEAN



CHARLES ALBERT VAN DUSEN



















# CHAIRMEN OF DIVISIONS

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AGE

P

Robert A. Millikan Physics, Mathematics, and
Electrical Engineering
Arthur A. Noyes Chemistry and Chemical
Engineering
Franklin Thomas Civil and Mechanical
Engineering
John P. Buwalda Geology and Paleontology
Thomas H. Morgan Biology
Clinton K. Judy
Royal W. Sorensen Physical Education

# ADVISORY COUNCIL

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Frank B. Jewett, President, Bell Telephone Laboratories, Inc., and Vice-President, American Telephone and Telegraph Company.

- John C. Merriam, President, Carnegie Institution of Washington.
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Robert A. Millikan

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George E. Hale Arthur A. Noyes
Thomas H. Morgan Henry M. Robinson
Edward C. Barrett, Secretary





Dean Macarthur

Edward Barrett



Dean Hinrichs



H. C. Van Buskirk

# COMPTROLLER

 $\star$  Pleased with Mr. Barrett's efforts in the past years, the Executive Council and Board of Trustees this year accorded him a new honor in appointing him to be Comptroller of the Institute.

 $\star$  A quizzical smile greets one in meeting Edward Barrett. Much of the success of the California Institute of Technology can be laid to his experienced handling of the finances of the school. Although Mr. Barrett does not contact the number of students that his colleagues do, to those he does encounter he leaves a remembrance of sincerity and helpful attention.

# DEAN OF UPPERCLASSMEN

★ The military manner of Dean Hinrichs has had a great effect upon the morale and discipline of the upperclass students. The former West Pointer came to Tech in 1920, and has been very active in the student aid and student relations committees. In the classroom, he is highly regarded as professor of mechanics.

### DEAN OF FRESHMEN

★ Everyone likes Dean Macarthur. In a kind and friendly way he helps the freshmen through their various difficulties in adjustment. In his years here since 1920 he has sponsored many activities, including the organization of Pi Kappa Delta, national honorary debating fraternity. Besides his many other duties, he is professor of languages, and teaches both French and German.

# REGISTRAR

 $\star$  Suitably enough, Professor H. C. Van Buskirk is the first official of the Institute with whom the new student becomes acquainted.

★ When interviewed recently, he said: "It has been a satisfaction to me to see the Institute grow. When I came here in 1904 only some twenty of the students were of college rank."
★ Professor Van Buskirk is resigning this year from his strenuous duties as registrar, in which capacity he has served since 1915, but will continue as professor of mathematics.



Second Row: Watts, W. Miller, Snow, Parker, Kramer — Front Row: King, Johnson, President, E. Edwards, Webster.

# THE BOARD OF DIRECTORS

★ Several features of the work of the Board of Directors, aside from its purely routine business, have made the past year unusually interesting for its members. Perhaps the most permanent contribution of its activities was the incorporation of the Associated Students into a non-profit corporation. While this step has produced no internal change in the structure of the student government, it has resulted in a definite legal protection to the individual members. Together with the incorporation came the revision of the Constitution.

 $\star$  In financial matters, the Board was extremely fortunate in that it was not faced with the problem of a deficit at the beginning of its term. Sufficient money was given the Rally Committee to warrant several professional vaudeville shows in Friday assemblies.

★ The Board also helped the band to pay for its new orange and white uniforms. In a concert

before the student body, their "first Spring showing" brought forth much favorable comment. Finally, with the policy in mind of using up the A. S. B. dues in the year in which they the collected, the Board planned and gave a semi-formal dance for the students at the Hotel Vista del Arroyo.

G E

2 2

★ A few other activities of the Board are perhaps worthy of mention. They were the new pep song contest, the reorganization of the Press Club, the joint banquet at the Athenæum for the incoming and retiring corporation officers, and the making of tennis a major sport.

★ The men serving on the Board for the past year were Wallace Johnson, President; Fred King, Vice-President; Euclid Watts, Secretary; Robert Kramer, Treasurer; Robert Parker, Athletic Manager; Neil Snow, Publicity Manager; Don Webster and Wendell Miller, Representatives-at-Large; and Eugene Edwards, Rally Committee Chairman.



Second Row: Watts, McIntyre, Scott, H. Davenport — Front Row: P. Edwards, Veysey, Johnson, W. Miller, Dourson.

# BOARD OF CONTROL

★ To every institution there must be an organization for the maintenance of traditions and principles. In any self-governing unit the good of the majority must be preserved. The individual owes to the group an integrity of conduct which will reflect honor to the body. Only realizing that human nature is susceptible at times did the student body provide for a system which would return the wanderer to the road and point him in the right direction again. Because all proceedings on the campus are carried on in the spirit of the honor system, everyone is his own policeman. The faculty believes in the ability of the students to deal with the malefactions as they occur. For these cases was the Board of Control organized. The board deals with infractions of any of the school regulations and violations of the honor system. Results of their findings are never published, proceedings are never divulged.

★ This year the board was ably governed by the didactic hand of Fred King. The board is composed of representatives from all the four classes, four seniors, three juniors, two sophomores and chairman of the freshman class. The vice-president of the student body presides but has no vote. In the capacity of chairman, Fred influenced the decisions of the board by his clear and straightforward arguments. To his successor, Wendell Miller, Fred extends a hearty welcome and looks for a signal year to develop under the hand of the young politician.

★ When the cogs of the honor system grow a bit rusty and the thought becomes spidery in the mind, one can be sure the Board of Control will soon have it well oiled and cleaned for any emergency.







# THE HISTORY OF '35

 $\star$  Late in September, 1931, the new freshman class first arrived upon Tech's campus on registration day. The 162 bewildered high-school graduates wandered into Dabney Hall and there were shepherded by faculty advisers. A few of the hardier souls teased their less nonchalant associates and exhibited at that time a capacity for horseplay which would soon make life very busy for the sophomores and upperclassmen in the student houses.

★ That time was ushered in by the mammoth bonfire, the first organized project of the freshmen. Under the leadership of Bill Harris, who had been appointed Chairman of the freshman class, four telephone poles were acquired and erected at the corners of a twenty-five-foot square. Crews of freshmen scoured the territory for combustibles, and square was made into a cube of boxes, benches, and wood fragments. The pile was guarded on the night previous to the Oxy game by more crews of frosh. Ignited by flaming wads of excelsior, the bonfire was a roaring success.

★ The second project was the Rodeo. Despite many clever tricks, such as kidnapping and tying of two soph teamsters in the steam tunnels, '35 lost the push-ball contest and so had to be hosts to the sophs for the traditional Rodeo Dance. Later, at the end of the first term,



SENIOR CLASS OFFICERS Webster, President; Stoddard, Secretary Hallanger, Treasurer; E. Edwards, Vice-President

the freshmen again were hosts, this time at the traditional Freshman Student Body Dance. Given at the Civic Auditorium, the dance was a splendid success, with the unique features of plenty of room and an excellent orchestra. (Continued on Page 41)



#### SENIOR CLASS

Fifth Row: Joseph, Chivens, Willits, Stoll, Thomas — Fourth Row: Hallanger, Dewees, Kramer, Dekker, J. N. Smith, Patterson, Graham, La Rue, Merralls, Evans, Higley — Third Row: Rivas, Karp, Jennison, Ehrenberg, Mosteller, Scott, Gravitt, Taylor, R. P. Jones, B. Young, Ketchum, Nelson, Gelzer, Sheppard, Stuppy — Second Row: Browder, Garner, Fussell, D. Miller, Gluckman, Krantz, Ribner, Pehoushek, Potter, L. Davenport, Maloney, Lindsay, Estes, Green, Deahl — Front Row: Weber, Meneghelli, Schwartz, McRae, Scoville, C. Davis, Leppert, Jahns, Seidel, Ohasi, Webster, Smith, Dunbar.



#### Frederick H. Allardt Aeronautical Engineering

The Baron has been an institution at the school. His radio column has produced much controversy and an added interest in the current radio programs. An accomplished master of ceremonies. Fleming House will miss the organ pounder next year.



#### Joseph A. Ashworth Physics

Joe appeared on the campus for the Junior year from the Bell Labs in New York. An active member of Tech's musical organizations and Hank Evans' orchestra. He journeys to Duke next year to spread the fame of Tech men. Success with all physics, Joe.



#### Horace White Baker Mechanical Engineering

The Beau Brummel of the campus. A riot with the women, he found his system falling down in the last year. Seen strolling about the streets of the fair city in the company of a dainty damsel when the evening breezes sigh so softly. Bright-eyes has been neglected lately.



#### Robert Tate Bakeman Geology

The non-literary editor who does not possess a smile. Seen running around Pasadena and environs in short pants for the past four years trying to get somewhere and always arriving at the same place. Will be making little ones out of big ones for a long time.



#### Lawrence W. Baldwin Physics

A product of Missouri, Lawrence has graced the campus for the past three years. Always at hand to assist the worrying editors with their publications, he has been a campus leader in literary publications.



#### Alan Beerbower Applied Chemistry

A true scientist from the wastes of Arizona. His genial smile and slow words will remain a long time in the minds of his classmates. Seen wandering absently about the campus in the true cast of the absent-minded professor. A radio shark.



#### Ward Wilson Beman Physics

A lithe gymnast and Freshman scholar. Ward is one of the most consistent of the class. One sees him still faithful to feminine charms which he courted as a neophyte. Doing handstands during the physical examination at Pasadena Hospital.



#### Lewis Blakely Browder Physics

One of the original section members. A bit reserved although found boosting Tech activities in many of its phases. Interested in radiation, being observed in the company of Stoll around Dr. DuMond's labs.





#### Donald N. Chamberlain Civil Engineering

Financier Chamberlain has dabbled in radio and automobile selling. From the increase in the value of his own vehicles he must have been slightly successful. He has that way with the girls even though there has been a one and only one since high school days.



Clyde C. Chivens Mechanical Engineering

A civic-minded citizen of the campus. Clyde's fiery hair is found burrowing into the work pile at every opportunity. Comes from the town that is named for the great horticulturist and potato king. Expected to produce some great edifice for our posterity.



William Gordon Cox Electrical Engineering

The most successful prexy of Dabney House since the beginning. He has led the boys from the doldrums of social and athletic life into a unit rivalling the best. One will not forget Bill's shuffle as he made announcements about his prodigy, the band.



#### Lind B. Davenport Electrical Engineering

Whatever happened on the campus one was nearly always sure to find Lind somewhere in the picture. There are few better baseball players on the Tech team now. One of the mainstays and reasons for the success of Throop athletic teams this year as well as its social program.



#### Horace W. Davenport Biology

Tech's Rhodes Scholar for this year. One of the greatest literary lights found on the campus for many a day. His favorite sport is guinea pig feeding. All the books on the freshman reading list were read by this enterprising literarist.



#### Chester Arthur Davis Civil Engineering

A late-comer to the campus, Chet has entered activities as though he wished to make up for lost time. One of the boosters of the Throop Club. Aided considerably in the sale of the Big T this year. His athletic program was quite as versatile as the social one.



#### James Allman Davies Applied Chemistry

The seniors and juniors can thank Jimmy for their enjoyable afternoon at this year's Garden Party. Congratulations, old fellow. Tau Beta Pi member. Found as an able assistant during the evening hours to "Jimmie" McMillan. Remember that engaging smile.



#### Charles A. Dawson, Jr. Geology

One of the cleverest illustrators in the school. His sketches are a marvel of exactness. Chuck returned this year to complete his course after being out for a period. He has produced some of the best photography viewed around the campus.





#### Robert Henry Dourson Applied Chemistry

There is hardly a fellow in our class who has been more active. Always a worker in the "Y" and this year's president. In the orchestra and glee club. Dabbling for four years in Fleming House functions. On the Board of Control and time to be a member of Tau Beta Pi.



#### Thomas Deahl Chemistry

Tommy has been one of the foremost scholars in the senior class during his entire stay. Research work has engaged most of his time, but in the meantime there has been opportunity to be actively engaged in forensics. A member of Tau Beta Pi.



#### Albert O. Dekker Chemistry

Pal of Deahl and one not to let Tommy get far ahead of him in anything. A debater and member of Pi Kappa Delta. Frosh crosscountry letter winner. Has been greatly attached to the chem building these last few years. Elected to Tau Beta Pi.



#### Norman B. Dewees Mechanical Engineering

Some rivers flow deep and silent and here is the human counterpart. Norman kept most of his accomplishments under his hat, but a few have slipped out. As a member of Tau Beta Pi he has been responsible for many of its social functions and initiations.



#### Oliver C. Dunbar Electrical Engineering

The only announced benedict in the class. We wonder how many more there are. There is no doubt as to Ollie's chances of success with a rooter like the Mrs. Happy days to you both. A late comer to the class. A member of the student chapter of the A. I. E. E.



#### Jackson Edwards Electrical Engineering

A sophisticated collegian and tasty dresser. Jack has been one of the foremost advocates for the Tech golf team this year. Spends a good part of his time putting the Throop Club on top socially around the campus. A member of the student chapter of the A. I. E. E.



#### Eugene Leroy Edwards Mathematics

A live-wire in a small package. Gene has instilled the student body with spirit during the past year as Yell Leader and Rally Committee Chairman. A forensic participant and last year's conference diving champ. Found handstanding with Beman.



#### Gustave Ehrenberg, Jr. Electrical Engineering

Honest Gus holding everything to the letter of the law. There can be no more steadfast man in the senior class or in the student body. One of the most accomplished wrestlers found on the campus. An active member of Fleming House social functions.





#### Charles H. Elmendorf Physics

A staunch believer in non-participation in student life. The life of the student appeals to Chuck. To caress the noble pages of a math book holds more attraction than the wail of the sax. Known to relax once in a while with a sail boat around Santa Monica.



#### Arthur E. Engelder Biology

A medico and surgeon in the making. Art's grin will not be forgotten for a long time. Remember when he and Binkley performed the operation on the frog in biology lab? Headed for Johns Hopkins next year. He once owned the gray phantom which changed hands so rapidly.



Harry De Estes Applied Chemistry

A big reason for the success of the annual this year. On Harry's shoulders has rested the burden for getting pictures for the book. A Tau Beta Pi member and ardent supporter of the Press Club. Strikes one as being a future business leader.



#### Milton Harrison Evans Geology

Finds his greatest attraction in the study of minerals. Religiously has his German lesson perfect. Impresses one with confidence and surety. Heard often to repeat, "Let's go after our charts." Was a freshman football letter winner and varsity pole vaulter.



#### Greer W. Ferver Civil Engineering

The rubber-legs of the school and possesses the most anguished look in clearing the bar. Seen bounding around the campus in the company of Thompson with a pipe protruding from his mouth. A two-year lettef winner in track.



#### Robert George Fussell Electrical Engineering

The Pope has done much to further the traditions of Fleming House. Known as an accomplished debater upon the subject of socialism. His greatest adversary was Doc. Hanes. Fought for Tech two years on the gridiron. His friendly smile wins many admirers.



Francis R. Gay Mechanical Engineering

A tennis great who has been a potent factor in the team's success during the past three years. Supports actively anything that Ricketts House proposes. Slightly enigmatic. In the company a good part of the time of Ferver. Dislikes pictures of himself.



#### John Roswell Gelzer Electrical Engineering

A radio shark found tinkering with resistance and capacity far into the wee hours of the morning. Discreetly polite. Bud is silent but we bet he slays the feminine admirers when he gives them a break and takes one on a date.





#### Charles James Gibbs Mechanical Engineering

Intellectually great. Charles has delved into nearly everything on the campus. Has tried crosscountry and football, and fought on the house athletic teams for four years. A leader in social functions and still time for Tau Beta Pi.



#### Howard P. Gluckman Electrical Engineering

One of the supporters for the down-trodden masses. Howard has been a leader in the campus "Y" for his stay at Tech. Second place winner in this year's Conger Peace Contest. Sure to attend all functions sponsored by the Throop Club.



#### Adrian Hugh Gordon Physics

Extremely quiet, with a keen desire to study certain subjects. Found working German with Evans nearly every night. Intends to continue in meteorology. In the future we will be traveling by plane with weather predictions given out by "Lord Gordon."



#### Eugene Graham Mechanical Engineering

Found mostly with Webster. Intends to further research in the field of refrigeration and air conditioning. When we travel by train we will be praising Gene for the cool, fresh air in the car when we traverse the arid stretches.



#### Bruce Benson Gravitt Electrical Engineering

A member of the student chapter of the A. I. E. E. Participated in baseball at Tech in the backstop position. Active in the Throop Club functions. Possesses an infectious laugh and a genial air which wins friends easily.



#### Emerson Ward Green Chemistry

A chem bug who into the realms of alchemy has dug. Aided in putting Tau Beta Pi's activities over the top this year. Often found at school dances. Ended a successful year as president of the campus Chemistry Club. To his friends Green is Red.



#### Thomas W. Griffiths Civil Engineering

One of Santa Barbara's scholars. And does he burn when the females are mentioned. From the top of his collar to the roots of his hair a crimson hue glows as his sins catch up with him. Then with all his social life, he still has time for Tau Beta Pi.



