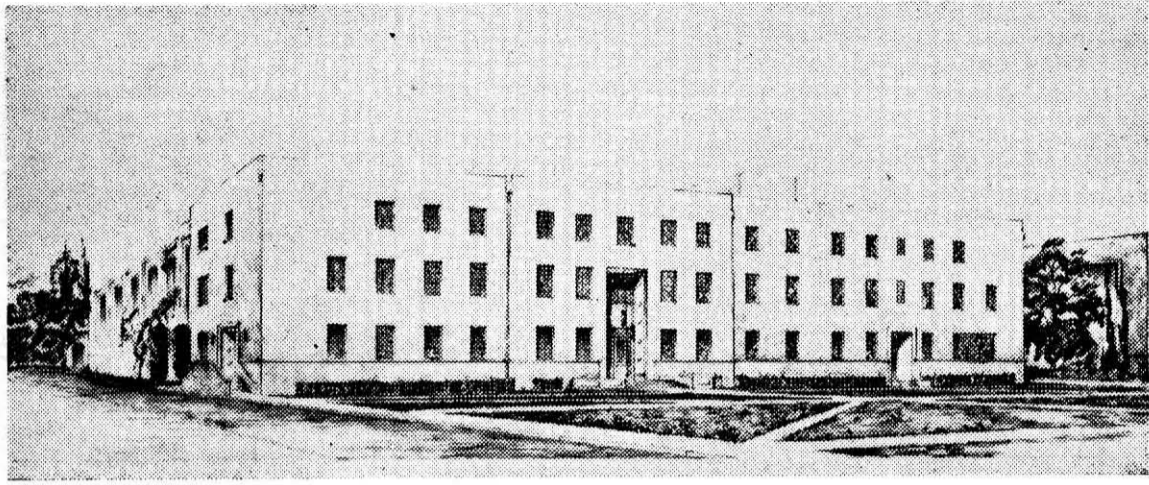


FUTURE CE-ME BUILDING



Construction of a new Engineering Laboratory on the Caltech campus was recently begun. Cost of the building when equipped will be approximately \$625,000. The building will house all Civil Engineering labs and offices as well as other engineering facilities.

CE's, ME's To Enjoy New Lab

Construction of the new Engineering Laboratory adjacent to the present Mechanical Engineering Building has been under way since July with its completion expected in about ten months.

The new, earthquake resistant reinforced concrete structure will have two basements and three floors above ground, providing 34,000 square feet of space for the Institute's extensive Engineering section.

Research Facilities

Besides housing the department of Civil Engineering, the new building will contain metallurgy facilities such as laboratories for powder metallurgy, metallography, x-ray metallography, spectrographic analysis, metals preparations, and study of materials through radioactive isotopes.

Facilities also are planned for research in thermodynamics, in strength of materials, and in earthquake and vibration investigations. There will be space for applied mechanics research, as well as offices and classrooms.

Needed Space

It is expected that the new building will not only consolidate the Civil and Mechanical Engineering facilities in one structure, but also provide needed space for the Institute's present research program.

Prof. Gilbert Leaves For Germany Post

Professor Horace N. Gilbert, Professor of Business Economics, is at present on a year's leave of absence from the Institute as a member of the staff of the U.S. High Commissioner in Germany.

Professor Gilbert left for Washington, D.C., last Sunday, and will depart for Europe within the next few days. He will be assigned temporarily to the Office of Economic Affairs, and will be in charge of trade and payment matters at his headquarters in Frankfurt.

A teacher of business economics professor in 1947 and has served as a consultant to a large number of companies and also to the U.S. Air Force.

During the war Professor Gilbert was principal production supervisor for the Air Forces at Wright Field and in Los Angeles.

Campus Calendar

- THURSDAY, OCT. 6**
12:00 Throop Club Meeting
7:45 Dancing Class in Culbertson
- FRIDAY, OCT. 7**
11:00 Whittier Pep Rally
Beginning of Frosh Initiation Week
- SATURDAY, OCT. 8**
8:00 Football at Rose Bowl
Caltech vs. Whittier
- MONDAY, OCT. 11**
11:00 Radio Club Meeting in 401 E. Bridge
- TUESDAY, OCT. 12**
7:30 Band Rehearsal in Culbertson
- WEDNESDAY, OCT. 13**
7:30 Orchestra Rehearsal in Culbertson
9:00 Glee Club in Culbertson

Debate Team Prepares For Fall Contests

Caltech scholars need not be tongue-tied scientists if they get into the forensic program now set up under the direction of Coach Lester McCrery. Debate, oratory, discussion, impromptu and extempore speaking are all included.

This year the program scheduled for Caltech students includes trips to Stanford University, College of the Pacific, Santa Barbara State College, University of California at Los Angeles, Pepperdine College and Los Angeles City College. Also, Caltech will be host again this year to an intercollegiate debate tournament given to colleges in the western league. Throughout the year audience debates and oratorical events will also be scheduled.

Marshall Plan

According to McCrery, two particularly vital and interesting debate topics are offered this year. The western states topic, "Resolved that the United States Should Adopt a Marshall Plan for the Countries of the Orient," will be debated throughout the fall term and in final competition at the western tournament at Stanford, November 21, 22, and 23. The national intercollegiate topic, "Resolved that the United States Should Nationalize the Basic Non-Agricultural Industries" will be debated throughout the season and for final honors at College of the Pacific.

(Continued on page 6)

Band Receives New Director

The Caltech Band made its first appearance this year at the football game with La Verne College last Saturday. Revitalized by the addition of several freshmen this year, the Band expects to appear during all the pep rallies and football games this season.

The Band's new director, Mr. William Killgrove, has been organizing and orienting the group so that by the second term the Band will be concentrating on the presentation of a concert at one of the assemblies. Mr. Killgrove's excellent musical background and the enthusiasm of the individual members promise a successful musical season.

Additional members are welcome at the rehearsals held each Tuesday evening at seven-thirty in Culbertson Hall. At the moment, there is an acute need for players in the woodwind section. All interested newcomers are welcome.

Tanham Steps Into New Post

The appointment of George K. Tanham to Master of Student Houses, taking over the duties of the late Colonel E. C. Goldsworthy, was announced by President DuBridge at Commencement last June. Mr. Tanham, well-known to freshman students of European history and formerly American history students, has been an instructor in the history department here since 1947. In addition to his new duties, he will continue in his usual post.

A native of Tenafly, N.J., Mr. Tanham graduated from Princeton in the class of '43. Immediately thereafter, he began three years of duty in the Army, serving as an officer in the 7th Armored Division's artillery, and as a forward observer. He saw action with General Patton's Army throughout France, Belgium, Holland, Luxembourg and Germany.

After leaving the army, he went to Stanford, where, in 1947, he received an M.A. in history. At present he is working toward a Ph.D. from Stanford.

His field is "The Belgian Resistance Movement, 1940-1944." Mr. Tanham, his charming wife and their 17-month-old son now reside in Arden House.

Another new arrival to the Student Houses is Harry Ellis, Ricketts R.A. A native of Vancouver, B.C., Harry graduated from the University of British Columbia in 1945, spent a short time in the Canadian Navy and then worked as an E.E. for the Canadian General Electric Company.

He decided to resume his studies by coming to Tech, where he has been since September, 1947. At present he is working for his Ph.D. in the field of high-voltage studies.

Much impressed by the well-rounded student he has found here, Harry feels certain that his stay in Ricketts will be a happy one.

Division Newcomers Queried

Bacher Helps Plan Synchrotron

Dr. Robert F. Bacher, new head of the Caltech Physics Department, "is delighted to get back to a lab," after two and a half years as the only scientist on the five-man Atomic Energy Commission.

