

Techsters Prepare For Interhouse

Caltech Y To Begin WSSF Drive To Aid Students Abroad

Funds to Provide Food, Housing, Books, for Needy Foreign Scholars; One Million Needed

Opportunity for Caltech students to help needy university students abroad will be given in the annual World Student Service Fund campus drive, Nov. 15-19.

The WSSF is an international organization which provides food, medical aid, housing, books, and clothing for students in Europe and Asia—students training in engineering, law, medicine, and other vital fields important to the rehabilitation of countries and continents.

Drive

The Caltech Y has again accepted responsibility for the drive and has named Oily Gardner and Ralph Stone as co-chairmen of the 1948 drive. Aiding the Chairmen will be Pete Knoepfler, Faculty; Don Merrifield, Grads; Dennis Long, Employees; Leigh Sheriffs, Student Houses, and Dabney House, Ulrich Merten, Ricketts; Art Bruntington, Blacker; Dave Madden, Fleming; Bob Cobb, Throop Club, and Carlos Navarro, Publicity.

Big Help

As example of how much a contribution can mean to some fellow student, two dollars will supply the notebooks and paper required by a Chinese student for one year, while five dollars will buy from one to six books for a European university whose library has been destroyed.

Sponsored

The WSSF is sponsored by organizations such as the U.S. Section of the World's Student Christian Federation, B'nai B'rith Hillel Foundations at American Universities, Newman Club Federation, U.S. National Student Association, International Student Service.

Great Need

It is estimated that 400,000 students in Europe and Asia must receive material education this year or else abandon their education. The WSSF is asking \$1,000,000 from the million and a half students and professors on American campuses to meet this year's needs.

Lecture On Balzac Delivered By Stern

Dr. Alfred Stern, noted philosopher and member of Tech's Humanities staff, recently delivered a lecture in French to the Pacific Chapter of the Balzac Society of America. The Society, which is under the chairmanship of Mr. Alexandre de Manziarly, Consul of France in Los Angeles, heard Dr. Stern speak on the topic "Balzac and Our Time."

Dr. Stern is also scheduled to lecture in English to the Philosophy Forum of the School of Philosophy at the University of Southern California. Speaking in Mudd Memorial Hall, on Tuesday, November 23rd, at 4:15 p.m., his topic will be "The Current Crisis in the Realm of Values." All those interested are invited to attend.

Campus Calendar

THURSDAY, NOVEMBER 4—
12:00 Y Upperclass Luncheon Club at the training table.
12:15 Throop Club meet.
7:30 Dancing Class, Culbertson.
FRIDAY, NOVEMBER 5—
11:00 Assembly, "Benelux and the U.S." by Dr. E. van Raalte of the Hague.
4:15 Cross Country, USC vs. CIT at Tournament Park.
4:45 Water Polo, Oxy vs. CIT at PCC.
7:30 Lecture, Prof. Hewitt "How the Geophysicist Searches for Oil."
SATURDAY, NOVEMBER 6—
9:00 Student Houses annual Interhouse Dance.
SUNDAY, NOVEMBER 7—
7:00 Y Fireside with John E. Barber.
7:30 Caltech Musicale, Dabney Hall lounge.
MONDAY, NOVEMBER 8—
4:20 Interhouse Bowling, Pasadena Bowling Courts.
TUESDAY, NOVEMBER 9—
training table.
7:30 Band practice, Culbertson.
WEDNESDAY, NOVEMBER 10—
7:30 Fencing Class, Dabney House dining room.
7:30 Orchestra practice, Culbertson.
9:00 Glee Club, Culbertson.
12:00 Y Frosh Luncheon Club at the

Muddy Events Set For Annual Spree Next Tuesday

The usual five muddy events constituting the annual Frosh-Soph Mudeo, will take place next Tuesday, Nov. 9, beginning at 2:30 p.m. Scheduled are a Tug of War, Sack Race, Wheelbarrow Race, Tire Spree, and the Mudeo, all occurring in the mud pit. As usual the judges will be a committee of Juniors who are subject to dumping in the pit at the end of the contests.

Tug of War

The tug of war is between two teams of 20 men each, on a 100 foot rope across the pit. The event is won when one team is pulled completely across the pit. In the sack race 2 relay teams of 10 men race back and forth across the pit.

Wheelbarrows

Next event is the wheelbarrow race (a 20 man relay race) in which one man walks across the pit on his hands with his partner holding his feet. First team of ten pairs to finish wins. The tire spree causes great confusion. About a dozen tires are placed in the center of the pit and at the whistle two teams of 25 men each charge in and try

(Continued on Page 2)

Jones, Eaton, Lacey Named Committee For Draft Problems

To facilitate handling of selective service problems at the Institute, a committee composed of Dean L. W. Jones, chairman, Dean Paul Eaton, and Dean William N. Lacey will be appointed by President L. A. DuBridge.

Contact

This committee will serve as the Institute's official contact group with Selective Service agencies and also to keep students advised and work with them on draft problems. Undergraduate students will see Dean Eaton and graduate students Dean Lacey.

No Information

At the present time no information is available as to whether or not there will be any special deferment for science and engineering students, Dean Jones said. Under the present bill students are deferred only until the end of the school year for which they are registered. The committee has no information yet on deferment after the end of the school year.

Local Decision

Los Angeles County Local Board Group B, covering Local

(Continued on Page 4)

Heaven, Hell, Mutiny, A-Bomb Set As Themes For Dance

Herb Adkins, Nappy Lamare, Doug Maple, Carr Quintet, Max Bickley to Furnish Smooth Music

This Saturday evening, Nov. 6, the annual Interhouse dance will be held here at Caltech. This affair, which promises to be one of the best in many years, will feature the combined efforts of the four houses and Throop Club. Each will furnish its own band, decorations, entertainment, and refreshments.

Each house traditionally tries to create the best theme, and the resulting competition produces unique and well-designed themes. Everyone is urged to see them all, since this is the only time in the year that all five houses work together on a dance. This year's dance is said to be particularly well planned.

The dress is informal, which means suits for the men and party dresses for the girls. The dance will start at 9:00 and last until 1:00.

Blacker Devils

Making the rounds, the first stop is Blacker House. Blacker will feature Nappy Lamare's band with Zutzy Singleton on the drums. This is the same outfit which played at Gene Norman's jazz concert last Saturday night at the Shrine Auditorium. They will play some smooth dancing melodies, but also give out with some hot stuff to fit Blacker's theme "A Night in Hell."

Ricketts Angels

Moving on to Ricketts you will pass into Purgatory and through the Pearly Gates to Heaven. The theme is "Dancing in the Clouds." Herb Adkins will provide smooth dancing music straight from paradise.

Fleming Monks Revolt

Across the way from this peaceful scene Fleming will have a "Mutiny in the Monastery." (Continued on Page 6)

Songs, Yells, Fire Spark Annual Rally

Thanks to the last minute cooperation of the Pasadena Fire Dept., the pajamarino came off as scheduled, complete with bonfire. Festivities began with the outdoor supper followed by songs and yells and noise from the band. Later the box pile was ignited and a snake dance ensued.