Robert J. Hallanger Mechanical Engineering

The second half of the annual team. "Gravy Train" has held several financial positions this year. A member of Tau Beta Pi, the student chapter of the A. S. M. E., and one of the formers of the Throop Club. Varsity basketball manager.





#### John Ball Higley Electrical Engineering

One of the old guard who has plugged along to the end. A member of the student chapter of the A. I. E. E. Quiet and unassuming, with a very pleasant smile. Engages in considerable tennis for a pastime. Possesses boxing skill.



Ralph E. Homann, Jr. Biology

Destined to aid humanity through the channels of biology. The ad companies will be after him for his hearty smile. Seen sitting round-about many an afternoon in the quiet recess of the Throop Club nook. A catch for some lucky girl.



#### Byron Noll Inman Applied Chemistry

Punctilious. Recorded the Senior Class History for the Big T this year. Received his training in Long Beach. Rather retiring in social affairs of the school, but known to have interests on the outside. Bring her around, Byron, and give us a break.



#### James Henry Jennison Civil Engineering

A gentlemanly scholar. Accomplished sketcher. Soon to be erecting edifices for the future which will prove his worth. Member of student chapter of the A. S. C. E. and Tau Beta Pi. Reluctant to place himself at the fore but that is where he belongs.



#### Richard Henry Jahns Geology

The man of the hour. There has never been a more versatile man at the Institute. Chief instigator of the Throop Club, mainstay of the baseball and basketball teams and geologist extraordinary. Social hound. What about the stripped black cat? Tau Beta Pi.



#### Wallace J. S. Johnson Mechanical Engineering

Student body prexy for '34-'35. The best "rassler" in the school. Produced in the capital of Long Beach. On first debate team. Tau Beta Pi member and selected to the exclusive Pi Kappa Delta. Football letterman and known to get results with the "babes."



#### Ford Lawrence Johnson Applied Physics

A scholar gone wrong. He is perhaps one of the few scientists who missed Dr. Swift's analytical course. Known to lean toward radio dabbling. We wonder how many of those Utah lassies he has on the line. Contagious smile and demeanor.



#### Robert Parry Jones Electrical Engineering

A battler for Tech on the gridiron. Heaved the weights around considerably during the past four years on the track teams. Also a social hound, being in the limelight at most of the campus functions. Generous Bob.





#### Robert Gardner Jones Applied Chemistry

The first of the numerous Bob Jones. These guys are a nuisance. One never knows which is who. Dropped in on us quietly and leaving quite as easily. Seen in the company of some "knockouts" but he never gives us a break. Bring them around, Bob.



#### Paul Alton Joseph Mechanical Engineering

Slightly shy on the social side of the ledger. Decidedly favors studying. Found among the members of the student chapter of the A. S. M. E. Would like to see the Throop Club on the top. An added starter to the race for diplomas.



#### Nathan Karp Civil Engineering

Activity curtailed with entrance into the class only this year. Membership in the student chapter of the A.S.C.E. Comes from the city of the movie stars. Difficult to get started but continues once going with enthusiasm.



#### Milo C. Ketchum Civil Engineering

Mild-spoken Milo has a gracious manner and wins friends readily. President of the student chapter of the A. S. C. E. Left the "Show Me State" to see if the world could produce anything he had not already seen. Silky smile.



#### William F. Keyes, Jr. Applied Chemistry

I wonder if Bill still remembers the ride he took as a Frosh? Shy and slightly modest. Clean humor is stressed by him. Seen in the company of a very beautiful damsel at several if the dances lately. When is the date, Bill?



#### Paul William Kilpatrick Applied Chemistry

Returned to school to finish out this year. Set himself to reap a lively existence in the field of industrial research. Another one of the boys who needed considerable urging before his photograph appeared in the book.



#### Fred Charles King Applied Chemistry

Cynical Fred sipping tea. A most active personage. Vice-president of the student body, Board of Control member, class and house officer. Edited the Campus Handbook last year. Interested greatly in the social welfare of the world.



#### Harry Montford Koons Civil Engineering

Turned to Tech to finish his studies after a start elsewhere. Fond of slumming through the Chinatown section of L. A. We bet that sleek, curly hair raises a riot with the girls. Seen a good part of the time with Don.





#### Robert Lincoln Kramer Mechanical Engineering

One of the busiest men at Tech during the last four years. Has played football for four years. Seen the Big T through a hectic year as Business Manager and quietly guided the finances of the student body this year. Dogmatic.



Channing Henry Krantz Electrical Engineering

A very jovial fellow. He radiates good humor and mirth. Aided Blacker to win the Interhouse Athletic Track Meet this year. Proposes to indulge in the field of communication and to increase facilities for the public.



Robert Orville LaRue Physics

Perhaps the quietest, most unassuming lad in the whole class. Prone to study those things which interest him most. Wonder what goes on behind that poker face? Favors the seclusion of his room to the bright banalities of the frivolous world.



#### Elmer L. Leppert Aeronautical Engineering

Lefty's pepper has filled Tech's baseball teams with barrels of fight. This year he is leading the horsehiders to victories as captain. Not with the class as Frosh, he has nevertheless left his mark on the class pages. Vital spark in the Throop Club.



#### Henri Arthur Levy Chemistry

Henri is inclined toward a literary life. He has participated in forensics and has been a vital factor in the stage productions of the school. Perhaps the youngest in the class, he lays claim to the heaviest beard in the place.



#### Chester William Lindsay Chemistry

A photographic devotee. Has been one of the main reasons for the success of the Photo Club Contest and Exhibit. Contributes ability and energy to the pictorial sections of the Big T. Stickler for legal procedure and practices.



Fred Vern Maloney Electrical Engineering

Found a good part of the time in the Throop Club sagaciously regarding the small disc revolve about the table. Silent fellow. A member of the student chapter of the A. I. E. E. Slow to smile but readily at hand for a bit of humor.



William B. McLean Physics

Another pictorial enthusiast. Bill has a collection of photos about the campus which will bear much poring over during the long hours of the winter years. Prone to learn the manly art of wrestling. One of the class's foremost scholars.





#### Robert Alex McRae Civil Engineering

Slightly dubious to his ability. One of the best distance men attending Tech, but the call of the student is stronger. The best of the cross-country men as a Frosh. Inseparably found with Schwartz. A member of the student chapter of the A. S. C. E.



#### Franz Nelson Merralls Electrical Engineering

Showman extraordinary and dignitary of the microphone. Franz has produced more ballyhoo for Tech activities than any man past or present. Exhibit Day chairman. Chief activity man in the senior class, rings, announcements, etc.



#### Eugene Clair Miller Civil Engineering

The Empress has grumbled and ranted at the injustices for four years but here he is. Has spent four years making sure that Dabney House is on top. Served as Secretary and Treasurer of the House. Battled around on the nine. Has kept pretty steady company.



#### Daniel Harrison Miller Electrical Engineering

A fine football player and named on this year's All-American Rugby Team. Has skillfully weathered the four-year storm. Seen quite often at Tech dances guiding the nimble feet of the fair young maiden gracefully over the polished boards.



#### William C. Mosteller Electrical Engineering

Calmly prepares each day the lessons in a careful way so that he may press forever more on to heights of glory's shore. Addicted to solitude and quiet. Seldom seen about in campus doings. Member of the student chapter of the A. I. E. E.



#### George Yoshio Ohashi Electrical Engineering

George spent one year recovering for the final spurt and so graduates with us. Seen driving about in an overgrown Austin. Seems to be ensnared with the bug of playing bridge. A likable smile spreads over his features. A.I.E.E. member.



#### Charles Patrick Chemistry

Thorough believer in smokers. Seen rolling the spotted cubes at these affairs for high stakes with Watts. Also known to cavort around the lounge at strange hours in the morning. Bumps about with Heitz and Spaulding.



#### Leonard S. Patterson Applied Physics

Tech's greatest tennis star. Pat has cleaned up all competition in sight offered him in the conference matches and has borne Tech's banner over the country in tennis tournaments. We never see much of him socially, but you can rest assured the girls do.




#### Frederick Pehoushek Electrical Engineering

"Hash" has become a byword in Dabney. Commenced and edited through a successful year the Dabney Divulger. He was great at getting at the real dirt. Kept Dabney in the run for the Interhouse Athletic Trophy in several sports.



#### Kenneth Sanborn Pitzer Chemistry

Kenny has the honor of garnering more credits than any other fellow in our Frosh year. A member of Pi Kappa Delta and this year's president. Tau Beta Pi man. A super bridge shark. This year also was Frosh debate coach.



Perry Polentz Mechanical Engineering

Four years is a long time with nothing eventful happening. Rather barren ground here. Found engrossed in the perusal of tomes and tomes from day to day. One of the bulwarks on the Throop Club Football Team this last fall.



#### Warren T. Potter, Jr. Electrical Engineering

All-round utilityman on the baseball team, played nearly every position. There is hardly a Throop Club athletic team he has not played on. Captain of baseball last year. One of the founders of the Throop Club, and its vice-president.



#### Albert Allen Ray Mechanical Engineering

Frosh football numeral winner. Held several offices in the class in the past years. Seen at the dances with coy young ladies. Remember Mickie and Winnie at the Throop masquerade? Sunny smile lightens up his countenance.



#### Edward H. Reynolds Applied Chemistry

Tennis stalwart. Has lost very few of his encounters over the last four years. Indulges in a tremendous quantity of book learning. He has yet to be present at one of the social functions. There's plenty of life there. Break out, Ed.



#### Herbert S. Ribner Applied Physics

Longs for the brilliance and loveliness of the Southern girls. Herbie has not forgotten the period he spent down there. Looking for a fellowship next year. Caters to a growth of down and bristle beneath the proboscis.



#### John Ritter Civil Engineering

Joined the class for the senior year and added his blithesome gaiety to the merry throng. Member of the student chapter of the A. S. C. E. Intends to enter the service of the government upon graduation. Hear the clink of the discs.





#### Dagoberto Rivas Civil Engineering

One of the sons of Mexico who has fought out the storm of four years and is now ready to carry Tech's fame into the hinterland. Subdued in actions. Throop Club proponent and listed among the members of the A. S. C. E.



#### John R. Rossum Applied Chemistry

Entered with all the assets of a scholar but soon developed into one of the most accomplished bridge players on the campus. Smokes numerous cigarettes. Often seen at social functions about the college. Slays the femmes with his chatter.



# Ivan Victor Scherb Geology

The wildest softball pitcher Tech has seen. Delves to a great degree into the secrets of geology. Seen often climbing the pole as he attempts to clear heights in the pole vault. Blacker House's baseball star. Researches here next year.



#### Harold Schiller Applied Chemistry

The paper killed him off last year. He was content to let well enough alone when he returned. Found sunning himself in Fleming Court most of the day. Starred in Pi Kappa Delta's play in the fall. Spaulding and Schiller.



#### David John Lemicke Applied Chemistry

Dave has been one of the markers of Blacker history. From his Frosh year he has developed into one of the best in the Bridge Tournaments. He has not been lacking in athletic ability, being chosen on the All-House Football Teams.



#### Jack William Schwartz Civil Engineering

Dark as his German appellation implies. Member of the Throop Club and played on its football team. The side-kick of McRae. The deep voice and merry laugh will ring for many a year to come in thoughts of today. Member of the A. S. C. E.



#### Claude Trick Scott Electrical Engineering

A great star of the cinder path gone wrong. Too many late hours and weeds. Track captain this year. Newspaperman. Member of the Press Club. Spends a good portion of his time with Baker. An ardent and active Throoper.



### Allan Romig Scoville Electrical Engineering

Tech's premier distance star. It was a joy to watch those thin legs, sinewed with bands of iron, go flashing over the track or roads. One of the happiest fellows on the campus. Always a good word and smile for everyone. Good luck, Scovie.





#### Robert Klensch Seidel Aeronautical Engineering

Likes to cavort around the diamond and has been found in a Tech uniform ever since he came here. Not very portentious, but possesses the ability to produce results. Breaks out once in a while and drags a bit of loveliness to the dances.



Edmond F. Shanahan Electrical Engineering

A versatile young fellow who has accomplished much in working his way through college. Constantly maintained his grades above average. Spends some idle hours at dances and similar functions. Found about with Patterson.



Sander Sheff Mechanical Engineering

Minus in the department of extra-curricular activities. Tends toward a career of service in the field of machine design. Where others find joy in life, he receives recreation from the solutions of intricate mechanical problems.



### Dickson M. Sheppard Applied Chemistry

Super-German star. An extraordinary sense of humor and delights in practical jokes. Crosscountry star in his younger days but went slightly to seed in his last years as the result of a leg injury. Varsity track letterman.



#### Alfred Leon Slater Aeronautical Engineering

One of the school's best actors. His sonorous voice pleases the audience and his presentations are received with commendations. His breezy smile sows joy about the campus. His role of Priuli was done very well this year.



#### James Norman Smith Electrical Engineering

Has developed into quite a tennis player in his four years here. Has been elected into Tau Beta Pi, which marks a big increase over his start. Retiring Throop Club member. His sparse form has marked the campus and will not be easily forgotten.



#### Gale M. Smith Electrical Engineering

Soft-spoken southern gentleman. Slow smile. Likable personality. Has spent only this year with the class. Member of the student chapter of the A. I. E. E. Keeps himself sequestered from the rioting of student politics.



Neil W. Snow Civil Engineering

The proud possessor of the gray phantom. Varsity Track manager, president of the Press Club, Publicity Manager of the Student Body, honor key winner. Enthusiastic rooter and activity man for Ricketts House. Keep at it, Neil.





# Robert M. Stanley Aeronautical Engineering

President of the Glider Club here at Tech. Dropped in on us halfway through. Nearly got left out of the senior section but here is his contribution. Sees great possibilities for the future in air transportation.



#### John C. Stick Aeronautical Engineering

Pete's quiet manners are well liked by the fellows. This year's president of Blacker House. Football letterman. Has given the hammer a few twirls in his stay here. Interested in printing as a hobby. Has a fine Dad.



# James Bates Stoddard Applied Chemistry

Intends to journey around the world after graduation. Will have Christmas dinner with Horace in England. Will pursue some line other than scientific after his worldly wanderings. Humorous team of Stoddard and Engelder.



# Henry W. Stoll Physics

Hank is the largest fellow in the class. Indulged in football in his youth, but lately he has found greater delight in X-ray emanations. Entered social life early and has never left off. Joyful nature and infective smile.



# Laurence J. Stuppy Biology

Headed for Harvard and a career in the field of medicine and surgery. Retained the old spirit in Fleming House and led us to another banner year in athletics. Fleming socially was at top due to Laury's efforts. Newman Club president.



# Jay Camburn Taylor Physics

Jay has played football and rugby for recreation while enrolled. He was quite a factor in the rugby wins scored by the team. Plays a fair brand of tennis. Also seen in the recesses of the X-ray room in West Bridge.



#### Charles F. Thomas Aeronautical Engineering

"Y" potentate. Chuck was this year part-time secretary of the "Y." In the past he has also served as president. Participated in football and bolstered the Throop Club line this last year. Glee Club president. Honor key.



#### Charles S. Thompson Civil Engineering

Baseball player and ace-flinger for the house team. Wonder if Charley will be returning to his native state to work on the irrigation problem with his knowledge gained at Tech? Ricketts House vice-president.





#### George Jarvis Tooby Applied Chemistry

Soon to be one of the leading newspapermen and columnists in the country. George already has contributed to periodicals and journals. Tech has seen his talent. Ricketts House president this year. Believes scientific education the best.



Robert Collett Warner Biology

Going to New York to instill methods of cleanliness in brats, says he. Cross-country numeral winner. Interhouse halfback while defending the honor of Ricketts. Forensics star. Drama Club vice-president. Good luck, Bob.



Donald C. Webster Mechanical Engineering

Pack of dynamite. Broad jump record holder. Senior Class president. Varsity track letterman for three years. Honor key. Lives very ethically and true to his code of honor. Steadfast to any principle he holds. Farewell, Don.



#### Victor Wilmer Willits Mechanical Engineering

Throop Club member and active participant in its athletic and social life. Tau Beta Pi member. Has a very sweet young lady who attends the dances with him. Football stalwart. Member of the student chapter of the A.S.M.E.



#### Bradley Hobart Young Aeronautical Engineering

Missing when we started but has proceeded to the end with the best. Delves into airplane design and intends to produce some rare and original plans for future construction in this field. Confident of his own ability to succeed.