Before his appointment to the AEC in 1946, Dr. Bacher was physics professor and director of the Nuclear Physics Laboratory at Cornell University.

He also made important contributions to the development of radar at the MIT Radiation Laboratories from 1941 to 1943, and was chairman of the important bomb physics division of the Los Alamos Laboratory from 1943 to 1946.

An opportunity to get back in the experimental harness was one of the reasons Dr. Bacher came to Caltech from his position.

(Continued on page 6)

Y Tea Dance Hosts Frosh, New Students, and Girls

"Music," Skit, and Beauty Contest Given as Entertainment For Mixer

This year's Y-sponsored New Student Tea Dance was held Sunday, in Dabney Lounge. Girls were imported from Oxy, Muir, P.C.C. and South Pasadena High.

The dance started off slowly due to reluctance on the part of the frosh to plunge into the seething mob of beautiful females. When the new students saw the upper class competition moving in they got down to brass tacks with their new steps and old lines.

Working Staff

Everyone on the Y staff worked for the dance in some way or another, but Leo Baggerly was the man who coordinated the effort. He and his three assistants, John Boppart, who took charge of receiving the guests, Phil Orville, who handled the various arrangements for the dance, and Frank Ludwig, who planned the entertainment, initiated work on the dance last spring.

Intermission Program

Frank Ludwig was M. C. at the program held during the intermission of the dance. Much of the talent for this presentation was from the frosh class. Chuck Benjamin, Ken Lunan, and Mike Sellen played a number on two ukeleles and a violin. Burger, Sentner, and Hyde made up a trombone trio. An accordion number was then played by Bill Smith. Vern Edwards, his guitar and zombies, the zombies being Mike Sellen, Fred Wood, and Bruce Hedrick, gave a rendition of "Whiskey and Wild, Wild Women." Another part of the program was devoted to a beauty contest, the winner of which was Joanne Peterson from Muir J.C. The main part of the program was devoted to a skit which was a parody on a radio program. The skit, "Casie's Cozy Coffins" used the histrionic talents of Frank Ludwig, Bruce Hedrick, Fred Wood, and Don Stewart. After the frosh officers were introduced, Manuel Silva, president of the freshman class, gave a brief speech to the guests.

Y Session Will Map '49 Policies

This Sunday the Caltech YMCA Cabinet will meet for an all day planning session at the South Pasadena Y Cabin in order to map out the program for the coming year.

The question of membership in the organization and what constitutes an active member will be a principal item on the agenda, and the Y hopes to have a definite membership policy set up before very long.

The session will meet at 9 a.m. and will continue until 3:30 p.m., with time taken out, of course, for dinner at the cabin.

The Cabinet held its first meeting of the new year last Thursday evening at the home of Wes Hershey, Executive-Secretary of the Y. Bob Crichton, president, presided at the occasion.

Annual Well-Baby Conference Opens

The Institute's continued interest in the offspring of its students is shown by the fact that the Well-Baby Conference is being held again this year. The Conference is a periodic health examination held on the second and fourth Tuesdays of each month at 4 p.m. in rooms 101 and 102 of Kerckhoff Biology Laboratory by Dr. Fremont P. Koch, pediatrician.

All children of Caltech students under two years old are eligible for these periodic health examinations. Registered students who wish to arrange for their children to be examined by Dr. Koch should make an appointment through Mrs. John Gee Clark, SYcamore 6-7435. This service is offered to the students by the Caltech Service League.

Rally Slated For Tomorrow

Varsity Coach Bert LaBrucherie and "Hustlin' Hal" Musselman are slated to be guests of honor at the pep rally this Friday. Rally Commissioner Bert Snider and Head Yell Leader "Mert" Merten have scheduled the year's first rally for 11:00 o'clock tomorrow in the pit behind the optics lab.

Merten and his two assistants, Chuck Miller and Leo Baggerly, will be there to lead the school songs and yells, and, incidentally, to teach the student body a few new ones. The rejuvenated Caltech Band, managed by Bill Sampson, will also be on hand to provide music between the yells.

Conference Prospects

Coach LaBrucherie is expected to give out the lowdown on Tech's conference prospects, so everyone will know what to watch for at the Whittier game, Saturday night. Last year the Beavers and Whittier fought to a 7-6 score in the first three periods, but the Poets went wild in the last quarter to win the game, 27-6.

This year's Techsters will need your support to get their revenge.

Alumni Talks Scheduled

After graduation, then what? What kind of a job to choose? Whether to go into large or small industries? How to get a job in the field you're interested in? How to choose a graduate school?

These and many more questions that seniors and other undergraduates will face when they leave Caltech will be answered by the Alumni Placement Lecturers, which will begin October 11.

Topics

Topics for the Lectures, which are to be given at as yet unspecified places and by a number of prominent industrialists and Caltech professors, follow:

October 11—The Graduate Seeks a Job—Methods of Securing Information.

October 18—The Place of Engineers and Scientists in Industry.

October 25 — Government Employment—Federal.

November 1 — Government Employment—State.

November 8—Industrial Research and Development.

(Continued on page 6)

Journalists . . .

A course in Journalism is now open to all interested, whether staff members or not. For information, see Prof. Macminn, Humanities Dept.

Film Classics Begin Sunday

An interesting series of films chosen from the sea of old-timers promises to be the solution of what to do with Sunday and Monday nights for Techmen. This is the chance to both laughs and culture the easy way.

The series includes **Anna Christie, The Navigator and Abstractions, Ivan the Terrible, The Four Horsemen of the Apocalypse, Sunrise and Abstractions in Synthetic Sound.**

The way to take advantage of this opportunity is to show up at Culbertson Hall with a ticket. Monday tickets are all sold out and about 50 Sunday tickets are left. Cost to undergrads will be 90c for this term only. The films will be shown on alternate weekends beginning this week-end. Tickets are available from Miss Pond in 119 Throop.

ACS Honors Tech Chemists

Dr. Arie Jan Haagen-Smit, professor of bio-organic chemistry in the biology division, and Dr. Verner F. H. Schomaker, associate professor of chemistry, received outstanding honors at the recent meeting of the American Chemical Society in Atlantic City.

Dr. Haagen-Smit received the Fritzsche Award for "outstanding achievement in analysis, research and new applications of essential oils." His work in the oleo-resins led to the award, which consists of \$1,000 and a gold medal. The presentation will be made at the spring meeting of the ACS.

Dr. Schomaker received the American Chemical Society Award in Pure Chemistry for his work in structural chemistry, particularly his determination of molecular structure in the vapor phase by electron diffraction techniques. This award also consists of \$1,000.

The first ACS award in Pure Chemistry was made in 1931 to Tech's Dr. Pauling, now president of the ACS. Of the 19 awards since then, nine have either been at Caltech when they received the award or were trained there. These include Oscar K. Rice; John G. Kirkwood, now Arthur Amos Noyes Professor of Chemistry at Caltech; E. Bright Wilson, Jr.; Lawrence O. Brockway; Kenneth S. Pitzer; Frederick T. Wall, and Saul Winstein.

IRE Reorganization Session Announced

The Caltech Student Branch of the Institute of Radio Engineers will have a reorganization meeting Monday, October 10, at 11 a.m. in Room 206, Dabney. All present members are expected to be there. Any persons who are interested in joining the IRE should be there so they may start participating.

Welcome!

Long ago and far away a bard once said, "There is nothing new under the sun." Looking about us these days reminds us of the falacy of that statement...

With over two hundred freshmen and transfer students to greet, new professors and instructors to meet, it seems that most of this year could be utilized by just getting acquainted.