Present were numerous photographers from the Herald-Express and the Pasadena Independent.

The parade went from Tournament Park to the American Legion Hall where the troops were entertained royally by the PCC Highlighters.

BLAZING BOXES COST LOCAL BUSINESSMAN



"Forget It," Says Businessman, As Boxes Burn

Amidst cries of "To hell with Oxy" and "Potato Chips, Potato Chips" last Thursday night, few people noted that the pile of boxes gathered by this year's frosh class had an air of quality about it. Few people noted that afternoon a man with an overcoat pulled high around his neck, who in reply to, "Are you looking for your son?" said, "No, I'm from the local genderme, and I'm looking for a few of your more inspired freshmen."

Good Stuff

It is to be noted that the undercover work of this year's class surpassed that of previous classes in that they were able to find a place out on East Colorado called Jack's Food Town where every Tuesday morning several

truck loads of especially fine quality, durable, highly combustible boxes were hauled to the shipping docks.

Not being ones to pass up such a rare deal, these readers of Real Clue detective magazine, gathered the troops together and (to put it crudely) made a haul.

Generous Attitude

The unusual part of this story comes when we hear from the owner of the store himself, Jack Biffle. In the face of his loss of between 70 and 100 bucks (deposit value of the boxes), he assumed the attitude of, "Let's not get excited about this thing boys, I was in college myself once and it seemed to me that the bonfire was pretty important."

In fact, when the student body offered to make good his loss, he turned it down flatly saying that we could use the money a lot better to pay for part of a dance or sweaters for the athletes.

Treasurer Heaves

Old Hugh (money bags) Carter then heaved a mighty sigh and said that he wondered if there were something that we could do to pay some small tribute to this guy Jack Biffle. So this is it. It all went up in smoke last Thursday and maybe had something to do with our team's great showing.

To Jack Biffle, we take off our hats, and hope that when we are in a similar position in the future, we can be as understanding and generous as he has been.

E. van Raalte Of Hague To Speak On "Benelux Of The United States"

This week's assembly, Friday at 11:00, in Culbertson Hall will feature Dr. E. van Raalte of The Hague College in Holland. Dr. van Raalte is a very noted Dutch historian, author, journalist, and authority on international law. He is now in the United States working on the problem of economic cooperation with the United States and Europe. His speech is entitled "Benelux of

the United States," which refers to the present five power alliance in Europe. Dr. van Raalte is a noted authority on such subjects and his address should be very timely. It is well worth while for all men on campus to hear this informative talk, from such an authoritative and distinguished visitor. Frosh are required to attend as usual this term.

John Barbers To Entertain Students At Sunday Fireside

The Caltech Y continues its Sunday night Fireside Series this coming Sunday, November 7, at the home of Mr. and Mrs. John E. Barber.

Mr. Barber is an Institute Associate and in the past he has indicated his interest in Tech students and his desire to meet them on an informal basis. This Sunday's gettogether promises to be a very enjoyable evening and you are urged to sign early on the lists which are posted in each of the four houses and in Throop Club. For further information, please contact Dave MacKenzie in Dabney 52.

Nobles Entertain

Dr. and Mrs. James A. Noble entertained a group of ten students this last Sunday evening at their lovely home on E. California. Dr. Noble is a Geology professor at Caltech and he is also Chief Geologist for the Homestake Gold Mining Company in the Black Hills. Drawing on their wide and varied experience both in the U. S. and in South America, Dr. and Mrs. Noble related many interesting incidents and stories to the group.

Later in the evening, Mrs. Noble served delicious refreshments, including hot spiced cider, to cap a very enjoyable Fireside.

Lomen To Play At Mudeo Dance

Tension between the Soph and Frosh classes which has been building up over the Mudeo to be held next Tuesday will be quickly relieved the following Friday in Dabney Hall Lounge.

Traditional Affair

The traditional Soph-Frosh dance held after the Mudeo has been scheduled for Friday, Nov. 12. This function is the first class affair which the Frosh have a chance to participate in and is always welcomed by the Sophs since they usually attend gratis, kindness of the Frosh. The losing class in the Mudeo foots the bill and fact has almost established the tradition that the Frosh can't win.

Hal Lomen

Music for the dance will be furnished by Hal Lomen. Judging by past performance nothing could be finer in this respect. Hal has played at a number of Caltech dances to the satisfaction of all concerned.

Entertainment

Entertainment is being planned for the intermission and as always there will be refreshments for those needing fortification. For a good time, don't pass up the Soph-Frosh dance from 9 to 12 Friday evening, Nov. 12, in Dabney Hall Lounge. Dress will be sport.

The California Tech

Published every Thursday during the college year except during examinations and holiday periods.

CALIFORNIA INSTITUTE OF TECHNOLOGY
1201 East California Street, Pasadena, Calif.

Subscription rates \$1.50 per year

Entered as second-class matter Nov. 22, 1947, at the Post Office in Pasadena, California, under the Act of March 3, 1879.

Offices: Lower Fleming

Telephone: SYcamore 6-7121 Ext. 180

Distributor of Collegiate Digest

Jim Hummel, Editor

EDITORIAL STAFF

Managing Editor.....Earl Hefner
 Sports Editor.....Thorne Butler
 Feature Editor.....Bob Kurland
 News Editor.....Eric Johansson
 News Staff.....Fred Drury, Bruce Stowe,
 Woody Bratnover, Ollie Gardner, Dick King, Bill Wright,
 Tony Malanoski, Stu Goldman, Carl Price, Wayne Herzig
 Rewrite Staff.....Bob Haufe, Chief
 Lee Ross, Alex Drapes, Charles Steese, Bruce Stowe,
 Bob Kurland
 Special Writers.....Fred Wood, Paul Saltman, Dick Schuster,
 Stan Boicourt, Dick King
 Sports Staff.....Dale Krause, Erle Brown, Leon Michaelson,
 Woody Bratnover, Bill Harris, Stan Boicourt
 Photographers.....Hugh Stoddard, Chuck Wallace

BUSINESS STAFF

Manager.....Bill Bradley
 Circulation Manager.....Win Soule
 Business Staff.....Charlie Steese

Song Leaders...

The results of the poll printed in the Tech were very interesting, if not very conclusive.

The figures on the poll will not be printed, since only about twenty-five ballots were returned. This number was too small to give any accurate student opinion.

About three quarters of the ballots indicated that the board's action was too hasty. This seems to be the main comment from the students; their chief displeasure is with too rapid action.

The most important factor is the low return on the ballots. This indicates that few of the students were interested enough to fill out the ballot. This seems to indicate the board was correct in assuming that the students didn't care to have song leaders.

Beak, Beak...