#### (Continued from Page 27)

 $\star$  In the elections at the beginning of the second term Bill Harris was elected President; Fred King, Vice-President; Al Ray, Secretary; and Max Millikan, Treasurer. Even in the first term-though officially there was no hazing of frosh-certain queer sounds of distress could occasionally be heard upon the campus as a crowd of sophomores managed to sequester a lone freshman. The result was usually a trip to the physics pond and a dunking for the victim. Occasionally the tables were reversed and the sophomore got the dunking. In the second term the frosh gained the upper hand in the student houses and, according to one of them, made life miserable for the sophs and upperclassmen. Such innocent pastimes as hiding loosely corked bottles of water in the victim's bed and "stacking" of rooms were resorted to. An unknown group did a thorough job at stacking Jack Chambers' room; everything movable and removable was piled in the patio. Only the lack of plumber's wrenches prevented the heater and washbasin from joining the wardrobe, bed, drawers, and other articles. A few freshmen and more sophs were taken for rides, dropped in the country, and left to return as best they could. A classic is the story told about Gerald Isenhower.



Taken for a ride by several sophomores and dropped somewhere on the Angelus Crest Highway, Jerry met a motorcycle cop, and soon talked the patrolman into giving him a ride back to the college. Many startled exclamations escaped the returning sophs who found Jerry comfortably stretched out in the house lounge, telling his tale to a group of appreciative freshmen.

 $\star$  The year closed on a well-organized freshman class which promised mighty things in the future. Bill Harris and Gerald Isenhower were awarded honor keys for their outstanding services to the class.

★ The Class of 1935 entered its sophomore year with Wally Johnson at the helm, with Laurence Stuppy, Max Millikan, and Don Webster in the other offices. The old guard missed some familiar faces, for about fifteen men had dropped out for reasons scholastic or financial. Transfers from other institutions filled the vacancies. ★ This year the sophomores added another link to the unbroken chain of soph victories in the Rodeo push-ball contest. The better organization and superior experience

of the soph team made the outcome a foregone conclusion, and but for a few initial exciting moments the contest took the form of a sprint for the frosh goal. The class enjoyed itself at the expense of the freshmen.

 $\star$  The tragic deaths of two popular members had a sobering effect on everyone. John Kiplinger was killed accidentally while cleaning a rifle. Thomas Jackson, a good track man, died suddenly at the end of a practice run.

★ The traditional Sophomore Student Body Dance, one of the few customs surviving the test of time, was given at the Vista del Arroyo. The affair was ably managed, well attended, and voted a "swell time" by everyone. In spite of the cool weather, it is said a number of couples found the garden very interesting.

★ After the football season ended, some of the men, apparently lacking sufficient outlet for their energies, formed an unofficial rugby team. Binkley, Dan Miller, and Jim Moore provided the idea, and soon were supported by about fifteen steady rugbyites. The end of the sophomore year was approaching. Many stout hearts had been faltering at the thought of the "comps," those much-touted sophomore comprehensive examinations. Actually, the exams proved to be less awesome than Dame Rumor had depicted. The last exam over, the members of the Class of '35 looked forward to a vacation and then a return to work as juniors.

★ For the junior year, Fred King was selected President; Laurence Stuppy, Vice-President; Kenneth Pitzer, Secretary; and Don Webster, Treasurer. The first official duty of the junior class was to provide a Rodeo Committee to take charge of the frosh-soph push-battle. During the epic struggle the push-ball split, so the juniors had to provide a substitute which would sate the bloodthirsty battlers. Shovels, a rope, and some bags were procured. A mud pit was hurriedly made and a tug o' war started, with the losing team getting a mud bath.

★ The Class of '35, as usual, contributed very largely to the outstanding success of the track and tennis teams, and won the interclass track meet by a handy margin. At the close of the year much valuable work was done by the juniors to make the Garden Party and Junior-Senior Prom two best-liked social events of the year.

 $\star$  To guide them through the senior year, the seniors selected Don Webster as President; Eugene Edwards, Vice-President; James Stoddard, Secretary; and Robert Hallanger, Treasurer. Many interesting events took place largely as the result of senior efforts. First and most noticeable of these was the reorganization of the Nonresidents Club. Seniors Jahns, Kramer, and Potter carried out an inspiration conceived at the end of the junior year. With faculty approval gained at last, these men made membership in the new "Throop Club" optional instead of compulsory. The dues were raised to two dollars and an active, vital organization promised. With an average of more than one hundred members, the better financial support made possible a great diversity of banquets, stags, and dances. The houses soon recognized the importance of this new club; better understanding between the formerly antagonistic groups was the result.

 $\star$  Early in January the senior class had cause to congratulate one of its well-liked members, with the announcement that Horace Davenport had won a Rhodes Scholarship. In the universal opinion of the seniors the honor was well deserved.

 $\star$  A group of seniors and graduates, headed by Gene Edwards, were asked by a faculty committee to investigate excessive study requirements. Their report has not been made public as yet, but revision of several courses seems to be in order.

★ The Senior Class observed its traditional Ditch Day on May 8. Carloads of seniors could be observed headed beachward early in the day. The Garden Party was planned for the afternoon of May 18. James Davies, chairman of the Junior-Senior Prom Committee, made good his promise of plenty of shady, secluded nooks in Dabney garden for those couples not wishing to stand around the punch bowl. Davies, assisted by four capable seniors, is planning the traditionally formal Prom, to be held at the Riviera Country Club on June 8.



JUNIOR CLASS OFFICERS Morse, Treasurer; McIntyre, Vice-President; Bishop, President; Milan, Secretary.

# JUNIOR CLASS

★ As one of the largest and most brilliant classes to enter the Institute, the Junior Class debut in 1932 was especially significant. The class easily showed its great strength and power by refusing to be dominated by the Class of '35. In the Sophomore year it completely controlled the Class of '37. ★ At the beginning of the Junior year Art Bishop was elected to the class presidency by a large majority, and was ably assisted in his duties by McIntyre, vice-president; Leo Milan, secretary; and Morse, treasurer. Davis, Mc-Intyre and Veysey were elected to represent the class as members of the Board of Control.

★ During the first term of this year the Class of '36 again convincingly demonstrated its superiority by decreeing that the two lower classes should settle the question of the relative supremacy in a gentlemanly manner, which they were incapable of doing on their own initiative. For this purpose a pushball contest was arranged and officiated by members of the Junior Class.

★ During the third term two social events were staged for the benefit of the departing Seniors. The first of these, a Garden Party, was held in the afternoon in Dabney Garden. The next, that climax of college life, the Junior-Senior Prom, was a notable success, being held at the beautiful Riviera Country Club.

 $\star$  The members of the class are extraordinarily interested in extra-curricular activities.



#### JUNIOR CLASS

Sixth Row: Kiger, Boothe, Elliott, Janes-Fifth Row: Lewis, Peugh, Gerfen, Frazier, Burnight, Cortelyou, Blodgett, Heath, Works, Salisbury-Fourth Row: Unholtz, Ferguson, Lew, Nutting, Swanson, Hicks, Carr, Nelson, Henderson, Vermeulen, T. Thompson -Third Row: Milliken, Petersen, Bingham, Dilworth, Gardner, MacMahon, Van Riper, V. Jones, Griffith, Hartlein, J. Gates Second Row: Veysey, Carroll, Creal, Jensen, Klocksiem, Bucknell, Goodwin, Rector, Fahrmann, Colvin - Front Row: Rosen. Kurihara, Muller, Kostoch, Sklar, Nance, Ambroff, Shapiro, P. Jones, McCloy, Haver.



# SOPHOMORE CLASS

★ Showing an activity decidedly more intense than that of last year's sophomore class, the Men of '37 this year tied up freshmen in the steam tunnels, threw them in the physics pond, won the push-ball contest, put on a dance which everyone enjoyed, and finally produced a stage show rivalling that of professional companies. On top of all this the class put seven men in student body offices, thereby equalling the junior class.

★ At the beginning of the year Richard Rosencranz was elected class president. He organized the push-ball team, which won over the freshmen by a single goal; and secured the Annandale Country Club for the sophomore dance, an elaborate affair which took place at the end of the second term.

★ Johnny Austin, School Rally Committee Chairman and a sophomore, arranged in the third term for each class to put on a stunt assembly. The sophs featured a variety show, the climaxing number of which was a ballet dance done by "rowdy section B." For the benefit of the faculty, another act was given in which the Registration Committee was dramatized. Its members were students, and those men of low grades applying for readmission were professors and teachers.

★ Scholastically the class dragged along at the tail end with a 2.3 average, but this was to be expected with men so deeply concerned with extra curricular affairs. Nevertheless, in spite of the general low average, '37 boasts of many super snakes, one whose term average is still above 200 grade points.



SOPHOMORE CLASS OFFICERS Edwards, Rosencranz, President; Wickett, Secretary; Benton, Vice-President; Zezukevich, Treasurer.

 $\star$  Athletically, especially with regard to football, the sophs have stood high. In tennis and in golf it has also produced good participants and similarly in handball.

★ Class officers for this year were:

Dick Rosencranz
Ralph Benton
Walton Wickett
Victor Zezukevich
Wendel Miller Paul Edwards Bob Mahoney

#### SOPHOMORE CLASS

Fifth Row: P. Edwards, A. R. Sole, Mahoney, Zezukevich, Gibson, Wheeler, H. Warner, H. Miller, Belzer, Penn — Fourth Row: Fenzi, J. M. Smith, Gilmore, Chatham, Dion, Wing, Dusel, Townsend, Wylie, Teague, Zimmerman, Owen, Stackhouse, Wetmore, Moore, Nojima—*Third* Row: Austen, Fahrner, Tyler, Goddard, De Vault, R. C. Jones, Harper, Bussard, Stones, Faust, Griffis, Van Der Werff, Laird, Axelrod, Van Fleet, Wickett, Second Row: Lycett, Kimball, Guardia, Selberg, M. Webster, C. Gates, J. S. Edwards, Peterson, Larson, Nellis, Horkey, Dunbar, Grobecker, Horne, Rosencranz, — Front Row: Hadley, Hoffman, Moncrief, Shimer, Wileman, Askenas, Mann, Dowd, Drummond, Boyd, Park, Keens, Erickson, Moore, Yale, Kapin, Ridgeway, Dorwart.





FROSH CLASS OFFICERS Ropp, Treasurer; Elliott, Secretary Woodrich, Vice-President; D. Davidson, President

# FRESHMAN CLASS

★ In mid-September, representative young men of twenty states, Canada, and two U. S. possessions converged upon the Institute to embark upon their college careers. They were high ranking scholars and achieved the highest average rating of an entering class since the inception of the physical efficiency tests. Twothirds of the class made a three-day trip to the Whittier "Y" Camp at Arbolado, where they

became acquainted and learned about the traditions, policies and problems of life and study at the Institute. One of the most radical changes for the majority of the Freshmen was the installation of the Institute's honor system.  $\star$  The Sophomores undertook to debase the neophytes, and class differences were finally settled by a pushball contest at the annual Frosh-Soph Rodeo. Kidnappings, rescues and turmoil reigned in the steam tunnels prior to the contest as the Sophomores attempted to gain an upper hand in the contest by removing the best of their opponents. On the field, Freshman effort availed nothing against the superior tactics of the upperclassmen, who scored the lone goal of the game.

★ Freshman versatility was definitely established, January 2, when they presented the Freshman Student Body Dance. Four hundred couples filled the lavishly decorated Exhibition Hall of the Pasadena Civic Auditorium and danced to the music of Everett Hoagland's Orchestra. On March 29, the class again scored socially with the aid of Hank Evans' Orchestra at the Frosh-Soph Rodeo Dance in Dabney Lounge.



FROSH CLASS

Fifth Row: Woodrich, Sherwood, Arnold, Ellings, Beavon, B. Davidson, Folkins, Page, Thomas, Llewellyn, Walker, Robertson, Dorr, Osburne, Dixon - Fourth Row: Crozier, Forward, Twiss, Farneman, Webber, Voorhees, Goff, Nickerson, Bellin - Third Row: Freede, Levy, Friend, Althouse, Blake, Griswold, Daggitt, Weinberger, Lowell, Carlson, Weiner, Craig, Ross, Meanley -Second Row: Van Dusen, Grainger, Bowman, McGarth, Custer, Stone, Metzner, Ellis, Frisius, R. L. Smith, Bauer, H. Evans, Hindman, Rynearson - Front Row: Horine, Bush, Ballreich, Harker, Wilson, Balsley, D. Davidson, Albert, Wolfberg, Knell, J. McLean, Luckenbill, M. Levet.









Layton Stanton, Coach Fox Stanton, Stewart Seymour

# COACHES

★ 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 Cal Tech respected in sports circles.

★ 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 Cal Tech the most versatile attack in the conference. It was he who had to work with a line averaging 163 pounds and a backfield averaging 161 pounds.

★ 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. ★ Highly instrumental in producing this year's championship football team were assistant coaches Layton Stanton and Stewart Seymour.

★ 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.

★ 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 inter-collegiate program.

 $\star$  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.

# VARSITY FOOTBALL

★ Varsity football is the "King of Sports" at Cal Tech. It plays an important part in the lives of the student body, yet a much greater part in the lives of the fellows who participate. Every year, two weeks before school starts, the eager members arrive in Tournament Park to begin the fall practice season. Two weeks of hard training to get in condition after a summer that may not have been exactly best for the necessary hard muscles. Two weeks filled with the attempt to instil in the players the real spirit of the game and the one great principle behind Cal Tech football, to play the game for the love of the game.

★ The season of 1934-35 was particularly suitable for the development of such a spirit. With only six returning lettermen there was much work to do in the matter of getting some experience for the younger members of the squad. Inexperience showed up, but as the season passed on these cases were much fewer, and the team began to be able to stand up under a fast-moving football game.



Capt. Frank Davis, Guard

★ The first two games were particularly valuable in the matter of giving the team experience. The Friday night before registration the team went down to the New Gilmore Stadium to play with the Loyola Lions. The score will not be mentioned but a good time was had by all. The following week Arizona State at Tempe, Arizona, was the host. This was the longest trip a Cal Tech team had taken for some years, and everyone had a chance to see some of the country as well as learn some of the points of the game found only by playing schools far away.



VARSITY FOOTBALL W. Miller, Benton, Fussell, W. Johnson, D. Miller, C. Larson, Davis, Captain, Peek, Wetmore, R. P. Jones, P. Edwards.

#### GE 5 1



Nollan, Guard





Kramer, Half



Larsen, Tackle



Bush, End

Zimmerman, Tackle

Shapp, Quarter

Benton, Full

\* After these two games, which gave the younger members a good start on their way to development of the true game spirit, the team settled down to two weeks of practice for the game with Redlands. Tech entered the game with a real fighting spirit, but that bad thing of inexperience came up in the third quarter, and Redlands took a lead that Tech could not overcome.

 $\star$  As youth is always full of hope, so was the team, and with great determination the following Saturday afternoon they went out to do what they could to the Pomona Sagehens. The sad part of the game was a brilliant passing attack put on by Pomona that swept the Cal Tech backfield off their feet and led to a Pomona victory.

 $\star$  Now was the time when the Beavers felt sure they could step into the win column, as they were to entertain La Verne in Tournament Park. Tech took the lead in the early part of the first quarter, but La Verne decided that they were the guests and should do as they pleased. The result was that La Verne took the lead away from the Beavers in the third quarter and would not yield to a hard last-minute Tech touchdown drive that was finally stopped by the gun.

★ The next week's bye was necessary for the preparation for the coming big game with Oxy. This was the game that the team absolutely had to win to uphold the even-odd tradition that has grown up. That is, Tech wins the game on the even years and Oxy should win on the odd-numbered years. From all past records of the two teams for the year things looked bad for the lighter and less experienced Beavers, but that true game spirit was in the hearts of the members of the team and with the student body behind the team there was little chance for Oxy to win. All who attended the game will remember the last few minutes when Oxy tried again and again to overcome the one point lead that Tech held but the final gun gave us the only victory of the year.

\* After their thrilling win over Oxy the team traveled to Fresno, where a rather damp time was had in about three inches of water, and many of the fellows had their first experience with mud cleats.  $\star$  The season ended all too soon. The team was getting in the right shape of mind to be able to stand the stress of the game, but Santa Barbara, with a determination to win from Tech for once, won the final game. This was particularly sad for the senior members of the squad, but they had the feeling of having played a good hard game.  $\star$  Little has been said about the individual members of the team. The end positions were filled by Daniel Miller, Ken Bush, Paul Ed-







Jerauld, Half

Miller, End



Johnson, Quarter



Snow, Tackle



Fussell, Half



Stuppy, Tackle



Jones, Tackle



McIntyre, Center





















wards, with Bob Fussell coming in from the fullback position. At tackle Bob Jones and "Swede" Larson did most all the playing. They were the two top men on the team in playing time, but Larry Stuppy and John Works were there to fill in. The guard positions were filled by different players about every game. Capt. Frank Davis was the outstanding guard, but due to injuries was kept out of several of the games. His place and that of running guard was ably filled by John Stick, Bill Wetmore, Al Zimmerman, Neal Snow, and Bob Elliot. At center Howard Peek and John Nollan were competing with each other, and it was usually a case of which one was in the better condition. In the backfield Wallace Johnson or Harold Sharp did the signal calling while Art Bishop would sometimes get the call for duty. There were five halfbacks that were present for duty. Bob Kramer and Ralph Benton did the blocking, while Ed Wileman, Wendell Miller and Don Blodgett carried the ball. Kramer also did much of the punting. Bob Fussell, a made-over end, and Dick Rosencranz did the work of the fullback, with much help from Bob Mc-Intyre until he was injured.