Secretary's Report

The ASCIT Board of Directors at its first meeting of the year felt that the first of the Secretary's weekly reports should be devoted purely to three important announcements.

The first announcement concerns all graduate students who wish to join the Associated Students in order to attend all football games, school functions and dances, and to receive the school periodicals.

The second notice concerns the student car repair lot, the only location on campus where cars may be legally worked on.

And thirdly, the Board of Directors wants to emphatically announce that their meetings take place in lower Fleming every Thursday evening at 7:15 and anyone is cordially invited to stop in.

Olly Gardner

The Front Burner

Topping off a great season of light opera at the L. A. Philharmonic Auditorium is the New York stage hit, "Finian's Rainbow."

The Pasadena Playhouse opens its fall season with the fast-paced comedy, "John Loves Mary."

The Evening Concert

KFAC 8-10 p.m. Presented by the Southern California and Southern Counties Gas Companies THURSDAY, OCTOBER 6

real humor for one and for all. Produced in the usual well-done Playhouse style, it is well recommended for an evening's enjoyment.

Cinema In the movie department there are some excellent productions around L.A. "The Red Shoes" is still in its record-breaking engagement at the Fine Arts Theatre on Wilshire near La Cienega.

"Henry V," with Laurence Olivier, is starting today at the Arlington Art Cinema on Washington at Arlington. This is very well done and features a remarkable performance by Olivier.

Musical Masterpieces

KFAC 4-5 p.m. daily 2-5 p.m. Sunday Presented by the Slavick Jewelry Company THURSDAY, OCTOBER 6

Potpourri

This is a new weekly column to bring you the people and the news behind the news at Caltech. We have a fine frosh class this year. They hail from 20 states, the District of Columbia, Hawaii, India, Honduras, Canada, Philippine Islands, Guatemala, England and Argentina.

Student Camp New Student Camp was a great success this year. In fact, one Frosh was so amazed at the opportunities in extracurricular activities that he asked Dean Strong, "Is Tech a resort for exuberant extroverts? I came here to study!"

The Hinrichs Award Congratulations to Paul Saltman, who won the coveted Hinrichs Award. The \$100 prize is given to the senior who in the judgment of the undergraduate deans "throughout his undergraduate years at the Institute has made the greatest contribution to the welfare of the student body and whose qualities of character, leadership and responsibility have been outstanding."

"Goon" Marries Paul got married and is doing graduate work in France this year. The high point of his marriage came when "Red" Furth, the best man, was fumbling for the ring, which was in Red's watch pocket. Paul turned, and in a loud stage whisper said, "DON'T PANIC."

Sis Engaged Sis Stabler, popular Y secretary, is engaged to Robert (Bob) R. Grinstead. They are to be married on October 29th. Bob got his Ph.D. in Chem. here and was a frosh chem. instructor for some of the present Junior class.

Bargain Jack and Mary Ottestadt have re-opened the old Sierra Madre Hotel with Tech students as boarders. There are 3-4 room apartments for 2-3 guys, \$14 per month per man. Also available, main lounge, kitchenette in each

CAMPUS BREWINS

We finally retrieved our battered typewriter from the pawn shop where it lay up in credit for a couple cases of brew this summer, in order to sharpen the old beak and get back on the bull.

The Rickets report, just flown in by carrier beetle, contains some interesting material. The Rowdies seem to have weathered the summer rather well with the exception of a few harrowing experiences and one major casualty. The big surprise of the year—even to the All-Seeing Eye—was the amazing nuptial of Stan Boicourt, who apparently got tired of putting on miles to Crestline, so he moved her down within easy reach.

Norm Fink also got wound up in the affair, purely as a guest, and emerged with three light-headed bridesmaids. Having originally contracted to take only one home—with commendable cunning—found himself burdened with the job of jamming them all into his coupe.

Busily engaged in Frosh seduction (this word has many meanings), Bob Crichton breezed into the boudoir of some Blacker neophytes with a cheery "How'd'ja like to go get something to eat?" Various faces came out from behind books including that of Ralph Lovberg, Blacker's First Citizen, also engaged in the same occupation presumably.

The summer has netted a certain crop of sagas, particularly the story of ex-wheel Barnes and Fleming Laundry Hammond, who went to Europe on an airline which promptly went bankrupt after landing them in apartment, master kitchen, evening meals at cost and plenty of rides. Call Custer 5-6771.

France, thus leaving them stranded in the land of the illustrious can-can without the price of a Folies Bergere ticket between them. They didn't even succeed in passing off as natives! Seen by Matzner by chance by the Place del 'Opera, Hammond was quick to shout "Laundry goes out a week from Monday." Hammond has since returned with two volumes of the famed literature of Henry Miller, with which he is now doing a brisk and lucrative lending library business.

Pete Verdier, genius to be mentioned only in hushed tones, has finally come to the raised eyebrows of this department with a tremendous evening of imbibition of ethanolic draughts to an extent that his friends had to take away his car keys and drive him home to the loving, but unperturbed, arms of his grandmother, who put him to bed without further comment.

Bob Madden got a surprise letter from his very luscious summer passion, Joyce, saying they were engaged. The shock for Bob was receipt in the same mail of a letter from her father. Have a good summer, Madden!? Waheed returned from a pleasantly immoral summer at Lake Tahoe, where he attended a co-ed summer camp for foreign students with commendable results, returning with the story that he was tired of American women. We're convinced. Klarfeld, our junior-edition Mad Man Muntz, is selling that worthy's TV sets to unsuspecting consumers, and is so fascinated with his work that he has painted his car white and smeared it with advertising, and plans to attend no social functions this year in order to have more time to sell. Money-hungry! Hasn't he heard that the best things in life are free?

Much gloating and gleeful rubbing of tender fists followed the Frosh Tea Dance, where we were shocked to see an unlawful number of upperclassmen. A note of rebuke in passing. The Frosh are handed a collective award for their excellent showing and eagerness. At a Pomona dance recently many of them were also noted for outstanding presence and activity, among them Mal Silva, Don Tierney, Terry Thomas and Jim LaTourrette. These Frosh seem to be taking off into

(Continued on Page 3)

The California Tech

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Who Dealt This Mess

Ed. Note: This is the first of a series of bridge articles for the tyro. It will run in lesson form starting this week. We hope it will be sufficient for the beginner, and a helpful revue for the novices and advanced players.

For the first term this column will be devoted to discussing the fundamentals of bridge. It will be assumed that the reader is familiar with cards, at least to the extent of knowing the rank of cards and suits. Nor will the mechanics of scoring be discussed.