After the fine showing our team made against Oxy last week, we should all be fairly happy. Of course we will always have some who are going to beak. You have them at any school.

"We came to this school to study; why should we have to support a football team (which is pretty poor anyhow)."

Haw! Let us have no such beaking around here. There are some schools that have much more of a right to moan. Take for example, Redlands. They played Hawaii a few weeks ago.

Did they beak about the score? Well yes, sort of. In fact, the following excerpts are reprinted from the Bulldog of a week or two ago. Look at the troubles some other schools have!

Hawaii-55; UR (sob!) 0!

9500 fans including one of the largest alumni homecomings of the school's history were shown how not to play football at the Orange show stadium last Saturday night.

The Bulldogs, with 90% of last year's personnel plus a good crop of freshmen and J. C. transfers, tripped over their own shadows as they tried to stop a razor-sharp Hawaii team. The Maroons had the material—good material—but they couldn't score despite the facts that the locals had SIX DOWNS to tally from inside the 5-yard line.

The islanders toyed with the UR club. Bessette, Dang, Mamiya, Hirota and Co moved over, around and through the Bulldogs at will as their razzle-dazzle plays went off like clockwork. The Maroon defenders were teased, sucked and blocked out of position all evening.

Getting only five first downs—one via a penalty—31 yards on the ground and 70 yards through the air, the Bulldogs were held scoreless for the first time since 1944.

Hirota, Haake Score

The Rainbows scored twice in the second quarter as Mamiya's passes penetrated the leaky defense of the Bulldogs. Hirota

skipped over from the one yard marker for another six points. After a long 40-yard Mamiya-to-Bessette touchdown pass was nullified because of a Rainbow offside penalty, Mamiya faded back on the very next play and arched one to Phil Haake for a 45-yard scoring play.

The Bulldogs held the Hawaiians to a standstill between halves.

Rout Continues

Mamiya made the only score in the third quarter as he sneaked around end for six yards, scoring on a beautiful hidden-ball play.

The Monoa valley squad erupted for three more touchdowns in the final quarter. Hirota, whose flashy broken-field running was poison to the local team all evening, scored on a 21-yard scamper off tackle.

Chuck Hackleman was easily the standout for the locals as he made tackles all over the Bulldogs back yard. Twice he stopped "sure" touchdown gallops. Chuck Luciano showed up well with several beautiful runs including the 60-yarder that almost gave the Maroon and Grey a touchdown.

The scoring:
 U R 0 0 0 0—0
 U H13 14 7 21—55

MUDDY EVENTS

(Continued from Page 1)

to move as many tires as possible behind the opponents' goal. After six minutes the team which has moved the most tires wins.

Mudeo

Final event is the Mudeo, which consists of a horse and rider free-for-all. Winner is the team having the most horse and rider pairs standing after ten minutes.

Flag Rush

The mudeo began back in 1921 when it consisted of a flag rush. Frosh tried to climb a greased pole to get the flag while the Sophs tried to pull them down. This was a very popular event and continued until 1935 when it was abandoned because of too many injuries.

In 1935 a new contest was cooked up which concerned a 6 foot pushball. Object was for

Frosh and Sophs to push it to opposite ends of the football field. In '37 more events were added and the mud pit made its debut. A fire hose was constantly played on the center of the pit.

Attraction

For awhile this was publicized and the events attracted many people outside of Tech, and took up most of the day.

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

CAMPUS BREWINS

The schnapps extravaganza rates tops on the gossip column this week. Dabney and Fleming got together at Mountain Oaks with the help of such greybeards as Auerbach and Benton to down something like four barrels in three hours. As usual, Dabney made a clean sweep of the contests, even though the usually dependable Royce was off his form—probably sober. Bartender Hartung was acting very friendly toward Jug Johnston's girl. Probably the most successful male at the shindig was Carl Anderson. His date couldn't have danced any closer. Maybe it was the beard that excited her.

Most of the fun came on the way home, however. The Fleming Waiter's Union limousine ran out of gas, forcing Fairall to hightail for more. He couldn't breathe into the tank all the way home. Dabney rented a hay truck which was filled with so many people it was impossible to tell what sort of agreeable activities took place. No one was in condition to return the crate Sunday so an extra \$12 was paid on it.

Blacker was quiet except for the dull thud of sand bags being piled before Bruington's room. With their eyes on the Inter-house Trophies, Blacker men have no time for social trivia. At the theater party, Blacker dates prevented the Playhouse from becoming dark with their charmingly blushing faces.

Ricketts experienced no such trouble—the Rowdies perhaps dating a more sophisticated set. This brings us to the feature story of the week. Our coveted award for Outstanding Savoir Faire goes to Ollie Gardner. Through some fault of his own,

Ollie's Browning Hall date has been encamped half-way to Christmas. Remembering his early gang-war experience, Ollie got busy polishing a hacksaw blade. Accomplice George Drapes dutifully loaned his engraving equipment and Ollie engraved the weapon with the touching words: "Stone walls do not a prison make . . . Love Ollie." Ollie pressed the weapon to his bosom, secreted it in a beautiful layer cake, and sent it off to Scripps. That, gentlemen, despite all French jokes to the contrary, is *savoir faire*.

Bradley announced that social events for Saturday night included a bowling party, and by Gawd, Carl Fox made sure there was a bowling party. Seen, were Carl Fox and date.

Rube Mettler and Dan King's dying ember appeared at the dance after Rickett's theater party. After the lady with memories said "Good evening, Dan," the poor lad was hustled to the showers with severe chills.

Question: What Ricketts frosh by the name of Jack Nobles was seen with how many girls on how many arms last Sunday evening?

Looking backwards we enjoyed the Old Home Week Friday night after the game. The appearance of the calm, happy, unfrustrated married grads is a serious and sobering influence on Tech bachelors. Remember, men, you're going to have to look at her before breakfast.

In happy retrospect, our nomination for the prettiest legs of the month go to the anonymous PCC girl who changed the signs at the Pajamarino show. Her mother must have been frightened by a pretty drawing.

THE SQUARES' CIRCLE

Editor, California Tech
 California Institute of Technology
 Pasadena 4, California

Dear Sirs:

The undersigned members of the Faculty, who were present at the Rose Bowl last Friday evening, wish to express their admiration to every member of the Team, and to the coaches, for the fine spirit and sportsmanship exhibited in the Occidental game.

We regret that the deadline for submitting this letter for publication in this week's Tech does not allow time to get in touch with other Faculty members who we are sure would join in this expression of appreciation.

Donald S. Clark
 Kent Clark
 Paul Eaton
 L. W. Jones
 Beach Langston
 Henry McCreery
 George MacMinn
 Rodman Paul
 Royal Sorensen
 Foster Strong
 Paul Youtz

PLACEMENT TALKS

(Continued from Page 1)

three of them altogether—B.S. in Mechanical Engineering in '34, M.S. in '35, and PhD in Aeronautics in '37. During his stay at Tech he was rewarded for his scholastic efforts by becoming a member of Tau Beta Pi. After graduating, he went to work at Douglas, starting at the Santa Monica plant. Later he was transferred to the El Segundo plant, where he became head of the Power Plant Group. He is now head of the Mechanical Design Section at that plant.