 $\star$  Besides these mentioned members there were several more who did not play very much, but their time will come in the 1935 season when the defeats of the past are forgotten.

# FROSH FOOTBALL

 $\star$  So far as winning games may be considered as an objective, the yearling football squad experienced a sad season. However, victory as such is not the prime requisite for a successful year. Team spirit plays an important part and this year's frosh team was enthusiastic.

★ Although we lost both of them by the scores of 12-6 and 21-12, members of the squad look back on the Pomona games as highlights of the season, and it is fitting to state here that the Tech men appreciated fully the spirit and sportsmanship which marked the playing of the Sagechicks in both games. In the opening quarter of the second game in the Rose Bowl, Pomona scored twice on two costly fumbles made by the Tech safety man. In the second period, however, Cochrane, Tech fullback, went over for a touchdown, and in the third quarter a long run by McLean, captain and ace halfback, made possible a pass from Smith to Baker for the other score. However, the Tech team was unable to overtake the Pomona yearlings or score further.

 $\star$  The schedule was tough and the Frosh proved they can take it despite their defeats. Throughout the season McLean, Smith, and Rowell inspired the team with their stellar football.

★ Those who received numerals were: Rowell, Helsel, Knell, Bowen, Shreve, Osborn, Captain McLean, Smith, Cochrane, Griswold, Brown, Demmit, Hamilton, VanHorn, Blake, and Peat.





Zediker Basketball Coach



Hallanger, Bussard, Bucknell, Radcliffe Varsity Basketball Managers

# VARSITY BASKETBALL

★ Starting the season under the greatest of difficulties, fifteen men answered the call of Captain Dick Jahns by turning out for basketball in early November. Without financial support from the Institute, these men secured a gymnasium and the services of an excellent coach within a short time.

 $\star$  Complete and natty sweat suits were obtained by the players themselves, and a strong squad began to take form. With lettermen Jahns, Colvin, Dauben, and Gates, plus very strong reserve material available, this squad gave all indications of having a very profitable season.

★ The team met with indifferent success in its contests as a member of the Pasadena Commercial League, largely because of the experimentation of Coach E. S. Zediker in his attempt to find a winning combination. The winter months were significant, however, because of the sensational improvement of Chet Davis, one of last year's reserves, at a forward position.

★ Beginning the conference season against Chapman College, the Beavers were dropped by a staggering score, partly through the absence of several first string men. Pomona and Redlands also garnered one-sided wins over the Techmen on succeeding Saturdays.

★ Against Pomona in the return game, the Engineers began to find themselves, losing the engagement only by a very close score. Dauben had his long shots clicking with deadly accuracy, while Jahns' one-handed side flings paid off to the tune of a dozen digits.

★ Chapman College was then given the scare of its life, barely easing out a 46 to 44 victory over the Beavers, who were now really "hot." Tom Harper turned in a beautifully played game at guard, scoring twelve points and com-



Jahns

Harper

Meneghelli

Davis

bining with Jahns, who rang up fifteen, to stage a rally which barely fell short of its mark.  $\star$  Victims of inflated craniums, the Techsters kicked away the Santa Barbara fracas with a dismal performance. Schuman, however, made



Elconin

Colvin

Gluckman

Harkey



good in his first chance at forward, while Davis turned in a superb passing game.

\* Sweet revenge from a stunning football defeat came during the following week when the Engineers ran roughshod over Loyola University, 66 to 20. Harper, Gates, and Horkey checked the terrible Lions to a paltry six field goals, while the home guard offense was going to town. Captain Jahns took high point honors with nineteen, followed by Schuman with thirteen and Colvin with nine.

\* San Diego, with its highly-touted offense, was held to another narrow victory when Dauben, Jahns, and Schuman nearly succeeded in outscoring their opponents. A let-down came the next week, when Occidental trimmed the Beavers handily, Colvin's ten points being the only bright spot.

 $\star$  The final game of the season was a thriller, with Oxy again victorious, but very narrowly so. Jahns closed his career in a blaze of glory

by taking high point honors with fourteen markers, made over the guarding of Marsh Beebe, while "Bull" Elconin turned in as fine a defensive game as one could desire. The passing of Harper and Dauben was a highlight.

\* Lettermen returning next year are Co-Captains-Elect Dauben and Elconin; Harper, guard; and Horkey, Schuman, and Colvin, forwards. Forwards Jahns and Davis are the only men lost by graduation.

★ Jahns will be sorely missed, as his offensive record was an enviable one. He led all nonconference players in scoring, with an average of over ten points a game, and was a fine inspirational leader on the floor. Davis was second in scoring, and will also be difficult to replace. However, with Haver, Penn, Lockwood, and Peek on hand to aid the returning letter winners, next season's squad should be a powerful one.







Yates

Schuman

Dauben

# FROSH BASKETBALL

★ Very fortunate in obtaining the services of Howard McCoy, a star player himself, as coach, this year's freshmen boasted a basketball team which had more than average success.
Various high schools in the Southland, as well as Pomona, Occidental, and Chapman freshman teams were played by the baby engineers.
★ The outstanding player on the squad was Garn Rynearson, fast, shifty forward. Always a dangerous man, he will be best remembered for his work in leading his mates to a thrilling two-point victory over Burbank High School.
★ Captain Stan Walfberg was a stone wall on defense, and an uncanny long shot artist as well. He was an ideal leader, combining good advice with his own good example.

★ The fighters of the team were Dave Phillip and Jack Baker, forward and center, respectively. No odds were too great to daunt this duo, which accounted for more points during the season than any other four players.

 $\star$  Paul Engelder, forward, was also a little scrapper, coming through with points when they were most needed. Neil Curry was a similar type of player.

★ Noble Maines, "Flash" Smith, Ralph Harker, Don Davidson, and the towering Folkins rounded out the squad, each playing excellent ball when called upon.



Back Row: Weinberger, R. Davidson, Folkins, Curry, Maines, McCoy, Coach — Front Row: Baker, D. Davidson, Wolfberg, Rynearson, P. Engelder.

# VARSITY TRACK

★ The dim days of early January saw Coach Fox Stanton issue the first call to the faithful for track practice, which was received by a vacation-jaded student body whose athletes could not yet grasp the idea of buckling down to fundamental training; however, within a week, a minimum of hammering brought a large turnout of old and new men to gladden his eye. Though captain-elect Claude Scott was lost by ineligibility, his distance-running spots were claimed by Waddell and Scoville, transfer newcomers, and gaps left by graduating weightmen were filled by sophomores. \* Interhouse and interclass meets served as tests to all, and it was noted that slow times were recorded by those who were later to rise and shine in the big meets, when early training began to pay off. Blacker House and the Junior class copped the most points in these, respectively.

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# Compton 77 1/2 Cal Tech 53 1/2

★ The Compton Junior College meet, which was held at Paddock Field, February ninth, produced some gratifying performances, and due to an already apparent strength vested in the second and third-place winners, the score was held to Compton  $77\frac{1}{2}$ , Cal Tech  $53\frac{1}{2}$ . Al Creal ran 10 flat and 22.8 seconds in the dashes. Bob Parker, Ferver and Austin took the other Tech firsts.

Cal Tech 73  $\frac{1}{2}$  Pasadena J. C. 57  $\frac{1}{2}$ \*Pasadena J. C. was bested a week later, as Engineers consistently bettered their performances. Don Webster erased a school record in



#### VARSITY TRACK

Third Row: Wileman, Manager, Nojima, Dorwart, C. B. Jones, Scoville, Keens, F. Davis, Webster, Ellery — Second Row: Snow, Manager, Horkey, Nellis, Chamberlain, Ferver, Fenzi, J. Gates, McIntyre, Stanton, Coach, Hanes, Trainer — Front Row: Selberg, C. Gates, Waddell, Snelling, Creal, Captain, Rector, Veysey, Blodgett.





the broad jump, as he bounced out from the take-off to twenty-two feet, five inches away. Webster had been shooting at the old mark for three years, and deserved to succeed. Every inch was needed to take first from Callier of J. C.

★ Waddell came into form in winning the mile at 4:52.7. Creal was the only double winner, as he took both dashes from Callier, considered near tops in J. C. Competition. Don Blodgett in the quarter; Clyde Jones in the vault; Greer Ferver in the high jump; and Hoyt Austin in the discus were other fivepoint men, while the relay team won.

# Cal Tech 69 Redlands 62

★ The Redlands meet was the closest of all. Held on a day when track conditions were not the best, performances did not impress, but some competitive spirit saved the relay team of Snelling, Keens, Veysey, and Creal a chance to pull out the meet. Both hurdle races were swept by Tech, but the noteworthy feats were Waddell's placing second in the mile, and Blodgett's save of three points in the quarter, in doing which he turned a heavy cold into severe illness. Webster, Wileman, Scoville, and Creal came through, the latter in two races.

Top, Left: Jones. Center, Left: Webster. Center, Right: Smith. Below, Left: Jones. Below, Center: Heath. Below, Right: Ferver.







# A. A. U. Relays

★ A four-man four-forty relay team composed of Parker, McIntyre, Chamberlain, and Creal won at Long Beach from Pomona and Occidental entries in 44.9 seconds, in the A. A. U. relay competition.

# Occidental 74 2-3 Cal Tech 45 1-3 Santa Barbara 42

★ A strong Occidental team beat the Engineers, who nosed out Santa Barbara for second, in a triangular at Paddock, March 16. Don Webster, who won the broad jump, was the only one who managed to excel, but Al Creal, newly elected captain, got two second places Behind Reel of the Tigers. No fewer than seventeen men made points for Tech.

# U. C. L. A. 116 Cal Tech 36 San Jose 22

★ Not daunted by prospects of being buried, Tech did well against U. C. L. A. March 30, Creal clocking 21.8 in the 220 to beat the great Lu Valle, and taking second to MacLennan in the hundred. Frank Davis, Bob Parker, Bob Jones, and Pete Stick got deserved points in the hammer-throw. Ferver won the high jump.

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# Pomona 74 Cal Tech 66

 $\star$  A really tough one to lose came April 6, when a relay victory by Pomona sunk Tech



Left: Heath. Above: Bakeman.









Ellery

Benton



hopes. Captain Creal made a gallant bid in the anchor lap, which gained twelve yards, but fell short of catching Newman. Creal had run the dashes previously.

★ Some dope was upset to keep Tech in the running. Waddell, Scoville, Davis, Heath, Jones and Webster won their events.



# Cal Tech 89<sup>1</sup>/<sub>2</sub> Chapman 45 Loyola 26<sup>1</sup>/<sub>2</sub>

★ The final meet was taken by a strong team from a group of strong individuals, from Chapman and Loyola. Greer Ferver finally broke his own school record in the high jump, by negotiating 6 ft.  $2\frac{1}{16}$  inches.

# Santa Barbara Invitational

★ Nine men were entered in the open competition. Wilbur Snelling, Vic Veysey, George Keens, and Al Creal ran fourth to university teams and Chapman College. Parker was second in the hammer, and Ferver high-jumped fourth.

# Lettermen

★ Captain Creal, Austin, Benton, Blodgett, Chamberlain, Davis, Ellery, Heath, Horkey, C. Jones, R. Jones, Keens, McIntyre, Parker, Scoville, Smith, Snelling, Veysey, Waddell, Webster, Wickett, and Wileman. Senior manager Snow was also rewarded.



Top Left: Waddell. Top Right: Scoville. Above Left: Parker. Above Center: Veysey. Above Right: Jones.

# FROSH TRACK

★ This year has produced a freshman track squad hardly equalled in the annals of Tech. They have swept practically the whole field in which they have competed. Numerous records have been equalled or surpassed in the triumphant march of the yearlings through the year. Coach Stanton has a splendid crop of potential champions for his varsity among the members of the green-shirters.

★ The outstanding star of the squad was John McLean from the City of Santa Barbara. He piled up a point score from double triumphs in the dashes aided with scattered points from other events which has never been reached by a first year man before. He was consistent at even times for both events throughout the season. Next year he will make an admirable running mate for the Varsity Champ, Al Creal. Doug Albert is a star seldom found at Tech. He can run the hurdles, half or quarter, with equal ease. Just where Stanton will use him is problematical. At present he is faster than any of the varsity hurdlers or half-milers. Dorr and Voorhees in the distances are sure to count heavily in years to come as they have this year. They usually came through in the mile and two-mile, respectively. Goff and Weiner aided these men in several meets. In the field there were less spectacular performances produced. Wilson in the shot and other weight events has plenty of potential qualities. Baker has the sky to reach in the pole-vault.

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★ In mid-season "Layt" Stanton was called from the field of sport to a position with the oil companies. The task of keeping the frosh team together and of producing better performances fell on the shoulders of Folke Skoog. Tech's Olympic Games competitor will have a better chance next year of showing whether he can instil in the yearlings some of his own ability to get results.



# FROSH TRACK

Third Row: Grainger, Manager, Wilson, Downing, Ivanoff, Goff, Friend, Althouse, Weiner, Skoog, Coach, Bellin — Second Row: Baker, Graybeal, Ropp, Smith, Albert, J. Mc-Lean, Demmitt — Front Row: Harker, Dorr, Voorhees.

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# CROSS COUNTRY

★ Breaking away from the former tradition of being a losing team, the Cal Tech Cross Country Men this year proved their merit. The Varsity Team began its year by crushing the team from Occidental College on the Rose Bowl Track between halves of the Oxy-Tech Football Game. There John Waddell and Allan Scoville, both newcomers, sparkled for the first time, but not the last. Bakeman distinguished himself this year by being the only three-year varsity letterman.

★ The Freshman Team found its main strength in the outstanding performances of Stan Voorhees and John Dorr, who, together with their teammates brought victory to Cal Tech in every meet except that with Pasadena Junior College. There they nonchalantly lost the course and started up the trail to Mt. Wilson.

★ Interhouse competition was keen, for there the varsity and freshman vied side by side. Nevertheless, the varsity men showed themselves unquestionably superior to the yearlings; the former were particularly strong in the three and four-mile events.

★ Other meets were held with U. C. L. A., Redlands and Pomona.



VARSITY CROSS-COUNTRY Wickett, Waddell, Scoville, Veysey, Hanes, Coach.



FROSH CROSS-COUNTRY Hanes, Coach, Weiner, Dorr, Grainger, Friend, Rudkin, Goff, Voorhees.

# VARSITY BASEBALL

★ Faced with the task of rebuilding the strong baseball nine which so successfully represented Tech last year, Coach Harold Z. Musselman began his labors with a nucleus of only five returning lettermen: Captain "Lefty" Leppert, Dick Jahns, and Johnny Nollan, infielders; Warren Potter, stellar hurler and infielder; and Charley Thompson, outfielder and pitcher.
★ The largest turnout in the history of Tech baseball responded to the call for candidates, however, and for the first time in many years there were enough men to form three complete nines. Hampered by the late rains, the players were slow to round into form, although they often showed great potentialities.

★ After dropping two hard-fought contests to Oxy and Redlands, the Beavers suddenly found their hitting togs and cut the Pomona Sagehens to ribbons, 26 to 4, in the most recent game played as this book goes to press. Wilstam pitched a beautiful game, and was given sensational support by his mates. Leppert's beautiful pickup of Potter's low throw at first base and two perfect pegs to nip runners at the plate from deep right field by Jahns were



Musselman and Doll.

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the fielding highlights, while Wilstam, Schuman, and Nollan connected for homers and Jahns doubled with the bags loaded.

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 $\star$  A serious gap in the backstopping department was admirably filled by Johnny Nollan, who handled the position like a veteran. His judgment was very steady, and his arrow-like throws to the bases cut down would-be stealers

# VARSITY BASEBALL

Third Row: Seidel, Schombel, E. Miller, Park, Mann, Sklar, Ridgeway — Second Row: Musselman, Coach, Wilstam, Kossiakoff, Morgan, Sheppard, Schuman, Colvin, Campbell, Gruenberger — Front Row: Seaman, Dorwart, L. Davenport, Leppert, Captain, Potter, Jahns, C. Davis, Thompson, Nollan.





Capt. Elmer Leppert



Davenport and Jahns



Gravitt and Nollan

at a terrific rate. Chet Davis and Bruce Gravitt, seniors, and Dick Ridgeway, a sophomore, were his understudies.

★ The southpaw slants of Al Wilstam were a constant source of wonder to opposing batsmen, while his fast ball always kept the plate red hot. Aside from being the first string chucker, Al was a potent hitter, his low, whistling drives bounding through the outfield for many extra bases.

★ Captain Elmer Leppert, by far one of the classiest first sackers ever seen at Tech, was a polished fielder, ran the bases like a frightened rabbit, and was a steady hitter as well. Batting in the lead-off position, his fine play was a constant source of inspiration to his teammates.