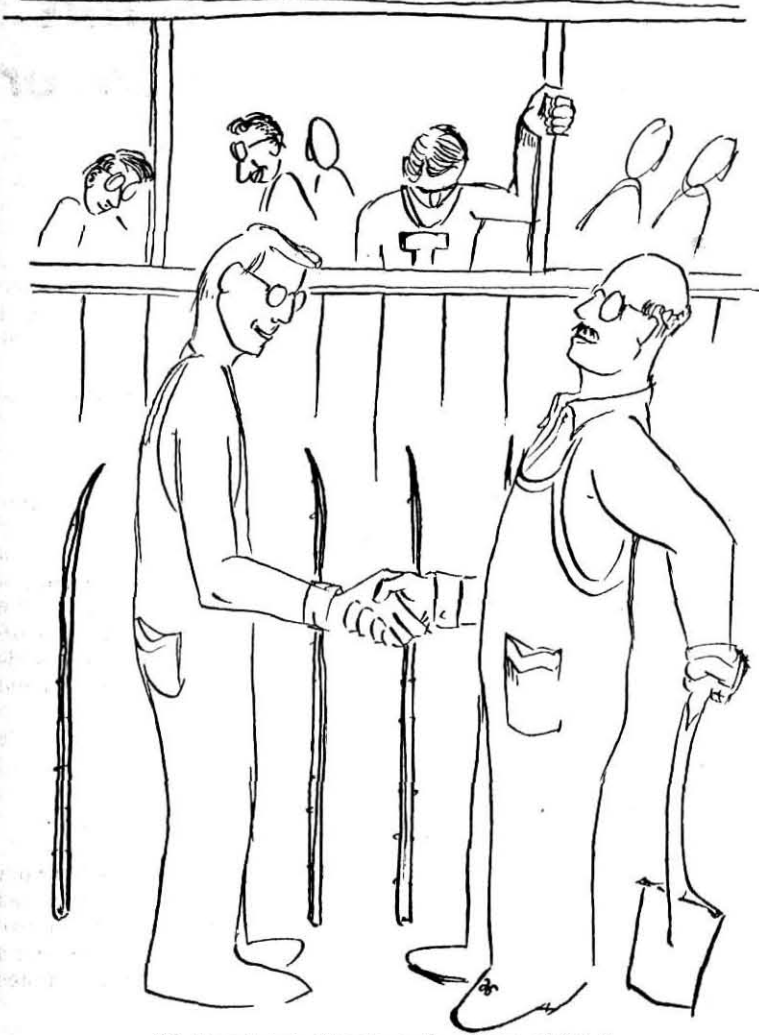
Bridge is the medium whereby two teams indulge in a mental contest. Remember that this is a partnership contest, not a solo exhibition. The object is to play each hand at the most advantageous contract in terms of the combined hands of the partnership, not in terms of your individual hand.

There are two parts to each hand, the bidding and the play. Of these, the bidding is more important since good play can mitigate but little the evils of reaching the wrong contract, while poor bidding may nullify the best of play. Since the aim of bidding is to reach the best contract, it follows that, usually, good bidding consists in passing the maximum of useful information to your partner. Occasionally a good contract may be

(Continued on Page 4)

Advertisement for Atkinson's Shop for Gentlemen. Includes an illustration of the store building and a list of clothing items such as Cashmere Sweaters, Scotch Argyles, Irish Poplin Ties, English Wool Challis Ties, Oxford Cloth Shirts, Hathaway Shirts, Pendleton Shirts, Botany Wool Shirts, Flannel Trousers, Tweed Jackets, Pajamas, Botany Robes, Alligator Coats, Gabardine Top Rainwear, Falco Hats, Napier Silver Bar Supplies, Spaulding Saddle Shoes, and Ivy League Clothes.

Advertisement for Brock & Co. featuring a woman's hand holding a diamond ring. Text: "The Greatest Compliment is to Select the Gift at Brock & Co. LOS ANGELES • BEVERLY HILLS"



"J. Randolph Wentworth, Class of '34."

CAMPUS BREWINS

(Continued from Page 2)

the social slough like a covey of steatopygic starlings, to paraphrase an old Army remark. Not so well is the sad relation of several Blacker young ones who foolishly gave some Tea Dance telephone numbers to Long-eared Pilkington; Pilkington, not one to let opportunity beat down his door in vain, now has two dates for next week-end!

One man who will probably not be living in Dabney after rotation is Tom Stockebrand, who was observed with interest at the LaVerne game when he greeted latecomer George Smith with: "There's George Smith! BRAAAAAACK!! (through megaphone) BRAAAAAACK!!" Scorning LaVerne were Goerke and G. Abell, who were trapped by the wide-roving reporter while sipping coffee at the Pasadena Playhouse discussing madrigals (Old English for "can-can") with a couple of likeliest that looked like visiting madrigal experts themselves. Ah! Such is the life of culture . . . Also scorning the rowdiness of football for culture was wheel Stan Groner, who spent the evening enjoying the intricacies of burlesque at the Burbank. Stan was sick all day Sunday, claimed it was something he ate!

Blacker's former Pope, Dan Schuster, has made the ultimate sacrifice and left the House in order to make an example of exemplary conduct in a paper manner to his former parish—he is

living in an apartment, surrounded by the apartments of beautiful, single working girls. He expects his work will suffer, but the necessity of being a shining model of the papal life is very close to Dan's heart, and he is putting his heart into it. The College of Cardinals in Blacker has met to appoint Hendrickson temporary Pope until an election of the Elite can be held. Two other notes of interest have deeply affected the houses. The first is the fourth round of wage increases in the Dabney Haircutters and Lawn Mowers Union, presided over by Long Shears Royce and Short Shears MacKenzie, to an inflationary 65c. A second major economic revolution is the final demise of the House supply of Amazon soap ("Amazon—it doesn't lather, it doesn't suds; it just keeps you company in the bath tub!"), and the subsequent cutting of local House soap entrepreneurs and cartels with rabid competition for the suddenly-opened market.

We wish to call attention to our cherubic omission of any commentary on Scripps, a condition forced upon us by the ugly powers of censorship that exist in the dark corners of Tech. The Eager Beak was severely reprimanded for its ebullience and courageous crusading for the truth evidenced last year. Letters of protest against such high-handed may be wrapped around cans of beer and pitched through our editorial window, and will be happily received.

BACHER HELPS

(Continued from Page 1)

lion with the AEC, he said in an interview for the California Tech.

Synchrotron Plans

Although Dr. Bacher is not doing any experimental work at present, he is participating in developing plans for a synchrotron to be used at Tech.

The synchrotron, according to Dr. Bacher, will develop "many points of interest in the study of elementary particles, since the only way we know of to produce these elementary particles is by means of the synchrotron or cosmic rays."

"Caltech has played a very important part in cosmic ray research," according to the new Physics head. "Caltech's outstanding work in two fields, nuclear physics and cosmic ray research," will be associated and coordinated even more after the development of the synchrotron.

Member of AEC

As an ex-member of the AEC Dr. Bacher is an authority on the military aspects of the atomic bomb. Speaking at Town Hall, Los Angeles, October 3, concerning the recent development by Russia of an atomic bomb, he said:

" . . . At this time it would be interesting to speculate on the objectives of the Russian atomic energy program. The Russians are most certainly interested in bomb development and production . . . but it seems most unlikely to me that this is the only

aim of their program . . . they recognize in atomic energy a new field, the successful development of which on a broad front, would allow them to achieve in one jump a position of more equal industrial development with the rest of the world . . . Success would mean a stronger country both in industry and in military potential."

Restrictions

Concerning restrictions on interchange of information about atomic energy, Dr. Bacher said:

"No one would argue today that our national security is not closely tied to our present position in atomic energy. But it is vital to realize that our security and continuing national strength are tied to the future development of atomic energy."

"In order to make the best progress in this work we should remove unnecessary road blocks set up by excessive secrecy; we should cooperate with Britain and Canada, making the most of their work as well as our own; and we must advance not only in the solution of our immediate technical problems but on the broad front of scientific research."

Student Faculty

Speaking as a university professor with experience at large eastern universities Dr. Bacher also commented very favorably during his interview on the student-faculty relations at Tech:

"Caltech has a very unusual place among universities in that it has a very small student body which therefore has a chance to know the faculty well."

The even balance between the number of graduate and undergraduate students at Caltech was appreciated by Dr. Bacher.

He plans to assume teaching duties at the Institute after the end of the first term.

Goethe Contest Announced by S.C.

A Goethe essay contest in honor of the 200th anniversary of the birth of Germany's most famous man of letters, Johann Wolfgang von Goethe, was announced today by the Southern California Chapter of the American Association of Teachers of German.

Essays, which may be up to 2000 words, may be written in German or English on the subject, "What Goethe Means to Me."