The time and place remain the same as last week; Dabney Lounge at 4:30, next Wednesday. The usual question period will follow the short talk by Mr. Clauser.

Your Campus...

By John Whittlesey

Several times during the past few weeks those of you who ventured forth from the snake pits, may have noticed strange, brilliant blue-white flashes reflected from the walls and penthouses of the various buildings in the early hours of the night. They appeared much like distant lightning; instant bursts of intense light coming unhesitatingly at two second intervals.

East Bridge

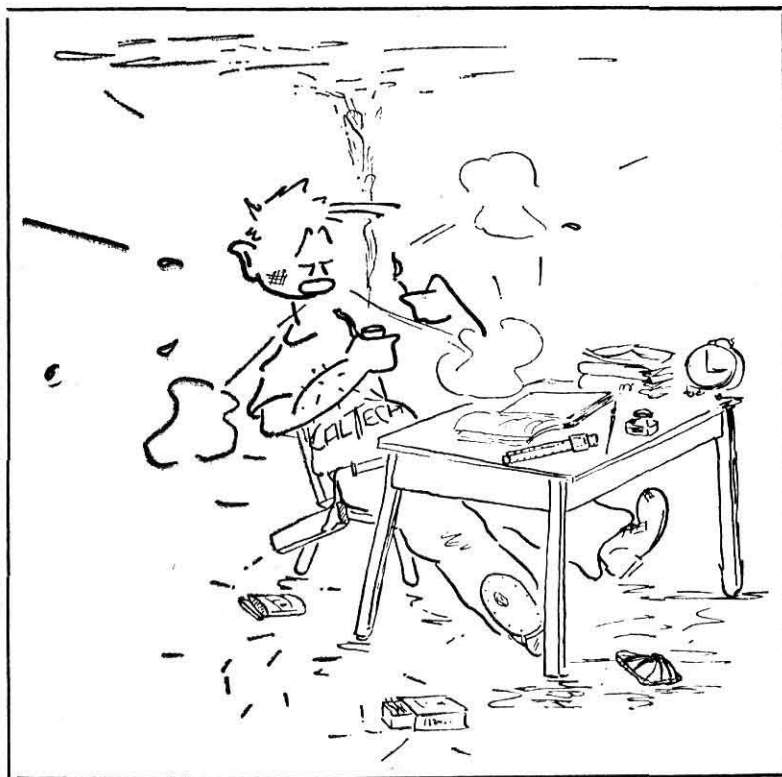
The story behind these flashes deals with a Naval Research Lab project currently being operated on the roof of East Bridge by Mr. Serviss (who you may know as the man responsible for keeping your elect. eng. experiments in order). The equipment, which is maintained from the Ham Shack (401 B.), includes a special Xenon ultraviolet flash tube, a bank of six 2 microfarad condensers in parallel which are used to build up the 9000 volt spark inside the tube, and a quartz spectrograph. The purpose of the work is to measure the difference in transmission of ultraviolet light through the local atmosphere under various conditions. On the Athaneum, a mirror reflects the flashes to the spectrograph.

Every Night

The whole setup was originally developed about six months ago by a Grad. student, Bill Baum, in conjunction with his PhD research, although it is now being

Voget & Cathey
 MEN'S CLOTHING
 FURNISHINGS
 Fridays till 9:30 p.m.
 459 East Colorado Street
 Sy. 2-3871 - Pasadena 1

HAROLD O. GRONDAHL
 Representing
NEW YORK LIFE INSURANCE COMPANY
 234 E. Colorado St., Pasadena
 Phone SY. 2-7141



THE FRONT BURNER

Perhaps last Thursday evening's performance was the most delightful of the San Francisco Opera season. "Don Giovanni" has been called THE most perfect and complete work of art, and has serious moments not found in light opera; still, we like to think of it as the charming and diverting comedy it is.

Ezio Pinza presented a masterful Don to a Shrine Auditorium audience whose great size demonstrated the revived popularity of the Mozart opera. Equally supreme was Salvatore Baccaloni as a Leporello above the crudeness of slapstick. Although both master and servant may have passed their prime in voice, it will be some time before other operatic performers exhibit more dramatic skill in the delicacy and understanding required of a Mozart work.

The supporting cast was adequate in all respects, but not brilliant. Nadine Conner's portrayal of Zerlina was as near perfect as we could wish. Max Lichtegg, Jussi Bjoerling's last minute replacement as Don Ottavio, did only tolerably well until he came forth with a warm and sympathetic *Il mio tesoro*, far surpassing our highest expectations.

Don Got Around

Baccaloni did well in Leporello's famous patter song, Napa-

mina, which lists the Don's female conquests. In case anyone's interested, he sings of 640 in Italy, 231 in Germany, 100 in France, 91 in Turkey, and a staggering 1003 in Spain. The total, which Leporello does not bother to calculate, is 2065.

Pinza and Miss Conner combined in a charming rendition of *La ci darem la mano*, and Zerlina's innocent and flirtatious aria, *Batti, batti*, was also given effectively.

We saw the last scene's terrific dramatics done sanely. Our opinion is that this point of the opera often becomes hectic. It was pleasing to see that effect not achieved in this performance.

Doubles as Pianist

Paul Breisach did quite well, both as conductor and accompanist in the many piano passages. We felt several times, however, that he was just a little too much in a hurry, especially when we were rushed through the Minuet.

The warm applause and many curtain calls were only some measure of the response of the audience. From what we saw of the San Francisco Opera season, this performance of "Don Giovanni" was certainly a high point.

**WHEN YOU ARE HUNGRY
 WHEN YOU ARE THIRSTY
 OR
 WHEN YOU JUST
 NEED RELAXATION
 IT'S THE
 SKIP INN
 Beer - Plate Lunches
 1352 E. WALNUT
 Open Till 2 A.M.**

Exquisite...
 always the finest in engagement rings

Brock & Co.
 LOS ANGELES • 515 WEST SEVENTH STREET • VA 4141
 BEVERLY HILLS • 9520 WILSHIRE BOULEVARD • CR 6-1106

Beaver Meeting Hears Strong Plan

Amid only a small amount of confusion the Beavers held their regular meeting at the training table last Monday. The one item not according to plan occurred when secretary Don Shepard found he had neglected to bring the minutes of the previous meeting. Since he could not repeat them from memory, this part of the business was omitted.

Pins Await Coughs

Hugh Carter announced that the long awaited Beaver pins would be awaited just a bit longer, until everyone coughed up the money. Carl Fox reported that the guide service was now in working order, with 6 guides available at 11 and 3 o'clock

each school day, and at 11 Saturday morning. President Bill Woods also reminded the members that the Beavers were sponsoring a referee service for interhouse games and taking charge of recruiting the Rose Bowl ticket takers, both endeavors being in good shape at the present time.