★ The early season battle for second base was a very hard one, with Lind Davenport getting the call over the promising young sophomore, Len Schombel, and the veteran Seidel, who suffered a hand injury which shelved him for some weeks. A slugging type of hitter, Davenport rated among the powerhouses of the team.

★ The very difficult position of shortstop was handled perfectly by Warren Potter, threeyear letterman and last year's captain. The most consistent hitter on the team, his fielding was of superior calibre. Possessed of a remarkable throwing arm, a cool head, and great ability as a pitcher, he should be the hardest man to replace next year.

 $\star$  Bill Elconin, who rounded out the trio of heavy hitters, held down the hot corner with unusual finesse. He was poison to all opposing pitchers when at the plate. Kossiakoff and Sheppard understudied him.

 $\star$  A shortstop last year, Dick Jahns was shifted to the outfield by Coach Musselman, where he earned his right to the title of the fastest man on the team. He led his mates in

the stolen base department, with seven pilfered sacks in the first three games.

 $\star$  Dan Schuman, a sophomore with an iron arm, held down center field. Rated a sure catch of a fly ball, he was very powerful with the willow when he made contact.

★ The veteran Charley Thompson and George

# FROSH BASEBALL

★ To the experienced man this year's Frosh Baseball Team shows great promise. An evenbalanced organization is placed on the field for every game by the canny Coach Doll. It is seldom that the Frosh show so much promise. There is no great outstanding star. The season has been marked by exceptional cooperation and team play. Musselman hopes to use the talents of the frosh in building for his varsity next year.

 $\star$  To date the peagreeners have played eight

Dorwart, a second year man, fought it out for the remaining outfield position, with final honors about even. Thompson shaded his younger rival in hitting, but Dorwart was a more polished fielder. Bruce Morgan and Maurice Sklar supported the before-named quartet in the outer gardens.

games. These have consisted of paired series with Occidental, Pomona and several High School teams. The season has been very successful for it has been marked by the brilliant wins scored over the rivals from across the gulch. The Tiger Babes were no match for the local nine.

★ To Coach Doll must go some of the credit for the prowess of the players. He has imparted to them much of the valuable baseball lore which he has gleaned from the Varsity Coach Musselman in his four years working under the Baseball Sage of Tech.



Third Row: Farneman, P. Engelder, Beavon, Hobson, Weinberger, Manager, Levet—Second Row: Forward, Crozier, Rowell, Woodrich, Ellings, Bowman, Phillip, Siechert, Manager, Doll, Coach — Front Row: Dougherty, Carr, Tobin, Hobson, Luckenbill, D. Davidson, Wolfberg, Jewett.





Patterson

# TENNIS

★ The 1935 season marks the climax of three years of gradually improving Tech Tennis Teams. Patterson and Reynolds played for Tech for the fourth consecutive year; while Gay played his third year on the squad. Harper, the only newcomer, ably filled the spot vacated at second singles by the graduation of Joe Grimes, the '34 captain. Griffith, Dowd, Bussard, Salisbury, Swanson and Nichols completed the team, with Swanson acting as manager.

★ Practice commenced early in February. The services of Dr. Lacosta, formerly of the University of Texas Tennis Team, were engaged as coach. This year marked the advent of tennis as a major sport. Practice matches were held with U.S.C., U.C.L.A., and Glendale J. C. U. S. C. and U. C. L. A. administered their annual beatings. No conference matches were lost. Pomona was beaten once, while Redlands and Occidental suffered two defeats apiece. A four-man team consisting of Patterson and Gay in the singles with Reynolds and Harper in the doubles made the trip to Ojai. Patterson was defeated in the quarter-finals by Wetherell



VARSITY TENNIS Second Row: Swanson, Playing Manager, Harper, Griffith, Gay, Salisbury— Front Row: D. Nichols, Dowd, Bussard, Patterson, Captain, Reynolds.



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of Santa Ana J. C., 7-5, 7-5. Reynolds and Harper lost in the second round of the doubles, 8-6, 6-3, to the second seeded team of Pommer and Dey from Stanford. The season closed on May 4 with the Pomona match. During the season Tech registered eight wins and suffered three defeats. For their efforts the men are to be awarded major sport stripes for each tennis letter won.

 $\star$  The frosh turned out the best team produced by that class in the last three years. They defeated Montebello High, Alhambra High, Burbank High and Webb School with very little difficulty. Keller, the star of the team, succeeded in going through the year without suffering a defeat or the loss of a set in any Frosh competition. The first four men, Keller, Hulbirt, Dixon and Elliott have not lost a match in either singles or doubles. These men are expected to fill the spots left vacant by the graduation of this year's stars of the varsity.



Reynolds



FROSH TENNIS Second Row: Bauer, Levin, Lewis - Front Row: Osbourne, Elliot, Keller, Dixon, Hulbirt, Manager.



# GOLF

★ A new sport was instituted this year at Tech in the formation of a golf team. The sport has been recognized by the student body as a regulation minor sport with the appropriate awards. A fairly successful season was scheduled with the team meeting competition from the surrounding J. C. aggregations and from several of the colleges.

★ To Elmer Dauben and Professor Fogg is due the credit for building up the interest in the sport. For several years the fellows interested in golf have been individually practicing the game. This year offers from neighboring institutions instigated the desire for a competitive team. Numbered among this venturesome group are Dauben, Chapman, Heath, Austin,

Beal, Jack Edwards and Coach Phil Fogg. Facilities for practice were gained at a reduced rate at one of the local golf courses. Day after day the hardy players could be seen practicing their several shots and trudging hour upon hour over the traps and fairways of the course.  $\star$  The top players of the group proved to be Dauben and Chapman. In an intercollegiate tournament these battlers upset the applecart several times in gaining the quarter-final round. In the opening round Elmer smothered the medalists by a lop-sided score. This procedure was dished out for several succeeding days to many of the brilliants of the tournament by the "Great One." Each day two sunburnt faces would wearily gleam in the Fleming dining room as Dauben and his caddy.

> Beal, returned from another victory. Marching along with the giant killer was the quiet Chapman. His playing, while less spectacular, was productive of the same results as the bombastic playing of the fiery one.



Second Row: Lemecke, Chapman, J. Edwards, Heath, Austin — Front Row: H. Miller, Dauben, Captain, Beal.








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 $\star$  The first class to live in the houses as freshmen is now terminating its residence in the Undergraduate Houses. From green, unmolded material have the traditions and qualities of the several houses developed. Definite trends are marked in the courses of the houses as units. Where one house is noted for its aggressive participation in all functions, athletic as well as social, another house is typified by its comparative conservative program. Snake-pits, the dens of iniquity, are prevalent in several corners of the building. The midnight oil is flaming many times into the small hours of the morning, but not always in the perusal of knowledge. The talons of fiend bridge grip and dig into men's souls. Ping pong becomes an obsession. Many hours are spent in courting fair daughters of the City of Pasadena. Each has determined which path shall be his in gaining favor in the eyes of Pan.  $\star$  As the years progress one will find that more and more has been added to his life from the contacts made while a member of the Mediterranean domicile. Even as seniors we felt that the atmosphere of the several houses is so distinctive as to enable one to determine a Dabnevite from a Ricketteer, just as the world at large marks an Oxford student.

★ To the several donors and associates of the houses a great obligation is due. They are making it possible for each one of us to gain a closer knit student body, to develop the much-needed social side of our lives. No longer is the Tech student marked as a mere machine. He lives, breathes and radiates life. He is able to meet his fellowman on an equal footing, is able to organize and govern units, builds for the future with tools given him while planning house functions. A fuller life is experienced, a necessary need has been supplied in the presence of a unified body living and constructing as one.

 $\star$  The resident associates have been a source of ideas and counsel. Dr. Eagleson of the Blacker contingent is the veteran of the crowd. He has successfully weathered the storm of four years and appears to be good for several more to come. He has guided the destinies of the house from his study over the archway on the east entrance. Maybe the morning sun aids the proctor in arriving at his decisions. A regular fellow is Phil Fogg. Ask anyone's opinion in Fleming. The house is sorry to lose his services, but wishes him the greatest success as the new Registrar. He will always be a Flemingite to the fellows. May he continue forever in the house spirit. Ricketts' McRae is rounding the house into a sophisticated group of undergraduates. He has not been long with the boys. To the outsider his influence is not noted as it is felt by the members. This is C. K. Alexander's first year associated with the Dabney horde. Their program has increased this year. They have expanded to rival Fleming as leading light of the campus. How much of this is due to "C. K." only the members know themselves.

★ A welcome addition to the campus life is the Throop Club. Newly formed by an aggressive group of seniors, the Club has proved to be one of the leading social and athletic features of the student body. In organizing the non-residents into a living group, Jahns and Company have worked unceasingly to develop it into a rival of the houses. May Wally Swanson carry on the good work and expand its ties to a great field of campus life.

# FLEMING HILITES

★ Although Fleming House is, as usual, standing at the top in nearly all inter-house activities, the one real distinguishing feature of the House is found not in its actual record of accomplishment, for that may be rivaled, but in its outstanding spirit of initiative and independence. It is for this trait that the men of Fleming are complimented by the appellation, "Rowdies."

★ One striking instance of this spirit is the spontaneous appearance of the Austen Inter-Alley Trophy for that alley most skilled in the black arts. Originating in a contest for the best entertainment at one of the famous Fleming Smokers, the precedent was firmly established by the dedication by John Austen of this unique brass trophy and all its accoutrements to the tradition of Fleming originality. Although beginning in the middle of the year, the competition has already seen some dozen challenges and fiercely battled contests, each of which, as ruled by unanimous consent, must be entirely original.

 $\star$  Another new house policy which has attracted notice and imitation is the presentation to all house officers of dinner coats bearing the Fleming coat of arms.

★ While hitherto the men of the houses have contented themselves with futile talk and stoic philosophy in face of the food served them for meals, Fleming men, in close cooperation with all the houses, succeeded this year in not only registering a protest of 85% of all house men with Dr. Millikan, but also in backing it up with concrete and practicable suggestions which were immediately put into effect.

 $\star$  In the social sphere Fleming House will be remembered both for her "open house" dances and ambitious guest program. In close coop-



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FLEMING HOUSE OFFICERS

Second Row: Dauben, Athletic Manager; Humason, Vice-President; Stuppy, President; Gibbs, Entertainment Chairman; Fogg, Associate — Front Row: Belzer, Secretary; Schneider, Social Chairman; Beal, Treasurer; Cochrane, Frosh Chairman.



FLEMING HOUSE UPPERCLASS COMMITTEE Second Row: Watts, Stuppy, Merralls, Fussell — Front Row: Humason, King, Dourson, Milan.

eration with the Throop Club, a barn dance was staged, perhaps the outstanding event of the year, while the Fleming Hallowe'en Dance will be remembered by all as the unique and outstanding dance of the first term.

★ Due to the initiative of other "Rowdies," Fleming has enjoyed at dinner not only the company of men of the campus and Institute

associates but also many outstanding speakers who visited the campus. Innovating in the social sphere found Fleming men each week visiting different prominent Pasadenans; thus establishing a precedent sure to be followed in years to come.

★ The same creed of house cooperation and positive action led Fleming to pre-eminence in sports. The Inter-House Trophy adorning her mantelpiece bids fair to return next year. As this goes to press Fleming is in the lead and with swimming coming up, the return of the trophy is generally conceded. Just below this trophy stands Discobolus in his usual home, from which he strays elsewhere on short visits but always returns to his well-worn niche above the Fleming fireplace. ★ All in all, the "House of Individualists" can have no cause for regret except the leaving of Prof. Phillip Fogg, her resident associate, to whose leadership may be attributed the rise of true fraternal feeling among house men. In honor of Prof. Fogg, who next year will be chairman of the non-resident associates of Fleming, a house Alumni Dinner is planned for the end of the year when all the old house grads, among whom a strong alumni association is forming, will be back to bid Phil farewell and enjoy a traditional Fleming-style smoker. It is to be hoped that in years to come Phil Fogg will remain as proud of Fleming House as the men feel indebted to him for his friendly counsel and true comradeship during the first years of the House.



#### FLEMING HOUSE

Fifth Row: Gerlough, Gardner, Klocksiem, Patrick, Helsel, Milburn, Llewellyn, R. Davidson, Austin, H. Youngs, Wing, J. S. Edwards, Heitz — Fourth Row: Baker, King, Bishop, Grainger, McGraw, Dorr, Isham, Gibbs, Friend, Ross, Farnham, Siechert, Mueller, Fussell, Townsend, Frost, Beal, Watts — Third Row: Bakeman, Clark, Lycett, Goddard, Snelling, Van Riper, Stuppy, Fogg, Humason, Dauben, Wilson, Peterson, McLenathen, Lindsay, Spaulding, Parker, Hurst, Wileman, Kimball — Second Row: Merralls, Allardt, Osburne, Hoffman, Freede, Dowd, Mann, Jordan, Haver, Austen, Gordon, Evans, Belzer — Front Row: Farneman, Ehrenberg, Gelzer, Walker, H. Miller, MacDonald, Rynearson, Schiller, Schneider, Cochrane, Penn, Dourson, McIntyre, Milan.

# **BLACKER HOUSE**

★ To its outstanding past three years, Blacker House has added a fourth in every way as spectacular and certainly as constructive. In all the Houses this has been a year of changes, with the Freshmen rotation and the Upperclass Committee government providing interesting improvements. The effectiveness of this system exemplified itself in Blacker in producing a year of complete harmony and achievement. ★ Undoubtedly the most outstanding achievement of the year was the adoption of a house coat. Feeling that having a distinctive house coat, uniform with all members and identifying Blacker men throughout the campus, would be an incomparable asset to house spirit as well as presenting a unified appearance at meals, blue wool sport coats with Old English "B's" on the pocket were adopted and purchased by over half of the members of the house. Added to this the official designation of house officers and Upperclass Committee through the use of stars above the monograms provides unique distinction. In this one year these coats have become recognized through-



**BLACKER HOUSE OFFICERS** Eagleson, Associate; Briggs, Treasurer; Stick, President; Schaffner, Vice-President; Price, Secretary.

out the campus and in future years it is hoped that they will adorn every member of the house.

 $\star$  Along with the other houses, Blacker started its social season by welcoming the Freshmen with the Four-House-Open-House Dance. The lounge and dining room done in festive carnival spirit with side show booths



#### BLACKER HOUSE

R. P. Jones, Westheimer, E. Johnson — Fourth Row: Bonham, Woods, Horovitz, Thomas, L. Johnson, Krantz, Gorham, J. McLean — Third Row: Eagleson, Beavon, Mac-Mahon, Hopkins, V. Jones, Guardia, Craig, Stone—Second Row: Arnold, Velasquez, Nickerson, Lemecke, Park, Daggitt, Cornwall — Front Row: Luckenbill, Crowe, Hadley, Hamacher, Webster, Boyd, Selberg.



BLACKER HOUSE UPPERCLASS COMMITTEE Second Row: Schaffner, R. P. Jones, Griffiths, Pitzer, Mac-Mahon — Front Row: Levy, Stick, Lemecke, Hammond.

proved the hit of the evening, if crowds were any indication. Following on with a successful "Anti-formality" Informal Dance, and combined Treasure and Scavenger Hunt, the climax of the second term came with the annual Formal Dinner-Dance, the lounge glittering in black and silver, and flowers filling the dining room. As always in Blacker, variety reigning supreme, the stag, ice-skating party, and

the three-day beach party at Balboa over Easter provided never to be forgotten memories. Climaxing the season with the annual Costume Party, this year an undersea dance, several informals, a Tea Dance at the Cocoanut Grove, and a Theater Party, Blacker's social season proved a highlight of the year. \* The coveted Abraham Lincoln Forensic Trophy rested more than its due time on Blacker's mantel this year with the Intercollegiate Bridge Trophy, a seemingly permanent possession, and the mighty Discobolus, the interhouse athletic trophy paying frequent visits. The overwhelming victory of Blacker's Interhouse Track Team provided the most sensational athletic achievement of the year and, along with handball, made up for the plucky though unsuccessful football team. Thus success, at least in spirit and fun, rewarded this year's efforts on the athletic field. \* Fortunate again, to say the least, Blacker was proud to have Dr. Harvey Eagleson as their resident associate for the fourth year. Dr. Eagleson has been the source of unending help and inspiration to the house and has endeared himself deeply to the life in Blacker.



#### BLACKER HOUSE

Third Row: Morgan, Forward, Drummond, Lewis, Gilmore, Van Dusen, W. McLean, Pitzer, Serrell, Lilly — Second Row: Kent, Keyes, Ellings, Woodrich, Bush, Peek, Weiner — Front Row: Rossum, Burnight, Briggs, Schaffner, Stick, Price, Levy.