(Continued on Page 6)

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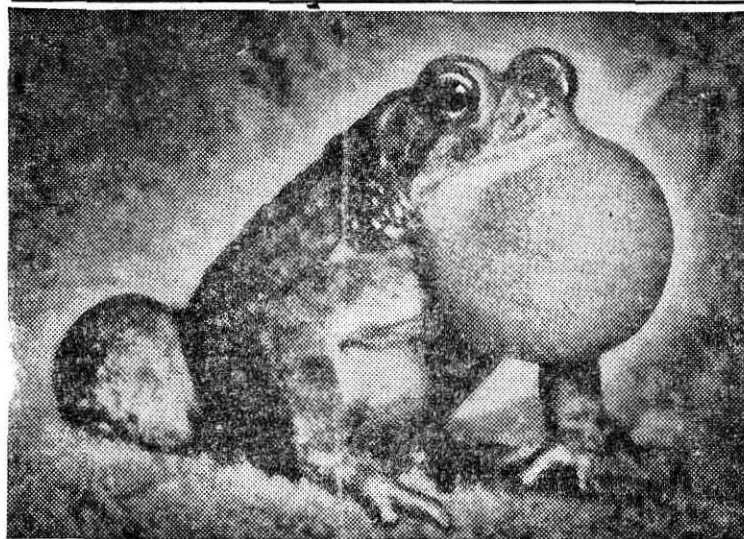
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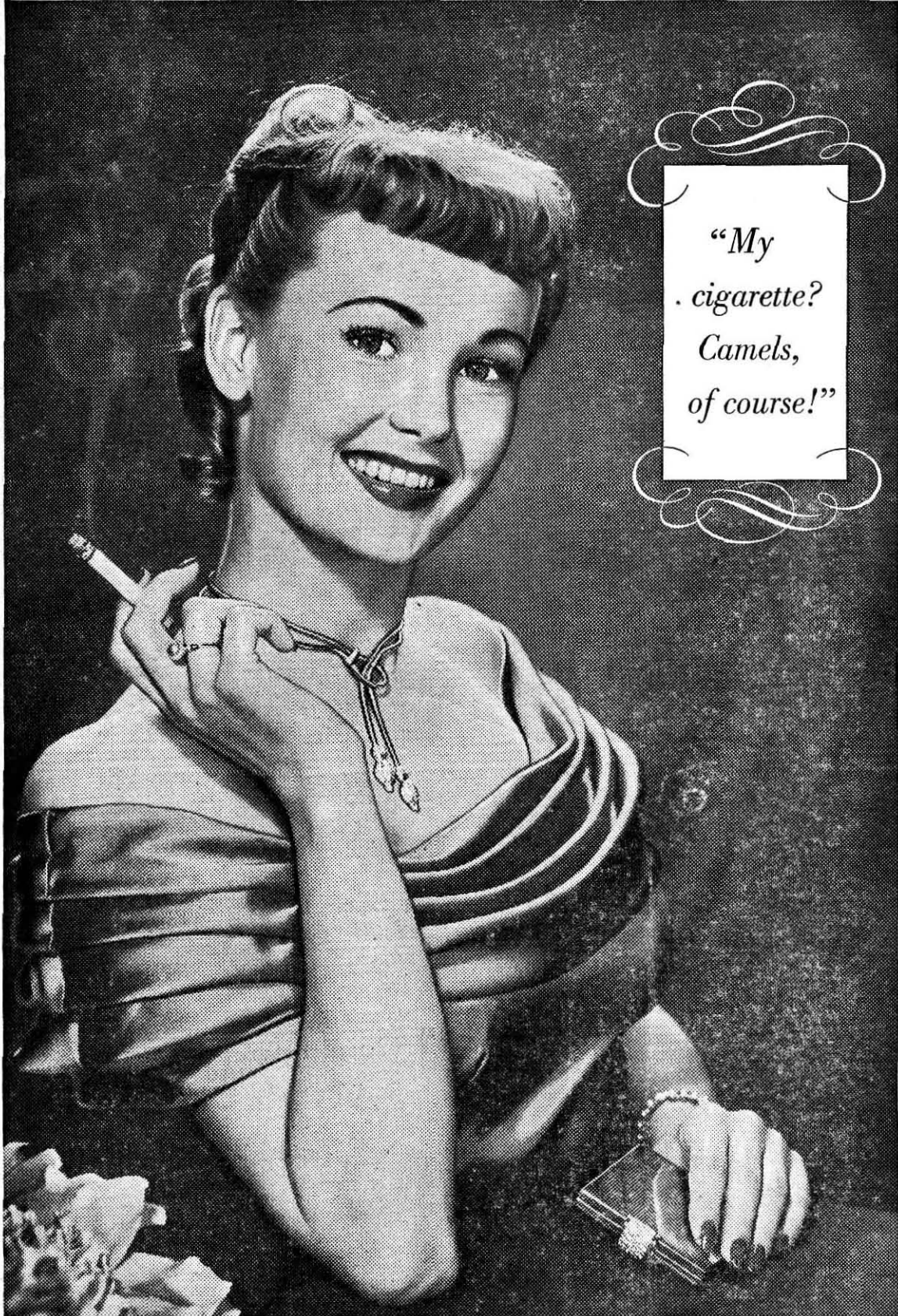
"Men's Distinctive Fashions"

J. Paul Sheedy* Switched to Wildroot Cream-Oil Because He Flunked The Finger-Nail Test



LOOK AT Sheedy all puffed up with pride. And to think that only last week he almost croaked when he found he couldn't pass the Finger-Nail Test. Then a friend put him wise to Wildroot Cream-Oil hair tonic. Now he's the big noise on the campus. Non-alcoholic Wildroot contains Lanolin, keeps hair neat and well-groomed all day long. Relieves annoying dryness, removes loose, ugly dandruff. So if you haven't switched to Wildroot, better hop to it right away. Get Wildroot Cream-Oil in bottles or tubes at your nearest drug or toilet goods counter. And don't forget to ask your barber for professional applications! (One at a time, of course!)

* of 327 Burroughs Dr., Snyder, N. Y.
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NOT ONE SINGLE CASE OF THROAT IRRITATION DUE TO SMOKING CAMELS!

The Root of All Ills: Women

Cognizant of this fact, the Fleming social directors have strived to surpass themselves in composing a program which, although incommensurate with their prodigious labor, still constitutes the ultimate of social achievement.

Launched with a startling innovation—an exchange for Fleming Freshmen on Friday—activities get under way. In order to satisfy the need for diversity, football games have been arranged to precede various post-game dances. To ensure repose after these, there comes a parade of significant events, led by one of Fleming's infamous local exchanges. Feeling the need for culture after this, a theater party has been scheduled. A bowling party, house stag, theater party in L.A., and optional Thanksgiving party for the snakes follow in magnificent procession.

Indeed, the culmination of this superb program embodies two magnificent events: the skating party (gay blades note!), and a big blowout after finals.

Blacker Features Mountain Party

Variety is the very essence of Blacker's social schedule this term. A skating party, a hay ride, a barn dance, and a theater party at the Pasadena Playhouse are but a few of Blacker's fall term social attractions.

Two exchange dances, one with John Muir College and the other with Oxy, will start the social program rolling.

By popular demand, one of the feature social functions of the term will be a Mountain Party. Last year's Mountain Retreat made such a hit with the lucky couples present, that a second one has been a must on the calendar. An added attraction this year will be the cool pleasure of the swimming pool which was closed last year.