Publicity Minded

Dean Strong then gave a report on the projected plan of sending Techmen to the high schools of Southern California to give prospective science and engineering students information on schools in general, and Caltech in particular. Letters had been sent to 74 high schools and answers were expected to return soon. Plans for financing the venture were discussed, and enthusiasm voiced at the idea. When it was emphasized

that the service was for all science and engineering students, Bill Barbat was heard to mumble something about coeds, but would not repeat what he said.

Lectures

Dick Schuster reported on the co-sponsored Alumni-Beaver lectures, which have been going well. He emphasized that freshmen and sophs were urged to attend, so that they might learn about the various jobs in each option, and decide their future course without quite as much difficulty as before.

Rube Kachadoorian said that the bigwigs of Pasadena had commented very favorably on the Techmen at the Pajamarino parade. Amazed at this news, the Beavers decided that this was a good time to adjourn.

Van West To Speak On Great Paintings

Dr. F. W. Van West, art critic and appraiser, will give an illustrated lecture on "Great Paintings—Fakes and Masterpieces" on Monday, November 8. It will be another in the Y Forum series.

Dr. Van West has won a worldwide reputation based on his 45 years of criticizing and appraising paintings. This lecture was inspired by the warm reception given a Y Forum lecture on modern art last year.

Support the WSSF

Tech Gets Bid To Bridge Tourney

Caltech has just received an invitation to compete in the 1949 National Intercollegiate Bridge Tournament. Invitations have also been extended to 325 other colleges and universities accredited by the Association of American Universities.

Preliminary

Only undergraduates are eligible to play in the duplicate Contract Bridge event for the title and silver trophy. A preliminary round will be played by mail in February, and the sixteen highest ranking pairs will meet for the face-to-face finals on April 22 and 23 at the Drake Hotel in Chicago, where the players will be guests of the Intercollegiate Bridge Tournament Committee.

Eight Zones

In last year's Intercollegiate Tournament, which was won by the team from Capital University, Columbus, Ohio, 1216 students representing 152 colleges in 43 states played in the round-by-mail. To insure representation of all parts of the country in the finals, the country is divided into eight zones, with two pairs from each zone qualifying for the finals.

No Cost

The Intercollegiate Bridge Tournament Committee, which supports the event so that there is no cost to the competing colleges or the players, is a group of college alumni and officials interested in developing Contract Bridge as an intercollegiate sport in which men and women can compete on an equal basis. The Committee requires that the approval of the dean or a corresponding authority be granted before a college can be regarded as officially entered in the tournament.

Concerts Slated For Tech Musicale

Next Sunday evening, at 7:30, the Caltech Musicale presents its usual Sunday evening of recorded music. This week's concert will be a group of three concertos:

Beethoven's concerto for violin and orchestra in D major.

Beethoven's concerto for piano and orchestra in G major.

Mozart's concerto for violin and orchestra in D major.

History

The present series of programs is the outgrowth of informal student gatherings to listen to records of the musicale collection. Starting about 1938, there came to be more formal programs, sometimes with lecturers, which were open to the public.

This year, members of the musicale are giving most of the programs with some of the faculty contributing their time when possible. With lights low and fire burning, Dabney Lounge is a fine place to spend Sunday evening, with or without a woman.

Incidentally, access to the fourteen hundred odd records in the collection can be had for the price of the key and the knowledge of how to work the equipment.

Ricketts Sees Play, Gives Two Dances

High spot of Ricketts social life this past weekend was a combination theatre-bowling party, followed by a Halloween dance in the lounge, which attracted a crowd of about 30 couples.

Play

Most of these spent the earlier part of the evening at the Pasadena Playhouse, enjoying **Road to Rome**, a play of great inspirational but dubious moral value. One hardy group, however, passed up the pleasures of the drama and turned to more serious matters of self-improvement in the fine art of bowling. Carl Fox and his UCLA date are said to have made up this contingent in its entirety, though for some reason nobody has heard of any high scores from this redoubtable kegger on this particular evening.

Dance

A truly Halloween atmosphere prevailed in Ricketts lounge at the dance following, with the dim flickering firelight casting weird shadows on the decorations, yet leaving certain corners conveniently devoid of candlepower. In keeping with the theme, pumpkin pie and coffee were served to all present.

More Dance

Friday night, following the tussle with Oxy, Ricketts lounge was bursting at the seams with native sons, Blackerites, and dates. A record dance was the occasion for this concentration of humanity, with the added attraction of delicious refreshments provided for all through the courtesy of Blacker.

Decorate

Tomorrow night the aforementioned lounge will be the scene of industrious activity as much elbow-grease will be expended at a Decorating Stag in order to set the scene for the Interhouse Dance on the following eve. Invigorating beverages will be provided for all faithful but weary workers later in the evening.

Blacker To Be Hell For A Night

Blacker traveled to a comfortably darkened Ricketts Lounge last Friday for a post-game Open House with Ricketts. Refreshments were soon gone and swing and sway took over until after midnight. Saturday night Blacker men and their dates attended Sherwood's "Road to Rome" at the Pasadena Playhouse, returning to the House for food, drink, and dancing.

The efforts of every Blacker man are going into making the Interhouse decorations something for posterity. Blacker's theme, "An Evening in Hell" affords unlimited possibilities. So far, however, probably Art Brington alone outside the Social Committee knows what the sandbags in the court are being used for. To establish the proper temperature, Nappy Lamare will provide the music from 9 'till 1. Trappings will be completed at a Decoration Stag this Friday night.

First Again
with
Tobacco Men!

More independent experts smoke Lucky Strike regularly than the next 2 leading brands combined!

An impartial poll covering all the Southern tobacco markets reveals the smoking preference of the men who really know tobacco—auctioneers, buyers and warehousemen. **More of these independent experts smoke Lucky Strike regularly than the next two leading brands combined.**

So, for your own real deep-down smoking enjoyment, smoke the smoke tobacco experts smoke

LUCKY STRIKE MEANS FINE TOBACCO

So round, so firm, so fully packed — so free and easy on the draw

Patronize Our Advertisers

And Tell Them Where You Saw Their Name

Never Trust A Public Opinion Poll

CROWN
129 N. Raymond, Pasadena
8Y. 6-5100
Doors Open 12 M., Cont. Daily

COLUMBIA PICTURES presents
Rita Glenn
HAYWORTH · FORD
The Loves of Carmen
COLOR BY TECHNICOLOR

—Plus—
Universal-International presents
DEANNA DURBIN
EDMOND O'BRIEN
DON TAYLOR
JEFFREY LYNN

"FOR THE LOVE OF MARY"

Memorial Held For Dr. Tolman

Du Bridge, Millikan Speak at Memorial Service in Dabney Gardens on Monday

Memorial services for Dr. Richard Chace Tolman, world famed atomic scientist and former dean of Caltech's graduate school, who died last September 5, were conducted November 1 at 4:30 p.m. in the garden of Dabney Hall of the Humanities.