# DABNEY HOUSE

 $\star$  Dabney House is well pleased with the house spirit developed this year. No longer handicapped by the presence of a large number of uninterested graduate students, and helped by a remarkable increase in the interest of the members in the house affairs, Dabney has gone through the most successful year of its history. ★ Two formal dances were the grand social affairs of the year. During the second term, the annual house formal was held at the Hollywood-Roosevelt Hotel. Near the end of April, Dr. and Mrs. W. B. Munro gave a dance at the Valley Hunt Club for Dabney members and alumni. Both affairs were complete successes.  $\star$  Chief among the other affairs of the year was the exchange dance with the Alpha Delta Pi Sorority at U. C. L. A. Even the hardestshelled hermits of the house returned to society for this informal dance. Rounding out the social year were several informal radio dances, a snow party at Lake Arrowhead, and those iniquitous revels known as smokers, where man can be seen at his worst. And lest it be forgotten, there was Easter week at Balboa.



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DABNEY HOUSE OFFICERS Second Row: Alexander, Associate; Chamberlain, Vice-President — Front Row: Sharp, Treasurer; Cox, President; E. Miller, Secretary.

★ Unique on the campus is the Dabney Divulger, in which are revealed the deepest secrets of Dabney members. Starting out in the fall as an unpretentious bulletin, it has grown to be an illustrated weekly with a circulation of sixty copies. Hard-working Fred Pehoushek was the editor this year, and to his sharp ears and industrious nature is due the credit for the Divulger's success.



#### DABNEY HOUSE

Second Row: McCloy, Richey, Carroll, Koons, A. Dunn, Boothe, Rector, Alexander, Cain, Caldwell — Front Row: Pehoushek, J. Gates, O. Johnson, Chamberlain, Cox, Beman, E. Miller, Elliott.



DABNEY HOUSE UPPERCLASS COMMITTEE Second Row: Pehoushek, Elliott, J. Gates, E. Miller — Front Row: Beman, O. Johnson, Cox, Chamberlain.

★ Dabney was well represented on Varsity and Freshman teams, many members earning letters or numerals. Although not starring in intra-mural competition, the house athletes

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have nothing to be ashamed of. First places were taken in handball and football. The whole record was markedly better than in previous years. Gordon Bussard has been athletic manager for the year.

★ Energetic William Cox, better known as "Brother Bill," served as president. In his labors he was competently assisted by Don Chamberlain, vice-president; Eugene Miller, secretary; Hal Sharp, treasurer; and Owen Johnson, Chairman of the Upperclass Committee.

★ For counsel and assistance in the reorganization resulting from the recommendation of the student life committee, Dabney owes a great deal to C. K. Alexander, popular faculty resident associate this year.



#### DABNEY HOUSE

Fourth Row: Powell, Wickett, C. Gates, Teague, Griffis, Putlitz, Folkins, Harper, Bauer, Wetmore, Erickson, Seidler, Leavitt — Third Row: W. Miller, Campbell, Smith, Dion, Lewis, H. Warner, Bussard, MacMichael, Du Fresne, Legge, R. C. Jones, Hindman, Webber — Second Row: Voorhees, Snyder, Wolfberg, Davidson, Sherwood, Griswold, Weinberger, Meanley, Kazan — Front Row: Wylie, Sharp, Chapman, Gruenberger.



# **RICKETTS HOUSE**

★ In Ricketts House, an important period of adaption to the new conditions suggested by the Committee on Student Relations was successfully passed, with some healthy compromise between conflicting schools (and classes) engendering a better spirit than before. Figuring unobtrusively, but effectively, were Resident Associate Mr. J. W. McRae, with the men his first full year, and President George Tooby. Other officers were Robert Jerauld, Charles Thompson, and Richard Ridgeway. The Chairman of Associates, Dr. Gilbert, has often lent his presence and counsel.

★ The first concerted function of the fall was a smoker held to welcome the freshmen who were chosen as members. They full soon entered into the life in good measure, impelled by Upperclass Committee "daddies" and sophomore "buddies."



**RICKETTS HOUSE OFFICERS** Second Row: Jerauld, Secretary; Ridgeway, Treasurer — Front Row: Thompson, Vice-President; McRae, Associate; Tooby, President.

 $\star$  The autumn barn dance was continued as a tradition, with success. A formal supper dance at the Beverly-Wilshire Florentine Room was in contrast to a stag ice-skating party, also



#### RICKETTS HOUSE

Third Row: La Boyteaux, Jurs, Beckley, Baker, Works, Stoddard, Morse, Quarles — Second Row: Muller, La Rue, Jerauld, Deahl, Nelson, Blodgett, A. Engelder, Ferguson, Henderson, Gelder — Front Row: Elmendorf, Tooby, C. S. Thompson, Carr, Salisbury, McRae, Snow, Ferver, Gay, Heath.



RICKETTS HOUSE UPPERCLASS COMMITTEE Second Row: Deahl, Beckley, Jerauld, Morse — Front Row: Snow, Thompson, Tooby, Davies, Nichols.

held in the winter term. Widely varying views on entertainment have been given consideration in this house, rather uniquely. Individualism was satisfied with an excursion to the play, "Tobacco Road." A gala spring dance completed the major affairs.

★ In interhouse athletics, Ricketts has been quite successful, having topped the heap in both football and basketball. Other sports were also enjoyed, and a large number of varsity and freshman sport awards brought points. The house rule of required participation was not needed in the case of the zealous freshmen, and other classes were scarcely outdone in their support.

 $\star$  During the year, Lincoln, the trophy for forensics, was won, and later defended from abduction. Abe was donated by Mr. Fleming, and has acted as quite a stimulus to the spellbinders.

 $\star$  The year ends with the men of Ricketts House a group of confirmed individualists, knit together by preference alone, but even with such a basically loose bond, a group of some strength.



#### **RICKETTS HOUSE**

Fourth Row: Smith, Frost, Van Fleet, Allen, Page, Edwards, Wheatfill, Balsley, Hunt, Lowell, Jewett, Lavender, Rowell — Third Row: P. Engelder, Ballreich, Rollow, Phillip, Hulbirt, Ellis, Tobin, Ropp, Tyler, Parker, Ahlroth, Nojima, Chatham — Second Row: Sandberg, Shimer, Zezukevich, Harker, Bowman, Horkey, Moncrief, Keens, Dusel, Wilson — Front Row: Mahoney, Elliott, Fenzi, Swain, Wilkinson, Ridgeway, Schmidt.

# THROOP CLUB

★ A year ago the Non-Resident Club, a heterogeneous mass of undergraduate humanity, was the only organization here at Tech to which an off-campus man could turn for social life, athletics, and general recreation. This club was totally inadequate for such a purpose, suffering both from lack of money and correct organization, and from its own inertia.

★ Realizing the increasing irritation caused by such a situation, the newly-elected officers determined to make some radical changes and sweeping reforms. After a long conference with a representative of the Committee on Campus Relations, Bob Kramer, Dick Jahns, Warren Potter, and Allen Rey formulated plans for a new club, which are printed in their entirety in the report of that committee.

★ Its name became the Throop Club, and it took over the facilities in the Old Dorm previously held by the now defunct Non-Resident Club. Membership was obtained only upon payment of two dollars per term dues, said payment being optional, instead of a compulsory one dollar per term for compulsory mem-



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THROOP CLUB OFFICERS Third Row: Swanson, Colvin — Second Row: L. Davenport, Scott, Kramer — Front Row: Hallanger, Jahns, President, Potter.

bership in the old organization. Its officers were: Dick Jahns, president; Warren Potter, vice-president; Bob Kramer and Claude Scott, secretaries; Lind Davenport and Bob Hallanger, treasurers; Hugh Colvin, athletic manager; and Wally Swanson, publicity director and program committee chairman.



#### THROOP CLUB

Fourth Row: L. Nelson, Quarles, Wimpress, Cortelyou, J. Edwards, Swanson, R. Wright, Baldwin — *Third Row:* Kapin, Althouse, Downing, Parker, Beerbower, Estep, Ray, Dickinson — Second Row: Yale, C. Brown, Larson, Jensen, Cohen, C. Davis, P. Jones — Front Row: Estes, Schwartz, Nestler, Dickson, Dorwart, Veysey, McRae, Rivas.



THROOP CLUB COMMITTEEMEN Third Row: Colvin, Swanson, Pabst — Second Row: Leppert, L. Davenport, Kramer, Hallanger — Front Row: Jahns, Potter, Scott.

 $\star$  The officers immediately announced plans which were nothing short of amazing. A strong athletic program, new types of club meetings, a brilliant series of social events, and all backed up by over two hundred dollars in the club treasury. The lid was officially pried off with a stag, in which heavy gambling and equally heavy doughnut and cider inhaling figured prominently.

★ There followed during the three terms a series of dances, at least three a term, which ranged all the way from semi-formal to a "cotton and cords" affair. Among the others were a Hallowe'en masquerade, a barn dance, a semi-formal dinner-dance, and a football rally dance, the last in conjunction with the student houses. In addition, there was a theatre party, a treasure hunt, and an ice skating get-together.

★ The Throop Club has maintained a high position in intramural athletics. Championships were won in indoor baseball, cross country, handball, tennis, and baseball.

★ A high-class set of new officers was elected to carry on in the club for next year. These men, live wires all, are: Wally Swanson, president; Paul Jones, vice-president; Dick Wright, secretary; Holly Dickenson, treasurer; Alfred Wilstam, athletic manager; and Al Pabst, program committee chairman.



#### THROOP CLUB

Fourth Row: Gluckman, Nellis, Dunbar, Hicks, Horine, Scott — Third Row: Higley, Hartlein, R. L. Smith, Potter, Kramer, Willits, Colvin — Second Row: Seaman, Janes, D. Miller, Ribner, Grobecker, Pabst — Front Row: L. Davenport, Leppert, Menghelli, Jahns, Inman, Bucknell, Scoville, Hallanger.



★ Intramural sports have been instituted on the campus in order to give the men of houses and organizations the opportunity to compete in athletics similar to those in which the school has varsity teams. It was decided this year to invade intramural sports by giving credit and points toward intramural trophies to those houses which had men on varsity squads, as well as on the basis of the intramural results. It seems particularly unfortunate that the groups having men winning varsity awards should have this advantage also applied to their intramurals teams, changing the final results of intramural competition.  $\star$  By amassing a total of 144 points over the year, Fleming House Athletes won the Interhouse Trophy for last year, Ricketts was second with a total of 120 points, while the Nonresidents, Blacker and Throop, trailed behind the leaders.

AGE

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★ Following the appointment of Tom Griffiths and Bob Dourson as Intramurals Managers for the year, the season started out with indoor baseball, the four student houses and the Throop Club competing. Throop got a leg on the trophy by winning all of their games, Blacker and Fleming tying for second, and Dabney and Ricketts bringing up the rear. The lead on the trophy was furthered when (Continued on page 91)



THROOP CLUB INTERHOUSE INDOOR BASEBALL CHAMPIONS Second Row: Kossiakoff, Leppert, Seaman, Swanson, Wright, Colvin — Front Row: L. Davenport, Wilstam, Potter, Jahns, C. Davis, Seidel, Schuman.



FLEMING HOUSE FOOTBALL TEAM



BLACKER HOUSE FOOTBALL TEAM



RICKETTS HOUSE FOOTBALL TEAM





DABNEY HOUSE FOOTBALL TEAM



THROOP CLUB FOOTBALL TEAM



INTERHOUSE BASKETBALL GAME



#### RICKETTS HOUSE INTER-HOUSE BASKETBALL CHAMPIONS

Second Row: Ellis, Works, Salisbury, C. Baker, Lavender, Swain — Front Row: Nelson, P. Edwards, Jerauld, Sandberg, Gay, Shimer.



#### BLACKER HOUSE INTER-HOUSE TRACK CHAMPIONS

Stick, Krantz, J. McLean, Schaffner, Selberg, Weiner, Drummond.



Benton



Jones







Al - "Dutch" Zimmerman





Belzer Wrestling Coach

Griffis and Seidler Interhouse Handball Champions

Dowson, Belzer and Bakeman Interhouse Wrestling Champions

#### (Continued from page 86)

the Throop bunch, headed by Scoville and Waddell, won the two, three, and four-mile races in the cross country.

★ With Bob Jerauld starring in the backfield, Ricketts won all four football games, to edge out the Throop Club, featuring Warren Potter as roving center. Fleming, Dabney, and Blacker followed in the order given. Probably the most remarkable feature of the Football series was the fact that in no game did the losing team score any points. Only once during the year did the teams have to resort to a decision on the basis of first downs. The scoreless Fleming-Dabney game was decided in favor of Fleming, with five first downs to Dabney's four. ★ Second term opened with basketball as the major issue. Ricketts took first by making a clean slate of its games. Fleming was second, while Throop, Dabney and Blacker finished in that order. Playing on dirt courts tends to make the game a little more wide open. Some of the most beautiful blocks would put the football team to shame. The hardest job of all was that of the referees, who did not know how much not to see.

 $\star$  The independent and graduate leagues had some very exciting games, with the Chemists coming out on top.

 $\star$  The interhouse track meet was won by Blacker, who took six firsts. The other houses

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finished Ricketts, Fleming, Throop, and Dabney. The interclass meet was won by the juniors, who had a substantial lead on the rest of the field.

 $\star$  In handball, Dabney managed to make a clean sweep of the field with some marvelous playing. Throop finished second, trailed by Blacker, Fleming, and Ricketts.

★ Wrestling was won by Fleming, who took three of the five classes. Ricketts and Dabney each took one of the others to tie for second. This year there was quite a substantial increase shown in the exhibitions of the pretzel benders, who grunted and groaned before an appreciative audience. ★ Throop walked off with the tennis matches by defeating all opponents. As complete returns are not in as yet, final results cannot be given. The open tournaments had a large number of entries, but considerable difficulty was experienced in getting the matches played off.

 $\star$  Final standings in the race cannot even be predicted, as the field is quite close, and anything may swing the balance. The further complication of varsity sports points also makes the matter more difficult. These points may completely change the whole line-up of the houses, and eventually cause the death of the intramural sports program.



An Interhouse Rugby Game



















# EXHIBIT DAY

★ The Annual Exhibit Day and Open House attracted over 12,000 spectators. The Exhibit Day Chairman, "Fritz" Merralls, assisted by "Baron" Allardt, succeeded in putting most of the undergraduate body to work. Fred Pehoushek was in charge of Electrical Engineering, and put on the Big Show in Hi-Volts. Jack Schwartz, in charge of the Civil Engineering Department, among other things, showed the visitors the "Duck Pond." In Mechanical Engineering, Don Webster opened the Metropolitan Water District's Pump Station. In charge of the Physics Department, Henry Stoll also gave excellent lectures on "Cosmic Rays." The Chemistry Department put on a rather educational exhibit under the guiding hand of Emerson Green. Harrison Evans showed many interesting displays in geology and in seismology. R. Sheer, in charge in the Biology Department, featured lectures in Genetics and Vitamins. R. Mahoney put a display in Dabney Lounge of recent publications. In the Astrophysics Department, Harold Schiller and Luther Spalding featured talks and displays on the 200" telescope. Brad Young opened the wind tunnel in Aeronautics, Russel Nance supervised exhibition of the Kellogg Radiation Laboratory. Allen Beerbower, assisted by Kimball and Goddard, did a very good job of lighting the campus for the evening session, and besides this put on a Stage Lighting demonstration lecture. Garner Wilson was in charge of Traffic and coordinated the Freshmen in their information booths and in their business of guiding visitors around the campus.



Back Row: Pehoushek, MacKeown, Beerbower—Second Row: Mahoney, Young, Evans, Green, Schwartz, Webster — Front Row: Stoll, Browne, Scheller, Merralls, Allardt.

# DRAMA CLUB

 $\star$  Participation in Tech dramatics is the basic qualification for membership in the honorary organization known as the Drama Club. This club is active in promoting both amateur dramatics and interest in modern drama at the Institute.

★ The major activity of the Drama Club is the sponsorship of one of the two annual Tech plays. Formerly this play was by tradition a modern play, in contrast to the Greek or Roman play of Pi Kappa Delta. With the presentation three years ago, however, of "The Queen's Husband," this tradition was abandoned. The following year the production, "George Barnwell," marked the establishment of a new tradition, that of selecting an eighteenth-century play. ★ The 1935 presentation of the Drama Club, "Venice Preserved," by Thomas Otway, was enthusiastically received by audiences in its four performances in Culbertson Hall, Thursday, Friday, and Saturday of last week. Douglas Rollow, Edward Kasnicka, Alfred Slater, and Miss Herma Reach turned in excellent performances in the leading roles, and the supporting cast did fine work throughout.

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★ The play deals with Jaffier, a young Venetian, played by Douglas Rollow, who is in love with Belvidera, the daughter of a Senator of Venice. The part of Belvidera was taken by Herma Reach of the Pasadena Community Playhouse, while her father was played by Alfred Slater. Made bitter by misfortune, young Jaffier joins a group headed by his friend, Pierre (Edward Kasnicka), in a plot to murder



Second Row: Jahns, Beckley, Dr. Stanton, Dr. Eagleson, Beerbower, Warner — Front Row: Serrell, Schiller, Park, Levy, President, Kasnicka.



the Venetian Senators. However, he is persuaded by his sweetheart to abandon the plan and to betray his confederates. The climax is reached when, in a fit of remorse at his treachery, he stabs Pierre, who is being tortured on the wheel, and then turns his dagger on himself. Belvidera, learning of his death, dies of a broken heart.