Dabney Plans Fall Shindig

A tentative Dabney House Social Program for the first term was released last week by Fernando Corbato, Dabney vice-president. Educational activities begin this Friday night, when representatives from Orr, Haines and Erdmann Halls at Oxy make a trip to Dabney for a get-acquainted dance. The new Dabney Freshmen, who will have been permanently assigned by Friday, are particularly urged to take advantage of this opportunity to make important new "contacts."

Beach Party

The exchange will be followed on Sunday by a Beach Party at Emerald Bay, a pleasant site near Laguna. Then, on Saturday, October 15, the first official contest of the year for the Interhouse Crew Race Trophy will take place between Fleming and Dabney at Mountain Oaks. The Darbs are now holding the trophy for the second consecutive year, and with several members of last year's team returning, are expected to furnish a strong defense to the challengers.

Subsequent activities as now scheduled include a theater party, a skating party, and a record dance on Thanksgiving weekend. The remaining week-end will be occupied with the ASCIT Scripps Exchange, the Pajamarino, the annual Interhouse dance on November 5, and the ASCIT Formal on December 3.

Rowdies Open Fall Schedule With Stag

Ricketts men will see a well-filled fall social program off to a fast start with a Stag this Friday night. The purpose of the masculine opener will be to get the Freshmen and new members of the house acquainted with the veterans of last year's crew.

Vice-President Norm Schroeder's committee has further arranged entertainment calculated to fill the "leisure hours" of both the he-men and the operators for the rest of the term. These indoor sports include several exchanges with Scripps, postcard and square dances, theater and ice-skating parties, and last, but by no means least, one of the famous Ricketts barn dances.

WHO DEALT THIS MESS?

(Continued from Page 2)

reached by groping in the dark but generally full co-operation is required.

The bedrock upon which the structure of bidding is built is honor count. Long suits, voids, and the like are valuable, but there has never been invented a substitute for honor tricks. Next week a short table of honor tricks and the requirements for opening bids will be discussed.

Egad!

Did you hear the story about the girl who was so thin that when she swallowed an olive twelve men left town?

Icebox Animals Studied In Arctic

Why can an arctic bird such as the tern stand on ice for long intervals without freezing its feet when in its natural habitat; how does a polar bear, which has long hair, but very little, if any, fur, withstand cold arctic weather? How does the blood of arctic animals differ from that of those in temperate zones? What is the chemistry of such blood and also the chemistry of sub-cutaneous fats which arctic animals have that seems to insulate them from intense cold?

These are some of the things Dr. Dan H. Campbell, California Institute of Technology professor of immunochemistry, would like to know more about and for which the Office of Naval Research is providing search funds. To continue this work, which he began last year, he has left for the ONR's Arctic Research Laboratory at Point Barrow, Alaska, Uncle Sam's northernmost scientific outpost. The laboratory is under the direction of Professor George W. MacGinitie, Caltech marine biologist currently on leave from the Institute.

By some process, believed to be a chemical one, arctic animals and birds adapt themselves to extremely low temperatures. The same tern that can stand on ice for long intervals without freezing its feet will if kept in captivity under milder conditions sustain frozen feet when it again returns to the same extremely low temperature which it had

previously been able to withstand. Scientists would like to know how to explain these facts.

Dr. Campbell and fellow scientists have also done some preliminary research on hibernating animals in the arctic, in search of information on what body and blood changes take place during such periods. They have found evidence that some very unusual changes occur. For example, the body temperature of hibernating animals goes down to as low as two degrees below freezing and their breathing becomes very slow. Serum albumin, which normally makes up about 50 per cent of the blood proteins, disappears from the blood of hibernating animals, he said.

Dr. Campbell expects to be working with a number of arctic animals and birds such as terns, squirrels, etc., and will also study lemmings. These animals, which are about four inches long and have heavy soft grayish brown fur, resemble in some ways a mole but do not burrow. At times they completely disappear from the arctic, and then reappear. There seems to be some correlation between their appearance in large numbers and the prevalence of other arctic animals at the same time. "When the lemmings come back, other animals also are present in greater numbers," Dr. Campbell said.

More research on the blood of seals, foxes and possibly polar various arctic wildlife, such as bears, is also planned by the Caltech scientists.

Lumberjacks Crush Beaver

A squad of thirty-three Beavers journeyed to Flagstaff on their first encounter of the season. Highly disturbing showers and a better than anticipated pack of Lumberjacks greeted the local eleven after their cross-desert jaunt, and teamed to sock a forty-three to thirteen defeat at startled Techmen.

Impressive Beginning

Initial contact with the Arizonians was very impressive from the orange and white bench while Captain Baker and crew powered to two successive first downs and pushed their hosts back on their first three attempts to penetrate Tech lines. The lumbermen, however, with a 6-0 edge at first quarter ran the ends for three tallies in the second while Babe Karasawa was finding the hole over right tackle for 63 yards. Babe's run set up the touchdown Woody took over several plays later.

Mud Flew

With the mudeo well under way in the second half, the men from mile-high fame netted two more TD's through the air and a third groundwise. It was noted throughout the game that Arizona gains through the line were considerably short, although their passers seemed to have ample time for aerial deliveries.

Baker Comes Through

A last minute thrill was produced as Don Baker grabbed a (Continued on Page 6)

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DAN CURRIN, independent warehouse operator of Oxford, N. C., has smoked Luckies for 20 years. He says: "To me, Luckies taste better. I've seen the makers of Luckies buy fine, prime tobacco, you know!" Here's more evidence that Luckies are a finer cigarette!



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Engineers Rally To Deadlock LaVerne 6-6

A 6-6 tie was the result of last Saturday's game between the Beavers and the Leopards of La Verne. Babe Karasawa and John Lewis headed the attack as they ran and plunged through the La Verne line for most of the Caltech yardage.

First Blood
After a scoreless first quarter, a La Verne pass to Dean Gillette was good for a touchdown. They were close to scoring again when Tech took over on their own one yard line as the half ended.

Babe Scores
The Beavers came back in the next quarter when Karasawa crashed through right tackle and swivel-hipped forty yards to the goal line. Tyson's kick for the extra point was blocked by Dick Tagg, La Verne center, ending the scoring for the evening.

Play in the final quarter saw sawed back and forth on the field with La Verne retreating deep into their own territory on a fifteen yard penalty and two consecutive five yard losses; but the Leopards managed to punt to safety.

The game ended just as Caltech intercepted a La Verne pass on their own one-foot line.

Summing Up
Although the Beavers were ahead on first downs at the half 7-6, the final totals favored La Verne 12-9. The orange and white defense seemed much improved over the Arizona State game. Craig Marks and Noel Reed stood out defensively in the center of the line.

A spirited Caltech team meets Whittier in the Rose Bowl this Saturday for our first conference game.

Distance Men Begin Trials

Cross country started officially Monday night amid the groans and cries of "Oh, my shin splints." Coach E. J. Brown briefed the runners on the "Swedish" training he plans to use this year. Reporting to hear the bad news were Dick Smyth, Bill Pilkington, Mike Sellen, Gene Shakespeare, Charlie Steese, Bill Lansdown, Brad Houser, Bob Cobb, Dick Dickinson, Ray Bowerman, Pete Mason and Bob Kurland. Also reporting were several Frosh who will, in general, be running inter-house.

Bright Prospects
We seem to have the makings of a good team this year, and with a few breaks we might even repeat last year's conference victory. The schedule includes

SPEAKIN' SPORTS with Mike

To carry on from where the gifted pen of Paul "Goon" Saltman left off is truly a privilege experienced by few. We will all miss his natural, humor-tinted philosophies in "Talking It Over." Winner of last year's Hinrich's Award for the outstanding senior, Goon now resides in the state of matrimony and is studying under a scholarship in France and hopes to cast his educated little self upon the world a couple of years hence.