DuBridge, Millikan Speak

Dr. Tolman was eulogized by Dr. Lee A. DuBridge, Caltech president; Dr. Robert A. Millikan, former president and vice-president of the board of trustees; James R. Page, board of trustees chairman; and Dr. Walter Adams, research associate in astronomy and astrophysics.

Absorb Math

Dr. Adams spoke on Tolman's contributions to cosmology. Tolman was primarily a theoretical physicist, rather than an experimentalist. Though, like Einstein, he was not trained in mathematical analysis in the schools, he had the rare ability to absorb the mathematics that he needed for his problems in statistical mechanics, in relativistic thermodynamics, and in cosmology, in all of which fields he made important and lasting contributions. His large volume on Statistical Mechanics will live as a classic.

Institute Suffers

The Institute suffers an irreparable loss, said Dr. Millikan. "No man did more than Richard Tolman to create the intellectual atmosphere which has pervaded this institution. His thinking and his exposition were penetrating and clear-cut. He was a superb teacher, who left his mark on all who took his courses. His spirit lives on in his publications, and in the large number of pupils who caught that spirit and the thoroughness and elegance of his methods. He was a quiet man, who listened

well to others and often asked penetrating and amusing questions, for he had a great sense of humor. He was a typical Yankee, both in speech and in action. He did little dogmatizing himself. Indeed, he always found where you stood but you never knew precisely where he stood. This, I think, was because he was a kindly and tolerant man, too wise to be assertive and cocksure himself and really eager to learn what he could from others.

Served His Country

"He gave ten of the best years of his life in the service of his country, four between 1918 and 1922 in the development of the Chemical Warfare Service, to which he made notable contributions, especially in the extraction of helium from Oklahama gas, and six years between 1940 and 1946, when he acted first as chief technical adviser to General Groves in the development of the atomic bomb, and second as chief technical adviser to the United Nations Atomic Energy Commission in its effort to provide adequate safeguards against the use of that bomb as a weapon of war. Throughout World War II he acted also as Vice-Chairman of the National Defense Research Committee.

Served the Institute

"He served the Institute not only in giving it the prestige of his distinguished scholarship, but also in acting as the Dean of its Graduate Faculty, and as a member of its chief administrative body, The Executive Council. The Institute suffers an irreparable loss in his death."

The services were attended by the board of trustees, faculty, and administrative staff members, graduate students, California Institute Associates, and friends.

JONES, EATON, LACEY

(Continued from Page 1)
Boards 85-94 inclusive, has informed us that letters certifying to registration at the California Institute should not be sent in with selective service questionnaires, as has been done up to now. Instead, those wishing postponement of induction until the end of the academic year should wait until notice of induction has been received. At that time they should write to their local board requesting postponement of induction until the end of the academic year on June 11, 1949, and should attach a letter certifying to the fact that they are registered full-time stu-

That's Our Team . . .

Some of you may not realize it, but the fine showing that our team made last week against Oxy really meant something. Why, losing to Oxy by only twelve points makes us one of the best teams in the country. We could take UCLA by 81 points with ease, and on a wet field, we could win over Army by over 130 points.

You doubt this?

Just look at the figures. We have Michigan so swamped that we couldn't make enough touchdowns to beat them properly in an hour. If we were to play Michigan, we should be able to make better than nine touchdowns every minute of play.

You still doubt this? How can you? Just look at the figures.

Here are some of the games played throughout the country in the last month or so, and our net edge on each team.

Team	Score	vs. Team	Score	Caltech Net
CIT	13	Oxy	25	-12
Oxy	40	C. P. (S.D.)	0	28
C. P. (S.D.)	7	Whittier	20	15
Whittier	19	Santa Barbara	21	13
Santa Barbara	32	Pomona	14	31
Pomona	34	Loyola	32	33
Loyola	14	C. O. P.	14	33
C. O. P.	61	Portland	15	79
Portland	6	O. S. C.	32	53
O. S. C.	28	U. C. L. A.	0	81
U. C. L. A.	48	W. S. C.	26	103
U. S. C.	14	Stanford	7	110
Stanford	20	Washington	0	130
Washington	0	California	21	109
California	40	Wisconsin	14	135
Wisconsin	20	Illinois	16	139
Illinois	21	Army	26	134
Army	28	Villanova	0	162
Villanova	27	Detroit	6	183
Detroit	34	Marquette	6	211
Marquette	9	Purdue	14	206
Purdue	27	Notre Dame	28	205
Notre Dame	40	Pittsburgh	0	245
Pittsburgh	21	Indiana	14	252
Indiana	6	T. C. U.	7	251
T. C. U.	27	Texas A&M	14	264
Texas A&M	13	L. S. U.	14	263
L. S. U.	26	Rice	13	276
Rice	14	Texas Tech	7	283
Texas Tech	41	Tulsa	20	304
Tulsa	28	Florida	14	318
Florida	16	Auburn	9	325
Auburn	6	Tulane	21	310
Tulane	21	Alabama	14	317
Alabama	48	Duquesne	6	333
Duquesne	15	Wake Forest	13	354
Wake Forest	34	N. C. State	13	354
N. C. State	0	Duke	0	354
Duke	28	Navy	7	375
Navy	14	Penn.	20	369
Penn.	29	Princeton	7	391
Princeton	55	Virginia	14	432
Virginia	41	Wash. and Lee	6	467
Wash. and Lee	0	Georgia Tech	27	440
Georgia Tech	13	Vanderbilt	0	453
Vanderbilt	35	Yale	0	488
Yale	28	Columbia	34	482
Columbia	27	Rutgers	6	503
Rutgers	34	Colgate	19	518
Colgate	14	Holy Cross	13	519
Holy Cross	33	Syracuse	7	545
Syracuse	14	Penn. State	34	525
Penn. State	14	Michigan State	14	525
Michigan State	7	Michigan	13	519

dents. Undergraduates may obtain this letter of certification from the secretary to the Deans, in 119 Throop, graduates from the office of the Dean of Graduate Studies, 104 Robinson.

No Assurance

While it might be presumed that other boards would follow the same procedure, there is no assurance of this, and it is advisable for those registered with boards other than those mentioned above, to continue to send the certificate of registration along with their questionnaires.

Schussing

with the Shoose

Injuries are hitting the skiers already, and the skiing season has not even begun yet. Bill Bradley, a veteran of last year's near championship squad, sustained an injury to his knee while on the soccer field with UCLA about two weeks ago. Bouncing Bob Stanaway, the new Dabney frosh from up Montana way, tried to get tough with the Dabney house upperclassmen, the result being that he is wearing a cast on his knee also. We trust that both of the lads will be all waxed up and ready for the first snow when it arrives in a few weeks.