★ Douglas Rollow had the best part of his career in "Venice Preserved," and he made the most of it. His work in the last two acts, particularly in his scenes with Pierre, was especially commendable. Edward Kasnicka, already well known on the campus for his ability as an actor, gave a performance which ranked above even his usual high standard. He has the happy faculty of performing effectively and at the same time naturally. Alfred Slater, whose part offered him comparatively little opportunity, was entirely satisfactory as Priuli.





★ Herma Reach did the outstanding work of the play in the part of Belvidera. Given several difficult emotional scenes to handle she carried them through beautifully, and no doubt assisted the rest of the cast by her example.  $\star$  The entire play was well staged and presented, and ran off very smoothly. Great credit is due Dr. Roger Stanton and Dr. Harvey Eagleson for their fine work in directing the whole production. Their efforts were well re-





warded by the fineness of detail and the finish which the play possessed. Rough edges were conspicuous by their absence. The stage set and the costumes were effective.

 $\star$  At the club's literary meeting during this year, the members were entertained by Dr.

Eagleson, who read from the poetry of Edna St. Vincent Millay.

# OFFICERS

★ Henri A. Levy, *President*; Edward Kasnicka, *Vice-President*; Robert Warner, *Secretary-Treasurer*; Albert Dekker, *Play Manager*.



# GLEE CLUB

★ Under the energetic leadership of Audre Stong, the Glee Club began a year which promised to be a successful one. Inaugurating a program of selective tryouts the club endeavored to accept only those men who seemed to have some vocal ability. Under the Faculty sponsor, Professor Franklin Thomas, these tryouts were carried out and a group of twentyfive men selected. Mr. Stong was then put to work in attempting to develop the men into a unified chorus.

★ One of the first appearances of the Club was in Monday Assembly Program. Shortly after this they were invited to sing at the Elks Temple in Pasadena. This program was especially successful inasmuch as food was offered to the men after the program.

 $\star$  In March the Glee Club, in conjunction with the Band, accompanied the football team

to Santa Barbara. Here they sang during the halves of the football game. After the Santa Barbara victory, the Glee Club and Band were invited to a school dance at which the men enjoyed themselves tremendously. The men stayed overnight and returned after inspecting the town the next day

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 $\star$  Another interesting time was had by the men when they went to Oxy for an exchange program. From all reports the students at Oxy found the program highly hilarious.

★ During the middle of the year Audre Stong was unable to continue as Director of the Club and Mr. Erin Robert Farley of Pasadena was secured to lead the men. Many programs were given under his direction, including one in which the Glee Club aided in a program by the Civic Chorus, which Mr. Farley directs.

★ The officers of the year were: President, Curtis Cortelyou; Treasurer, Paul Jones; Manager, Robert Dourson; and Librarian, William Cox.



Fourth Row: T. Thompson, Janes, R. C. Jones — Third Row: Kapin, Baldwin, Welge, Ribner, Jennison — Second Row: Levet, Dorwart, Nies, Poole, C. Davis, Fahrman — Front Row: Cox, Farley, Director, P. Jones, Cortelyou, President.

# ORCHESTRA

★ The Concert Orchestra of the California Institute of Technology, an organization of thirty-five pieces under the direction of William Bergren, is a well-balanced ensemble. The group has played music of a classical nature, including those of such old masters as Beethoven, Mozart, Bach and Brahms, as well as works of lighter vein.

★ The orchestra presented two Monday Assembly Concerts for the Student Body, first and third terms respectively. Second term, the group played in the Gold Shell at the Memorial Park as one of the regular Sunday Concert Series.

 $\star$  Considerable difficulty was experienced in obtaining a place on the radio, but finally three broadcasts were scheduled for Saturday afternoons over Station KNX.

★ The orchestra was assisted by the Cal Tech Glee Club and Quartet at the Gold Shell Concert and by Cardwell and Hulbirt, who played two trumpet duets at the radio broadcasts. Si Ramo, violinist, and Dr. Duwez, 'cellist, appeared as soloists.

#### MEMBERSHIP LIST—1934-35

William Bergren, Conductor

OFFICERS

#### Robert Dourson, President

First Violin Simon Ramo (Concertmaster) Robert Dourson Benjamin Kazan Moe Rosen Jack Knight Viola Sherwood Haynes Paul Siechert <u>Cello</u> Pol Duwez Bass Armand DuFresne Second Violin Ted Fahrner (Principal) Tom Lauritsen Bruce Hicks Richard Brice Flute Douglas Rollow Oboe

Everett Henderson

Richard Rosencranz, Manager

#### Clarinets John Farneman Bruce Morgan Joseph Ashworth

Bassoon Emmett Holman

Bass Clarinet Thomas Meanley

Saxophone Russell Kennedy

Russell Kennedy James Hurst Horn Richard Rosencranz Charles Heath

**Trumpet** Lowell Hulbirt William Cardwell

**Trombone** Frederick Dion Clarence Drake

Armand DuFresne, Librarian

**Percussion** John Stick Clay Smith

**Piano** Carl Thiele

Guest Members Cello—Robert Oulton Bass—Dick Martin Horn—Gage Biren Bassoon—Ray Knowlin



# THE BAND

★ Climaxing its fourth year under the capable direction of Audre L. Stong, the band has at last shown itself to be an organization of note. The officers, "Brother Bill" Cox, the live-wire manager, and Martin Poggi, the equally aggressive librarian and general helper, have produced something they can well be proud of.

\* The band started out the year with both feet on the ground and an increased membership due to the influx of twenty-one freshmen. With this for a talking point, Bill Cox was able to convince Wally Johnson that an organization of fifty men should have student body support and the result was that about half way through the football season the band blossomed out with a spectacular new set of uniforms, consisting of a brilliant orange shirt with a white tie, forester's hat and white flannels. The band's first appearance in these new uniforms was at the Oxy game. Up until the half-time period all that could be seen by the spectators were a few instruments and a lot of men in overcoats. As soon as the whistle blew all the lights were suddenly turned off and when they went on again, there was the band resplendent in their new uniforms in a long row on the side line. The gasp from the crowd almost extinguished the lights again. The band then executed some very complicated and spectacular marching during which they formed an O for Oxy and a T for Tech.

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 $\star$  This year the annual band trip was to Santa Barbara for the football game and the band put on a twentyminute program between the halves. That night the boys stayed in Santa Barbara and swept the local girls off their feet.

\* Much could be said of the activities of the band during the year; the most notable incident being a Monday Assembly near the middle of the second term in which the band seemed to go utterly beserk; however, it was all a stunt, and was so well received, due no doubt to the introduction of three good-looking P. J. C. co-eds, that the enthusiastic student body literally howled for more. On January 1st the Cal Tech band had the distinction of being the official reviewer's band for the Tournament of Roses Parade and later on in the day combined with the Bulldog band and the A. L. S. Alumnæ band to form the two hundred piece "singing band" of Alabama during the Rose Bowl game. The band put on a three-hour performance at the annual Flintridge Horse Show and furnished excellent music for commencement.

 $\bigstar$  Orchids to the band for this year's work and we expect that next year will be a banner year, with Poggi at the helm.

## BAND MEMBERS

# Martin Poggi, Librarian

William G. Cox, Pres.-Mgr. C. Heath L. Hulbirt F. Lawrence T. Meanley J. Powell

W. Wetmore

- J. Ashworth D. Chamberlain J. Dorr O. Dunbar H. Evans D. Gerlough
- E. Henderson J. Hurst V. Martin E. Miller D. Rollow W. Wickett

Audre L. Stong, Director E. Bonham P. Dane C. Drake E. Edwards J. Farneman B. Grainger

C. Horine R. Kennedy W. McLenathen C. Milliken W. Snyder S. Wolfberg



Third Row: Forward, Meanley, Kennedy, Dane, Grainger, Poggi, Drake, Dion, Arnold, Wolfberg, Gerlough — Second Row: Dorr, Powell, Horine, Evans, Milliken, Dunbar, Henderson, Snyder, Chamberlain, Farneman, Story — First Row: Cox, Rollow, Hulbirt, Cardwell, Wetmore, Ashworth, Wickett, Hurst, Ellery, DuFresne.

J. Arnold

F. Dion

W. Ellery

R. Forward

W. Cardwell

A. DuFresne
### DEBATE

★ Perhaps our most successful forensic season—the largest varsity squad in school history—

★ Thus is summed up the record of the 1934-35 forensic team which centered around the activities of Paul Hammond, Wallace Johnson, and Bruce Beckley. The climax of their efforts came in the Pi Kappa Delta Regional Tournament in which Hammond and Johnson were semifinalists in debate and Beckley won fourth place in oratory. The former two had the distinction of giving both finalists their one and only defeat in the tournament.

 $\star$  Hammond and Johnson were also semifinalists in the Pacific Northwest Tournament held at McMinnville, Oregon. Again in the Redlands Tournament these two stalwarts were in the first five of thirtyfive teams.

 $\star$  The Conference Tournament found Robert Mahoney and Thomas Griffiths joining Hammond and Johnson in an unsuccessful attempt to wrest the championship cup from Redlands.

★ The remainder of the squad, consisting of Levy and Bush, Edwards and Getzman, Price and Miller, Briggs and Kasnicka, Dekker and Deahl, and Tulagin and Poggi, had an average of ten debates apiece.

★ In oratory, Beckley was outstanding; besides his fine record at Stockton he won second place in the conference tournament. In extempore speaking, Hammond won third in the conference and made a successful showing in that event at the Convention of Western Teachers of Speech Association in Salt Lake City.

★ Freshman debate was also active with Stone, Allen, Elliott, Lowell, Beavon, Lewis, Bowen, Kolb, Ellis, Van Horn and Walker taking part under the able direction of Kenneth Pitzer, a star of last year's debating squad.

★ Nor should we overlook two special varsity debates. Hammond and Johnson won a decision over two Pasadena College coeds in a regular Monday Assembly to open the season, and were joined by Mahoney to finish the year's activity in a radio debate with Occidental.



Second Row: Kasnicka, Beckley, Elliott, Deahl, Dekker — Front Row: E. Edwards, Getzman, W. Miller, Mahoney, Johnson.



Second Row: Pitzer, Coach, Stone, Ellis, Lewis - Front Row: Lowell, Elliott, Beavon, Allen

### THE CALIF. TECH

★ The California Tech, under the able and successful leadership of Editor Victor Veysey, established itself among the front line of College weeklies during the past year's publication. Featuring an active, though conservative, editorial policy and an interesting and varied journalistic make-up, the Tech increased its circulation and gained new and consistent readers in the usually uninterested student body.

★ The increase in circulation was brought about by mailing weekly issues to alumni members in good standing. By means of pointed editorials, the Tech achieved two other sweeping triumphs; the seating of freshmen in a special section at assembly and an extra student body dance on the year's profits.

 $\star$  Bill Campbell as News Editor conducted an accurate and thorough news bureau, keeping tab on all interesting events emanating from the various campus sources, no matter how obscure, with remarkable consistency. Hugh Colvin, as Sport Editor, appeased the campus thirst for sport news with one of the best sport pages in the paper's history. Near the end of his term of office, however, scholastic pressure exceeded the safety point and Bill Elconin, for some time the Tech star reporter, took over the position and kept its high standard intact. The sport department, for its continued journalistic excellence, received Professor Mac-Minn's acknowledgment as the best written department in the Tech.

PAGE

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 $\star$  The financial success of the Tech was due to the efficient work of Business Manager Arthur Frost and his staff.

 $\star$  The entire staff, coordinated under the invaluable, interesting weekly instruction of Professor MacMinn, provided the student body with an excellent publication.

★ At the close of the second term, during the annual student body elections, Bill Elconin was selected to succeed Veysey as editor. In appointing Art Frost and Walton Wickett as joint news editors, and Noble Maines as sport editor, with George Carroll and Hugh Colvin as his associate editors, Elconin seems to have insured the Tech of another period of journalistic success. Ralph Haver, selected business manager at the same time, promises also to continue the financial healthiness of the paper.



Second Row: Wickett, Maines, J. Taylor, Jensen, Colvin, Baldwin — Front Row: J. Edwards, Levet, Veysey, Editor, Elconin, D. Miller, Scott.

### BIG T

★ The year has rolled around. It is now soon to be a memory of something accomplished, something done. The new editor is about to assume his duties. One can look with favor upon the finished work and be glad that the association with the staff, though soon to be severed, will never be forgotten. All the fears of writing the book myself, with no cooperation from the staff, have long been allayed. Much to my surprise there has been volunteer labor for the bothersome tasks of composing articles and garnering information and data. It has truly been a delightful relationship.

★ To each one in the group below I extend the hope that they will continue to prosper and serve the incoming editor wherever it is possible. They are an eager lot. It is fellows like these who in giving to life get the most in return.

 $\star$  In all the year has been slow. Numerous

difficulties faced us in commencing the book. Contracts here and there filled every moment of the opening period of the work. Legal aspects had to be surmounted. That is all passed now. It was a fine experience which at the time seemed almost to be the undoing of one. As this page is being written most of the worries are over, little is left to be done.

★ For the financial success of the annual one needs only to look toward Bob Hallanger and "Brainstorm" Rosencranz. Hallanger sold most of the advertising while "Rosey" brought in brilliant ideas for the sales campaign. Tyler, who will have his own worries financing the book next year, pitched in and sold ads for this year. Although, when all is said and done, it is the Student Body as a whole which has made this Big T a success in every way. To them belongs the credit. May the same spirit and support be carried over to increase the prosperity of the Big T which will be edited by Ted Vermeulen in the coming year.



Second Row: Veysey, Estes, Lindsay, Vermeulen, Baldwin, Merralls, Inman, Davis — Front Row: Webster, Konecnik, Keens, Bakeman, Editor, Allardt, Hallanger, Jahns.



AGE

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King

Baker

### **TECH HANDBOOK**

★ Simple, yet containing a well-organized source of information, characterizes the Tech Handbook for 1934. This year the book has had a reorganization. Instead of being edited as a subsidiary of the Y. M. C. A. the student body has taken over the editing of the book. This measure was instituted to prevent cutthroat dealings of the several publications on the campus in regard to gaining advertising to support the publishing.

★ Fred King assumed the responsibility of editing the handbook in its last time as a feature of the "Y." From past experiences with Fred the students knew that they would receive in September a publication correct in contents and written in a style to please. They were not mistaken in this belief for Fred spent considerable time in compiling the information and putting it into a form which ideally suits the purpose for which the book is intended.

★ Upon the shoulders of suave Horace Baker rested the burden of financing the venture. Up and down the town, in and out of every shop and store ventured the Beau Brummel of the campus seeking to the very roots for means of obtaining advertising sales. Where cash was low, the unctuous Horace cleverly accepted trade, and he and the august Fred lived royally off their royalties. Wining, dining and dancing the year around they may even yet be sopping up the gravy of the magnificent adventure.

★ A word to the new editor and business manager. Lest you forget, there will be no trade accepted for advertising this year. By you only will the cold glitter of cash be received in exchange for space in the handbook. Commissions will be paid on the advertising sold by the student body. The days of excess profits are over.



### TAU BETA PI

★ Cal Tech is fortunate in having on the campus a chapter of the Tau Beta Pi Association, a national honorary organization for engineers. It holds a place in the engineering colleges comparable to that held by Phi Beta Kappa in the liberal arts colleges. The national organization at present has about 23,000 members and 68 chapters.

★ There are two essential requirements for membership as an undergraduate. The first of these is scholastic and this requirement is essentially an eligibility requirement. During the junior year the highest eighth scholastically are eligible and during the senior year the highest quarter scholastically are eligible. Having obtained this standing the students are taken in on the basis of personal qualities. By means of this elimination Tau Beta Pi has aimed to form an organization of men capable in engineering practice as well as possessing those personal qualities essential to a successful career.

 $\star$  The local chapter has completed a very successful year. Their formal dance, held in Dabney Lounge during February, was generally recognized as one of the best affairs ever to be held on the campus. Two very successful initiation banquets were held in the Athenæum, one in December and the other in April. Frequent meetings are also held throughout the year. The work this year was carried out under the direction of Bob Kramer as president. He was ably assisted by Thomas Griffiths as corresponding secretary, James Jennison as treasurer, Emerson Green as chairman of the membership committee and several other men in performing the tasks necessary for the initiations and for the social programs.



Fifth Row: Stanley, T. Thompson, Dekker, J. N. Smith — Fourth Row: Hallanger, Chivens, Gibbs, Willits, Bush, Green, McLean — Third Row: Pitzer, Kossiakoff, Vermeulen, Dewees, Davies, Jahns, Estes, Levy — Second Row: Lew, Nessler, Cox, Scoville, Campbell, Ashworth, Johnson, E. Edwards — Front Row: Jennison, Kramer, President, Griffiths.