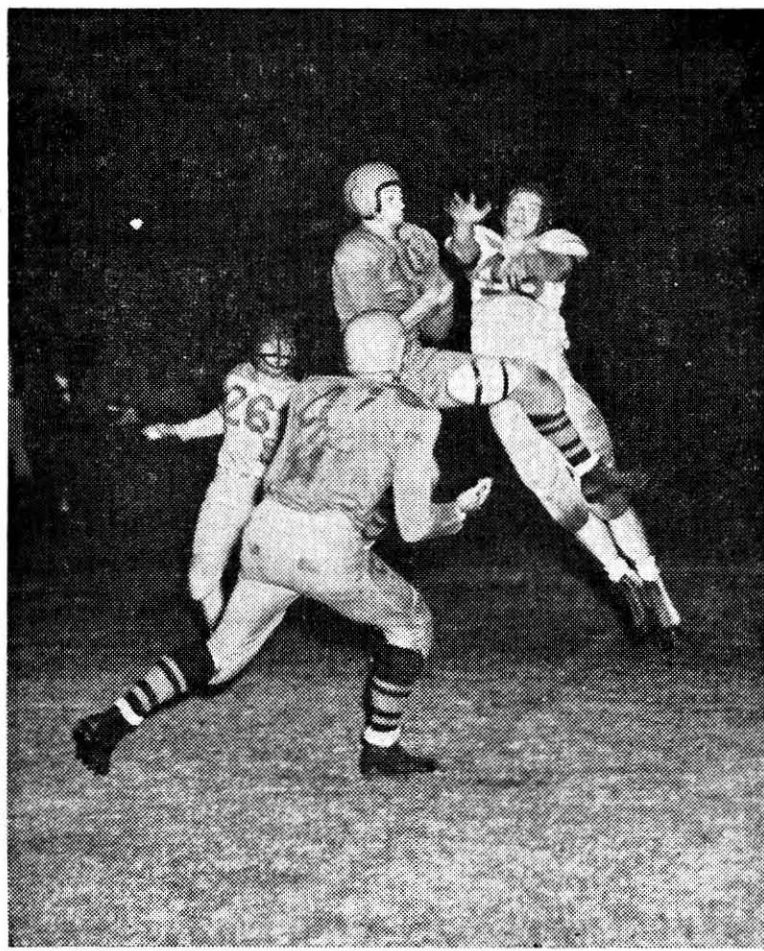
Bon Voyage
If you no longer hear that familiar Texan "Hit 'em Harder" arising from Tournament Park, it's more than likely because Mason Anderson is no longer commander of the Tech eleven. Little Andy checked in his orange and white football gear to take up bank managing down in the Lone Star State. Andy was Athletic Officer of the V-12 unit at Tech. After the Navy's departure, he stayed on, producing a commendable record that will not soon be forgotten. Our best to Andy.

Welcome
Bert Labrucherie is not new to the Southern California Intercollegiate Conference. Our new football and track coach played against Caltech as a halfback on the UCLA team in 1926, '27 and '28. As most of us know, Bert was voted Coach of the Year when he took his UCLA squad to the Rose Bowl in 1946. A hearty greeting, coach; welcome aboard!

Cleats Fly
Digging through the dirty uniform bag after the Arizona State game, I came to the conclusion that a pile of Beavers evidently ran into a bit of mud up Flag-staff way. Four unrecovered fumbles by local backs tend to prove it. You say, "Who' happen?" You've got me, but I'm saying that it was a greatly improved ball club that came to a

(Continued on page 6)
meets with the other four conference teams, L.A. State, P.C.C. and U.C.L.A. Anyone with running experience or the desire to run is urged to report to Erle Brown at the field house any afternoon. There's always room for one more on the team.

Beaver Sports



Leopards Hodson (41) and O'Neil (49) encounter Tech pass defenders Dayman (26) and Michaelsen (46) in end zone as second quarter scoring attempt is stopped. Beavers tied LaVerne, 6-6.

Skiers Organize, Plan Activities

Dick Jones, president of Caltech's Ski Club, recently announced the club's annual membership drive. "The Caltech Ski Club is a group of and for beginning skiers and all interested persons as well as schuss-boomers and experts," he said. Members of the club, one of Tech's most active organizations, are looking forward to another fine season.

Increased Privileges
The club owns and operates a fine cabin near Snow Valley and membership in the club entitles one to use of the hut and guest privileges at nominal rates. Club members enjoy reduced equipment rental fees, reduced tow and instruction rates, and reduced race entry fees. In addition, members receive subscriptions to **The Skier**. Each season the Ski Club sponsors and

Houses, Throop Begin Baseball

Hark all ye that dare to walk upon the sacred domain of Tournament Park ball diamonds. Your first conk on the head will assure you that interhouse baseball is under way. Competing for horsehide honors, our four local little dens of iniquity and Throop Club started their bids for sprained fingers yesterday—too late for publication.

Interhouse Baseball Schedule

Oct. 5—Ricketts vs. Blacker
Oct. 6—Fleming vs. Throop
Oct. 10—Dabney vs. Ricketts
Oct. 11—Blacker vs. Fleming
Oct. 12—Throop vs. Dabney
Oct. 13—Fleming vs. Ricketts
Oct. 17—Blacker vs. Throop
Oct. 18—Fleming vs. Dabney
Oct. 19—Throop vs. Ricketts
Oct. 20—Dabney vs. Blacker

participates in intercollegiate ski races through the Far West Ski Association. Weekends during the season find avid members and their guests enjoying the

Tech Hosts Poets In Initial SCIC Tilt

Whittier Favored Over Beavers After Pair of Decisive Wins

Whittier's red hot Poets meet the Beavers this Saturday night at the Rose Bowl. It will be the opening Conference game for both teams after two weeks of outside competition.

Poets Favored
The Poets are rated the favorites in the coming contest on the basis of their two previous wins this season. After topping Santa Barbara State 20-6, they overwhelmed San Francisco State 60-0 last week.

Al Gasperian, a transfer student who is fast as Mercury, and Joe Feary are the big threats on offense. Faspasian was the fastest man on the field against San Francisco and much of the Poet yardage can be credited to him. Being a ground-gaining team, Whittier has no outstanding passer.

New Staff
Caltech is pretty proud of the way her sophomores are performing on the football team. Now there will be a chance to compare them with some other outstanding second year man. Keep an eye on George Corey, Mickey Lima, and Ed Wanderhaven, all sophs and all defense men. Herman Reed, senior, is the backbone of their defense. Watch him too!

The Scoop
Getting down to particulars, Frosh football coach Preisler has had a turnout of 43 men, roughly one out of every four Frosh, which seems rather encouraging for future Varsity prospects. The Frosh schedule includes four main games plus several scrimmages. They are, in order: Whittier, Pomona, Oxy and Redlands, the last three games to be played before the Varsity games.

Outstanding Frosh
Most of the first-string positions are, as we go to press, still undecided, but the outstanding candidates for the various positions include TOM JANSSENS and GENE MUEHLBERGER at ends, CHARLES TALLMAN and JERRY ROSS at tackles, (Continued on page 6)

Large Turnout For Water Polo

Water polo practice got under way Sept. 28 with one of the largest turnouts in recent years. More than 20 upperclassmen and Frosh have reported to daily workouts at the P.C.C. pool. Especially encouraging is the number of Freshmen out, which will enable the forming of a Freshman team with a schedule of play.

The Calendar
A schedule is being worked out which will probably include the old rivals, Occidental, Pomona, and Redlands, as well as a number of outside games. No games will be played until about two weeks from today, allowing plenty of time to get the team working smoothly.