Injury Problem

This injury list brings to mind an article in the first issue of this term's California Tech. There was a statement from the powers that be in the Health Dept. that the medica rates for the students would be hiked up as soon as intercollegiate skiing was actively supported by the Athletic Department. That really brings blood to the eye, for, in the history of intercollegiate skiing competition at Tech, there has never been a single accident of note to a member of the Ski Team. There have been numerous injuries to Club members not engaged in competition for the

Team, and we feel that those injuries should not jeopardize the standing and participation of the Team; nor should they affect the health rates for the entire student body.

Last Work Party

This Friday noon, Nov. 5, there will be a meeting at 12:30 in the Ricketts-Fleming court to arrange for transportation to the mountains for this Saturday and/or Sunday. This week-end will have the last work party before the skiing season begins, and the help of a few fellows will certainly be needed and appreciated. There is still wood to be cut, some construction to be completed, and a few repairs to make. If possible let Carus or me know promptly if you are planning to go, for we can get chow for such trips through the Student House kitchen.

Chow Arrangements

When the snow finally arrives and skiers start going to the hut on weekends, we are going to have, when possible, a commissary arrangement at the hut. We can make up a list of all Club members who know beforehand that they are going up, and the kitchen will fix enough chow for everyone. The members that live in the Houses will get the meals free, and the off-campus members can pay for their chow through the Club. The meal situation will be less complicated and will cost everyone involved far less than if they brought their individual chow. This procedure can be followed for groups as small as five or six.

Weekly Meeting

One other plan we have to install as soon as the skiing begins is to have a meeting every Friday noon of all Club members who are planning on going up that particular weekend. The purpose of the meeting will be to see that everyone gets a ride up and that a minimum number of cars are taken up with a maximum number of skiers. The travel expense will be cut down, and everyone who wants to go up will be assured of a ride.

How about coming upto the hut this weekend and giving a bit with the brawn?

Dabney Moves Up In Bowling

Dabney House turned loose with its big guns this week in the Interhouse Bowling circuit to win seven of its eight games and move past Throop into second place in the standings. Ricketts held onto first while splitting 4-4, Throop also split 4-4, Fleming won three games while dropping five, and Blacker won but two of its games.

House	Won	Lost	Pct.	Ave.
Ricketts	18	6	.750	152
Dabney	15	9	.625	128
Throop	13	11	.542	148
Blacker	9	15	.375	132
Fleming	5	19	.208	125

(Continued on Page 6)

Niemann Visits SKF Conference

C. Niemann, Professor of Organic Chemistry at Caltech, was among the twenty-six scientists from all parts of the country who attended the second annual Smith, Kline & French Laboratories Research Advisors Conference which was held at the firm's headquarters in Philadelphia October 21 and 22.

The purpose of these conferences is to afford an opportunity for SKF Research Division personnel to discuss recent developments in the medical research field with top scientists from many of the country's leading colleges and universities.

The twenty-six guests represented nine different fields of scientific research, including bacteriology, biochemistry, histology, microanalysis, mycology, organic chemistry, pharmaceutical chemistry, pharmacology and physical chemistry.

At a luncheon in honor of the scientists C. Mahlon Kline, President of Smith, Kline & French Laboratories, greeted the visiting scientists. Francis Boyer, Executive Vice-President, told the group that "we now appreciate more than ever before the value of cooperative research efforts with academic centers. Medical research is a matter of teamwork, but one of the great difficulties we are faced with is the matter of inter-communication between the scientist and the layman—we must try to talk the other fellow's language."

Caltech Students Welcome at Neighborhood Church



A Church of Liberal Religion
225 West California Street
SUNDAY WORSHIP 11 A.M.
REV. CURTIS BEACH
MINISTER

30-DAY SMOKING TEST PROVES

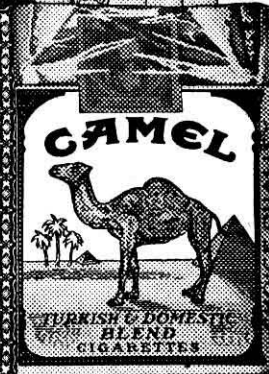
CAMEL MILDNESS!



Prove it Yourself! Make the Camel 30-Day Test in Your "T-Zone"

Money-Back Guarantee: Smoke Camels for 30 days. If, at any time during these 30 days, you are not convinced that Camels are the mildest cigarette you ever smoked, return the package with the unused Camels and we will refund your full purchase price, plus postage. This offer good for 90 days from this date.

(Signed) R. J. Reynolds Tobacco Company, Winston-Salem, North Carolina.



For 30 consecutive days in a recent test, hundreds of men and women all across the country smoked Camels—and only Camels—on the average of one to two packages a day.

Every week, their throats were carefully examined by noted throat specialists—a total of 2470 examinations from coast to coast.

And these famous throat specialists reported that they found not one single case of throat irritation due to smoking Camels!

But prove it yourself! In your "T-Zone"—T for Taste and T for Throat. Smoke Camels for 30 days. Let YOUR OWN TASTE tell you about that full, rich Camel flavor. Let YOUR OWN THROAT tell you how mild a cigarette can be! Yes, prove for yourself that there's

NO THROAT IRRITATION DUE TO SMOKING CAMELS!

Talkin' It Over With The Goon

This was a great football week-end, men. The Beavers turned in a great performance of hard, clean fight against a team that relied upon dirty tricks when they had us out manned three to one. While at the Coliseum the Trojans took some of the wonder out of Pappy's "Wonder Team."

Oxy Game

It's mostly about the Oxy-Tech tussel that I'd like to devote these next few inches to. Nothing but praise can be heaped upon the men from Tech who went into the game a 30 point underdog and emerged the moral victor by not only leading the Bengals at one point in the fray, but also out ran, out passed, and out smarted the highly touted Eagle Rockers. There was not a man in a gold and black uniform on that field who was not a credit to himself and to the coaches. There was not one incident that I can think of where our men were not giving all they had for 60 minutes. And the results showed.

Extra-Curricular Fists

In the past three years I have viewed three "Big Games," and in every one of them the play was marred by deliberate filthy line and backfield action on the part of the Tigers. This game was possibly the most brutal. It was obvious from the stands that the center of the Oxy line was using closed fists to break up the offensive blocking in strict violation of existing rules. It only stands to reason that a lineman on offense, who has no use of his hands whatsoever, can not defend himself from such punishment without in turn resorting to illegal play himself. Yet not once did the men in the black and white striped shirts blow their whistles. If the refs at any time let the game get out of hand, as happened the other night, it is up to them to clean it up in a hurry.

It wouldn't have been so bad if only the line play was shady, but the backs were just as dirty as the line. Numerous times when the ends would attempt to carry out their downfield blocking assignments they would be met with a knee in the groin or a closed fist in the teeth. Or when a tackle was made and everyone could see that the forward motion of the runner had ceased, the "rough and tough" Bengals would bounce right on

(Continued on Page 6)

Varsity Cagers Start Practice Sessions Monday

The molding of the Engineer five will start this Monday under the able direction of Coach Carl Shy. With the final arrangements for the Armory just completed, the basketballers can begin a late practice.