### PI KAPPA DELTA

### NATIONAL FORENSIC FRATERNITY

★ The aims of Pi Kappa Delta include both the recognition of ability in public speaking and the encouragement of forensic activity. The first aim is realized in the election to membership of those who have taken part in oratory, debate or extempore speaking contests, and have therein demonstrated their proficiency in the art of speech.

★ To encourage forensics Pi Kappa Delta organizes state and national tournaments, which give opportunity both for competition in speech contests, and for contact with students from other colleges. The California Gamma Chapter itself provides the funds for sending a delegation to the biennial convention of the fraternity and the national forensic tournament held in conjunction with it. The classical play given every autumn is sponsored for this purpose, "Mostellaria," by Plautus, being produced this year. The play was a great success from the financial as well as other points of view.

AGE

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★ The official Pi Kappa Delta debate question, which is now recognized as the national intercollegiate question by its almost universal use in tournaments, this year was: Resolved, that the nations should agree to prevent the international shipment of arms and munitions.

★ This year, though not one containing a National Convention, nevertheless brought with it many interests to keep the chapter active and particularly the officers: Kenneth Pitzer, president; Robert Warner, vice-president; Howard Hamacher, secretary; and Paul Hammond, publicity manager.



Second Row: Getzman, Jahns, Levy — Front Row: Johnson, Pitzer, President, Hamacher, Hammond.



### THE PRESS CLUB

★ The Press Club of Cal Tech, reorganized during the past year, is an honorary organization for the purpose of promoting and aiding the three undergraduate publications. The membership, which must be approved by the Board of Directors of the student body, is composed of only those men who have contributed outstanding journalistic work to these publications for two terms. The Board of Directors, in return, help the club in the purchase of the distinctive paragraph keys that identify the club members on the campus.

★ The membership of the Press Club is intentionally small, but this year included four editors of the California Tech, past and present, the Editor of the Big "T," the business managers of all three publications, as well as twelve other leading campus writers.

★ Activities for this year, after the reorganization at the first of the second term, included the writing and editing by club members of the California Tsk Tsk, the "Tech" night bargain of a show and dance to Hank Evans' orchestra, and regular monthly meetings with distinguished newspaper guests from the representative metropolitan press. Among these guests were City Editor Merriman of the Pasadena Post and the Los Angeles Times' famous feature writer, Alma Whitaker.

★ Officers for this year were Neil Snow, President; Claude Scott, Vice-President; Harold Schiller, Secretary; and Harry Estes, Treasurer.

★ The greatest task undertaken by the organization is the arranging of the chemistry department's exhibits for the annual Open House program. In addition to the usual exhibits in the laboratories, this year a series of two lectures was given: the first on *Recent Industrial Developments in Organic Chemistry* and the second a demonstration of glassblowing technique.

★ The success of the club activities was in no small manner due to the cooperation and work of the officers. They were: president, Emerson W. Green; first vice-president, James Davies; second vice-president, Chester Lindsay; secretary, Bill Campbell; treasurer, C. S. Garner.



Third Row: Baldwin, Scott — Second Row: Estes, Klocksiem, Jahns, Hallanger, Colvin, Snow — Front Row: Kramer, Veysey, Frost, Baker, King, Miller, Bakeman.

### PHOTO CLUB

★ The activity of the Photo Club in the past year has been directed mainly toward providing the Big T with pictorial photographs of the campus. In view of the marked success of the salon sponsored by the Photo Club last year, the Big T again offered prizes for the best pictures submitted.

★ Preceding the salon, a meeting was held at which Mr. John C. Stick, well-known member of the Los Angeles Camera Pictorialists, helped the members improve their work by offering constructive criticism of the prints brought by the students. The improved pictures were then turned in for judging and hanging in the salon. Mr. Stick again rendered service to the club by acting as judge.

★ About thirty pictures were submitted, most of which were hung in the Treasure Room of Dabney Hall. The pictures were later displayed again on Exhibit Day in Dabney Lounge, under the direction of the Humanities chairman of the Exhibit Day Committee. The five winning pictures are reproduced in the lithograph section at the front of this book in the order in which they won prizes. Many pictures not taken on the campus were submitted and hung in the salon; several of them were extremely well done.

AGE

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 $\star$  Various people who saw the salon expressed the opinion that a very high degree of photographic and artistic ability is possessed by the amateur photographers among us.

★ The Photo Club is an informal organization consisting of the undergraduates and graduates on the campus who are interested in photography. There are no dues and no elected officers. Meetings are held only when some definite need for one arises, and may be attended by anyone who wants to come.



Estes, Van Dusen, McLean, Lindsay, Kimball.



### CHEM CLUB

★ The Chemistry Club has the avowed object of being not only a means for the interchange of ideas among undergraduate chemists, but also of affording a chance for purely social contacts among the members. In an effort to achieve the first aim, the club has provided a series of meetings of a technical nature, at which men from the industrial field as well as from the Institute faculty spoke. One of the outstanding and most popular meetings was a glass-blowing demonstration by Mr. W. Clancy, the Institute glass blower.

★ To carry out its social obligations, the club sponsored two evening dinners during the year. The banquets proved extremely popular; at the first the members were addressed by Mr. Walter Schmidt, one of the country's outstanding industrial chemists. ★ The greatest task undertaken by the organization is the arranging of the chemistry department's exhibits for the annual Open House program. In addition to the usual exhibits in the laboratories, this year a series of two lectures was given: the first on *Recent Industrial Developments in Organic Chemistry* and the second a demonstration of glassblowing technique.

★ The success of the club activities was in no small manner due to the cooperation and work of the officers. They were: president, Emerson W. Green; first vice-president, James Davies; second vice-president, Chester Lindsay; secretary, Bill Campbell; treasurer, C. S. Garner.



Third Row: Keyes, Vermeulen, Campbell, Dunbar, Garner—Second Row: Radcliffe, Horne, Pressman, Laird, Nellis, J. Gates, Petersen, Ferguson, Bingham—Front Row: Heitz, Davies, Estes, Jahns, Lindsay, Dekker, Inman, Green, President.

### VARSITY CLUB

★ After a hard season of "Dying for Dear Old Tech" on the gridiron, the men of the Varsity Club at last turned to lighter pastimes. At the beginning of the second term they took to the high mountains in the proverbial cloud of bottle tops. The men ate themselves for pretzels after a few spills on the ski jumps.

★ In the spring term the Varsity Club Sport Dance at the Breakfast Club was enjoyed by many of the Student Body and Alumni. The success of the dance financially was due largely to the high pressure salesmanship of Paul Edwards and Prexy Davis.  $\star$  The Alumni Stag and initiation for new members was held at Balboa Beach.

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★ This year the Club started the policy of bi-weekly luncheons. For the first time in many years the Varsity Club began to show signs of life. The members began to take a new interest in the Club. In all the year was a tremendous success. All the credit for this new activity is due to the President, Frank Davis. Next year will mark a second term in office for Davis, who has been re-elected. He promises to instill even more energy and life from his own dynamic personality into the veins of the once nearly extinct organization.



Fourth Row: Stick, R. P. Jones, Bush — Third Row: Chamberlain, D. Miller, Wetmore, J. Gates, F. Davis, President, Potter, Zimmerman — Second Row: Sharp, Blodgett, Larson, Kramer, Colvin, Parker — Front Row: Wileman, Leppert, Webster, Jahns, Veysey, Creal, Nollan.



RALLY COMMITTEE Chamberlain, Austen, E. Edwards, Chairman, Veysey.

### RALLY COMMITTEE

★ The activities of the Tech Rally Committee for 1934-35 began Friday, Oct. 12, with a football rally calculated to stir up enthusiasm for the Redlands game. The following Friday, Coach Stanton spoke at a similar rally for Tech's battle with Pomona, Saturday, Oct. 20. On Oct. 26, the Committee on Campus Life and Interests, with the aid of the Rally Committee, gave the first of its series of assemblies designed primarily for freshmen. These assemblies were given to acquaint the students with the opportunities provided on the campus for extra-curricular activities and active student life. They were arranged and scheduled by Professor Thomas and the Rally Committee Chairman and advertised through the California Tech. In the course of the year twelve of these assemblies were given.

★ The week of November 4-9 was a busy one for the Rally Committee. It was "Smash Oxy Week." The evening of Nov. 8 Tech organized its annual "Oxy Pajamerino" in Tournament Park, marched up and down Colorado behind the band wagon, and finally disbanded at the Raymond Theatre for a free show. The following day an "Oxy" rally was held at which Coach Seymour and "Oxy's" A. S. B. prexy spoke. At this assembly the Rally Committee inaugurated its new policy of hiring entertainment by presenting several acts of vaudeville. The evening of the rally brought the defeat of "Oxy" and the end of a strenuous week for all.

 $\star$  During the remainder of the football season the Rally Committee held rallies for the more important games.

 $\star$  The policy of presenting professional entertainment was carried over to student business assemblies, where it served as an inducement for attendance.

 $\star$  On Jan. 17, the Rally Committee presented a program of magic lasting a full hour. Previously in this year its entertainment had always been given in conjunction with other things.

 $\star$  On Jan. 25, one-half hour of professional entertainment was again provided by the Committee in an assembly called to discuss changes in the by-laws.

★ The activity of the Rally Committee for the first and second terms closed with its presentation of the "Oxy" Girls' Glee Club in the week of nominations for student officers. Its participation in the activity of the week of Feb. 25-29 was practically negligible because of the splendid work of Allardt and Merralls in conducting the festivities climaxing this "campaign" week.

 $\star$  It is the hope that the two new features instituted by the Rally Committee this year, namely, freshman assemblies and professional talent, may be continued in the future.

### Y. M. C. A.

★ The "Y" offices in the basement of Dabney Hall were again this year the center of a good deal of activity on the Tech Campus. The services of the Y. M. C. A. are many and varied, and this year was quite a prosperous one for the association in spite of many difficulties.

 $\star$  The "Y" misses greatly the services of Mr. Charles Schwieso, Jr. Single-handed, "Chuck" has labored for ten years to place the organization where it is today. Duties called him to Colorado, where he is doing further study.

 $\star$  The Advisory Board secured the services of Charles F. Thomas, Senior Student, as parttime secretary as a temporary measure to fill in for the year. Thomas has had considerable experience with the "Y." He served on the board for four years and concluded with the presidency in the last year.

★ During the summer personal letters were sent out to all the incoming Freshmen and 90 of them turned out for the annual Frosh Camp held this year at Camp Arbolado, in the San Bernardino mountains. Prominent student leaders, Dr. T. G. Soares, Dr. J. E. Bell and Mr. A. E. Shattuch met with the fellows. A tea-dance was held in conjunction with the Faculty Women's Club on the Saturday before school opened.

★ Bob Dourson assumed the role of president during the absence of Reuben Wood. Reuben spent the year in the Orient attending a University there. Credit must be given to Dick Rosencranz, Howard Gluckman, Bob Elliott and Thor Robertson for helping to make the year a success.



Second Row: Stones, T. Thompson, D. Miller, Thomas — Front Row: Davidson, C. Smith, Gluckman, Friend, Robertson.

### A. S. M. E.

★ The close of the school year brings to a close the most successful year in the history of the Student Branch of the American Society of Mechanical Engineers. Operating under a new plan whereby the parent society takes more interest in the student branches than heretofore, the A. S. M. E. got off to a flying start with a luncheon held in the Athenæum early in October to honor Mr. Ernest Hartford, who was making a tour of the country to explain the new deal for embryo mechanical engineers.

★ One of the big features of the new plan is that two sets of officers be elected to head the chapter; one to serve from September to February, and one to serve from February to June. In accordance with this plan the first half of the school year saw Allen Ray officiating as chairman, Norman Dewees as vice-chairman, and Robert Hallanger as secretary-treasurer. The officers for the second half of the year included Eugene Graham as chairman, Victor Willits as vice-chairman, Clyde Chivens as secretary, and Edwin Getzman as treasurer.

 $\star$  Another point in the new plan for student branches is the annual conference held on the campus of a college where there is an active student branch. Cal Tech belongs to the Southwest Section, which includes Stanford, Santa Clara, California, University of Nevada, U. S. C., besides Cal Tech. 1935's conference was held at Berkeley on the 5th and 6th of April. Cal Tech's contingent, 13 strong, received first and fourth prizes in the contest wherein technical papers were presented by the members of the student branches of the various schools. The 1936 conference will be held on the Institute's campus and presents a great opportunity for next year's A. S. M. E. members.

★ Much credit for the success of the student branch during the past year is due to Prof. R. L. Daugherty and to Prof. W. H. Clapp. These men spent a great deal of valuable time to put Cal Tech's branch of the A.S.M.E. where it belongs and where it is today, at the top!



Fourth Row: Geddes, Graham, Gibbs, Willits, Kramer — Third Row: Blodgett, Gay, Getzman, Dewees, Cortelyou, Ray, B. Young — Second Row: Kurihara, Sheff, Douglas, Chivens, Hinshaw, Hallanger — Front Row: W. Johnson, Shapiro, Professor Clapp, Advisor, Ambroff, Webster, Joseph.

### A. S. C. E.

★ The program of the Student Chapter of the A. S. C. E. was featured this year by numerous inspection trips. Six of the student members journeyed to San Francisco to view the construction work on the San Francisco Bay Bridge and the Golden Gate Bridge. While there, they were shown around by Bill Mohr, who is an engineer on the project and a graduate of Tech. Coming closer home, twenty members visited the Pasadena Sewage Disposal Plant and were very much amazed by the various processes they saw there. Another interesting inspection trip, with a group of twenty-five, was taken to the Fairchild Aerial Survey Plant in Los Angeles.

★ The object of the Student Chapter of the A. S. C. E. has been to keep the members informed about current developments in engineering projects. Pursuing this objective, several illustrated lectures were given during the year, some by students and some by outside speakers. Jack Schwartz gave an illustrated lecture on the Hetch Hetchy water supply and power plant. E. M. Browder, who graduated from Tech in '27, told the chapter how the Panama Canal is operated. Ralph Stewart gave an interesting lecture on the new Los Angeles Union Terminal.

PAGE

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★ The most enjoyable evening of the year, however, was spent at the home of Professor Frankling Thomas, where movies taken by Mr. John Chester, retired engineer, of interesting places all over the world, were shown with explanatory remarks by Mr. Chester.

 $\star$  Early in May the Los Angeles Section of the A. S. C. E. were the guests of the Student Chapter for dinner and the regular evening meeting.

 $\star$  Thus closes one of the most successful and enjoyable years in the history of the local chapter.



Fourth Row: Kiger, Boothe, Snow — Third Row: Karp, MacIntosh, Ferver, Ketchum, President, Griffiths, Janes, Swanson, Professor Thomas, Advisor — Second Row: Dr. Martel, Advisor, Schwartz, Jennisen, Ritter, Davis, Goodwin, Chamberlain — Front Row: Dorwart, Rivas, Menghelli, Miller, P. Jones, McRae, Koons, C. S. Thompson.

### A. I. E. E.

★ The California Institute of Technology Branch of the American Institute of Electrical Engineers represents the student interest in the national professional society. To this end, the local branch operates a program of meeting, inspection trips, and the preparation of student papers. Through participation in branch activities and the presentation of papers the student gains experience in the conduct of the work of his professional society.

★ During the past year the local branch has been particularly active. Meeting subjects have included Oil Circuit Breakers, Geophysical Prospecting, and Transformer Design. Inspection trips to the General Cable Corporation, the Metal Products Co., Pasadena Municipal Power Plant, the Telephone Co., and the Welman Electric and Manufacturing Co. have drawn considerable interest from the membership.

★ Each year the California Institute of Tech-

nology Branch, the University of Southern California Branch, and the Los Angeles Section of the A. I. E. E. arrange for a joint dinner and meeting. This year the event was held in the Hall of Associates in the Athenæum. One hundred and fifty members attended the dinner and meeting. Tech men presenting papers were Merralls, McConn, and Simmons. The meeting was followed by inspections of the High Voltage Laboratory and the Pump Laboratory of the Metropolitan Water District.

 $\star$  Under the direction of Frederick Pehoushek, the Tech Electricals arranged the electrical engineering exhibits at the annual open house held in April. The popularity of the exhibits proves the success of the organization.

★ Officers for the past year have been: Chairman, Edward Simmons; Vice-Chairman, Brunce Gravitt; Secretary-Treasurer, William Cox; and Faculty Counsellor, Dr. Frederick Lindvall.



Fourth Row: J. N. Smith, Marsh, Potter, Fussell, Watt, Ribner — Third Row: Lindvall (Advisor), Beckely, Rector, Waddell, Mac-Mahon, Bucknell, Merralls, R. P. Jones — Second Row: McRae (Advisor), Gluckman, D. Miller, J. Edwards, Maloney, L. Davenport, Krantz—Front Row: Gravitt, Simmons, Nestler, Higley, Scoville, Muller, Menghelli, Ohasi.





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