Minor Sport
The team was formed with the co-operation of the Athletic Department, which has extended minor sport recognition to the team. Because Caltech is not in a soccer conference, both Grads and Frosh are eligible to play on the team.

Returnees
The return of the experience and skill of Barry Schuyler, Steve Chong, Dick Bennett and Dick Fairall, plus able coaching promises a team that should really go places.

Graduation took a heavy toll from last year's squad, leaving the team minus five of its best men. Returning regulars from the '48 squad are Dick Libbey, Al Eschner, Mike Hall, Stan Boicourt, Ed Reinecke. Sophomores Bill Barmore and Richard Van Herzen will probably be used a great deal this season. Coach Palmer has not yet assigned positions or named a starting lineup. This will depend upon how the men shape up as practice progresses. In any case there will be no lack of reserves.

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SY. 2-7151 RY. 1-6066

Shinmen Look To Big Year

Monday, Tech's soccer team sprang full grown from its shell of last year's team with more than 30 men turning out. Virtually all last year's big guns are back, and the new crop of Frosh brought an unusually large number of experienced players. Even Mr. Muehlberger of the Geology Department came out. Mr. James Hill, a grad student, has consented to be coach.

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Games will be started the latter part of October. U.C.L.A., Southern Cal, Pomona, Pepperdine and Claremont Men's College have promised games. In addition, the Los Angeles Soccer League will play Sunday practice games.

There are a lot of good men out, but there still is need for more reserves: Grads, Frosh, and students at large, experienced or inexperienced.

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ALUMNI TALKS

(Continued from Page 1)

- November 15—Discussion of Opportunities in Large and Small Industries.
- Nov. 22—Should I Go to Graduate School?
- Nov. 29 — Production and Manufacturing.
- Dec. 6—The Placement Outlook and How to Get a Job.
- Jan. 17—Sales Engineering.
- Jan. 24 — Business Management.
- Jan. 31—Petroleum Industry.
- Feb. 7—Aircraft Industry.
- Feb. 14—Construction Field.
- Feb. 21—Teaching and Academic Research.
- Feb. 28 — Non-technical Requirements for Success.
- March 7—Summer Jobs.

First Talk

The first lecture, October 11, will explain the organization of succeeding lectures, and give a picture of the need for them, and the information contained in them.

The objectives of the lecture series are as follows:

- 1.—To assist undergraduate students in selecting an option in the study of science and engineering.
- 2.—To show the student what type of training is most desirable for service in industry. (What industry expects from a man just out of college.)
- 3.—To provide information to the student in order that he can decide whether or not to take graduate work.
- 4.—To reveal the general character of work in the broad fields of science and engineering.
- 5.—To show where and to what extent different types of scientists and engineers are used and are not employed in a given industry.
- 6.—To point out methods by which the student may reach a decision about the field of his interest in regard to types of companies, stability of the organization, and opportunities for advancement.



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FROSH SPORTS ROUNDUP

(Continued from Page 5)

PHIL BATES and GEORGE STRANAHAN at guards, NEIL STEPHANIDES at center, PETE WESSEL or DICK BIRD at quarterback, PAT FAZIO and AL TEAGUE at halfbacks, and BOB KUBICK at full. Best all-around man on the squad seems to be tailback FAZIO, equally able at passing, running and kicking. WESSEL has shown much promise as a punter. Center STEPHANIDES and fullback KUBICK are also outstanding.

Positions Open

Coach Preisler is still interested in any Frosh who 1) weighs over 250 pounds, 2) can run the 100 in under 10s., or 3), seriously, IS IN ANY WAY INTERESTED IN FOOTBALL. Positions are still open and any new candidates will be welcomed. There is also a need for a couple of managers.

Well, we have to snake for awhile. So long until next week and let's all turn to support the Frosh when they meet Whittier.

LUMBERJACKS CRUSH

(Continued from Page 4)

punt on the Tech 40 yard line and scampered down the left sideline behind good blocking to a six pointer. Karasawa toed the extra point. Caltech 13, Arizona State 43.

STATISTICS:

	Ariz. St.	Caltech
Yds. running	161	108
Passes attempted	24	14
Passes completed	9	3
Yards passing	198	68
Passes intercepted	3	4
Fumbles	3	5
Fumbles recovered	7	1
First downs	11	7

Silva Chosen

Frosh Prexy

Manuel J. Silva, a graduate of San Diego Senior High School, will serve as president of the freshman class at Caltech pending election of permanent class officers at the end of the first term.

Other officers, appointed by the student body board of directors, are Tom J. Janssens, vice-president; Lyle N. Hoag, Jr., secretary-treasurer; Patrick J. Fazio, Jr., athletic manager; Gerald H. Ross, and Alan J. Teague, members of the board of control.

GOETHE CONTEST

(Continued from Page 3)

Contestants must attach to the essay a sealed envelope containing the entrant's name, address and age, name of college or university attended, German course in which enrolled, and a brief biographical sketch.

Essays are to be sent to Dr. John T. Waterman, Department of German, University of Southern California, 3518 University Avenue, Los Angeles 7, California.

Gad!

"I'll be seeing you," said the wolf as he laid down four aces in a game of strip poker.

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LESH SUPER SERVICE
Corner of Chester & Green
Only 3 Blocks from Tech

SKIERS ORGANIZE

(Continued from Page 5)

skiing and the fun and companionship afterwards in the hut. Pre-season activities now slated include an extensive remodeling and furnishing program for the cabin facilities and several organizational meetings.

Memberships in the Caltech Ski Club are being sold by representatives in the student houses and through the club officers at \$3 each. For further information, contact president Dick Jones in Room 40, Fleming. Other officers for the coming year are "Dutch" Vreugde, secretary; Pete Price, treasurer; Jim Blom, race manager, and co-managers of the hut, Olly Gardner and Norm Fink.

TECH HOSTS POETS

(Continued from Page 5)

find Hal Tyson returned after being out all last year with an ankle injury. He will find good competition in Bucky Harris, who has been averaging close to 50 yards on his punts.

CAMPUS BARBER SHOP
in Coffee Shop Building
ALSO AGENT FOR
LAUNDRY
Picked up Monday,
Delivered Friday
and
CLEANING

SPEAKIN' SPORTS

(Continued from Page 5)

6-to-6 tie with LaVerne last Sat. Somehow I think I caught a smile on Coach La Brucherie's face a couple of times as Babe Karasawa swept the right end for considerable gains and as John Lewis showed his last year's form by cracking through center in the La Verne encounter. Fleetfooted end Randolph Moore is a sophomore to watch, along with center Dave Hanna and fullback Harold Woody.

It's rumored that as soon as five interhouse baseball teams, one frosh football squad and numerous unorganized athletes clear with their eager little bodies from the north end of Tournament Park, the soccer team will start working out. Looks like Tech's newly revived sport is here to stay.

Leaving you with the hope that you won't let your education interfere with your athletic participation, I intend to be around next week to find out who' happen'.

DEBATE TEAM

(Continued from Page 1)

cific at Stockton, April 3, 4, and 5. The national discussion topic, "What Should Be the Foreign Policy of the United States Toward the Countries of the Orient?" will be carried through the entire season.

Awards

Last year Caltech students took part in six regular debate tournaments and also entered a number of other speech activities. A number of these boys are on the squad again this year. Last year five students received second-year awards, and five were awarded certificates. Among students meeting for the first practice session were Ulrich Merten, president of Caltech speech activities, Olly Gardner, Stan Groner, Ralph Stone, Allan Beek, Raymond Brow, Wayne Beebe, Bill Dibble, Lawrence Dyer, Doug Calley, John Rogers, Bob Smith, Bob Kurland, Hubert Goss, George Merkel and Jesse Weil.

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