Hopes this year are high for a very fine and successful season. With the almost complete return of last year's squad and the addition of last season's talented Frosh, the Beavers should have a team strong in depth and experience.

Games at PCC

And more good news for you cage fans; this year there will be plenty of seats for all. With a schedule for many home games, the school will have ample opportunity to see a lot of fine ball. All home games are to be played at the new PCC gym which sports a maximum floor and a seating capacity of 2200. But more yet, all Beaver and Bengal home games will be double headers at PCC; adding more thrills with four conference schools playing on the same night under the same roof.

Of course, this will mean that the Frosh preliminary will be absent, but Mr. Musselman is working out a satisfactory plan for the Beaverbabes. Ed Preisler is anticipating an equally fine season for the Frosh.

To Meet UCLA

The Varsity fall schedule opens with Muir and then the Engineers meet the Bruins at UCLA. In the first week of December, the boys travel to Redlands for the College Tournament.

From all reports all the Conference basketball teams are considerably stronger than last year. It will be a close race all winter with the experts now slating Pomona to come out of the fracas with top honors. However, this may be our year; the picture looks very bright.

Varsity Practice:

4:15 Mon., Nov. 8. Pasadena Armory.

Frosh Practice:

5:00 Mon., Nov. 22. McKinley Junior High School.

Fall Varsity Schedule:

Nov. 18 at Muir JC
Nov. 23 at UCLA
Nov. 30 at LACC
Dec. 2, 3, 4, Tourn. Redlands
Dec. 7 at PCC
All games at 4:15 except for Tournament.

Beaver Sports

Pilkington Stars As Blacker Takes IA Cross Country

Interhouse crosscountry competition for the year ended last Thursday, October 28, with Blacker House taking top honors. Bill Pilkington, a Blacker freshman, covered the 2 1/2 mile course in a fast 14:24.0. Second place in this third and last meet went to Brad Howser of Ricketts.

Pete Mason of Blacker came in third. Ron Connor, Ricketts, and Jared Abell, Blacker, came in fourth and fifth places respectively.

The scores for the meet are Blacker-8, Ricketts-18, Fleming-31, Throop-41, and Dabney-53.

Pilkington

In the first meet on Tuesday, October 19, Bill Pilkington led the Blacker team to victory by running the 1 1/2 mile course in 8:38.3. Brad Howser of Ricketts took second place and Jared Abell took third. The houses placed in the following order: Blacker, Ricketts, Fleming, Throop, and Dabney.

Pilkington Again

Bill Pilkington again starred in the second meet on Friday, October 22. He finished first with a time of 11:26.4. Second place again went to Brad Howser, with Jared Abell and Pete Mason coming in third and fourth. The houses lined up in the same order as in the first meet.

Still Pilkington

The season this year has been very successful. The intercollegiate squad according to all indications, should do well in league competition. The interhouse cross country brought out several freshmen who will make valuable contributions to next year's squad.

Table with 5 columns: B, R, F, T, D. Rows for 2 1/2 mile run, 2 mile run, 1 1/2 mile run, and Points acquired toward the interhouse trophy are.

Throop Razes Red In Softball For Discobolus

The Throop softball club last Thursday defeated the Fleming "Pros" 2-0 to gain position of the Discobolus trophy. The Throopers having picked up a number of lads who played in a few of the local leagues were loaded with talent and experience. The Big Red Machine was completely outclassed and the final outcome was obvious.

PASADENA BOWLING COURTS

970 East Colorado
Headquarters of Caltech Bowlers
Open 11 a.m. to 1 a.m., SY. 3-1341
Special Student Rate before 6 P.M. except Saturday, Sunday, and Holidays
20c Per Line

Water Bugs Roll Over USC Frosh Polo Team, 13-6

Led by captain Bill Palmer, who scored six times, Caltech's water polo team drowned the USC Frosh by the overwhelming score of 13-6. It was the Beavers' second win in three starts.

Fast Start

The Tech team started the game with 4 successive goals, Mike Hall accounting for two of them. The SC team rallied and put in two of their own in the first quarter. The second stanza ended 7-3 with the Engineers on the long end.

During the third period, the Frosh fought back to make three goals, raising the score to 7-6. But at this point, the redoubtable mermen from CIT launched their "spirit and hustle" offensive and tallied six times while holding the Troybabes scoreless.

Libbey Shines

Dick Libbey, Caltech center forward, was responsible for the control of the ball on almost all sprints, enabling the Engineers to score several goals with pre-arranged pass plays.

Face Oxy

This week the team plays its first of two games with Occidental. The Tigers have a good squad and promise to make a Tech victory a hard fought one. Game time 4:15 tomorrow at PCC.

rf Hall (2)
If Curray, Eschmer (1)
cg Libbey (4)
rg Harris

Table with 5 columns: 1st, 2nd, 3rd, 4th, final. Rows for Tech and SC.

Oxy Frosh Drop Yearlings, 22-6

When the Occidental Frosh football team came to the Rose Bowl last Friday night, they received a real shock from a crew of little Engineers. The favored Tigers pulled away in the first quarters on two 40 yard passes and boasted a 13 to 0 lead when the half gun sounded.

Took to Air

At the beginning of the third quarter a Beaver punt was fumbled and alertly recovered by Wise. Finding the opposition's line strengthening, the Preisler kids took to the air as Karasawa hit Erwin on the three making it first and goal to go. Woody

(Continued on Page 6)

Interhouse Trophy Points

Table with 5 columns: B, F, R, D, T. Rows for Basketball, Cross Country, and Total.

Beavers Topped By Occidental At Bowl Game Featured By Many Thrills; Engineers Play Outstanding Ball

The Battling Beavers roared into the Rose Bowl Friday night to give the highly touted Oxy Tigers a bad time for the full four periods. Playing inspired ball, Mason Anderson's boys scored as many points as Oxy's first four opponents this season combined; yet the Beavers lost 25-13.

Defensive Cracked

Cal Aggies, Santa Barbara, Whittier, and San Dimas Cal Poly had only been able to cross the Tiger goal line twice in their four games, and the newspapers had built Oxy up as a great defensive club. They forgot to bring their clippings along to Friday's game, however, and had to resort to such shady practices as piling-on, kneeling, and slugging to hold the Beavers' offense down.

Trade TD's

Oxy opened the scoring when Tex Bass had his punt blocked on the Tech 40, and Trump ran the ball all the way on the first play from scrimmage. Later in the first period, Bob Funk intercepted a Tiger pass on the Oxy 28 yard line, to set up the first Engineer TD. Chucker Norman passed to Don Hibbard for 15 yards and a first down on Oxy 5 yard line, and it took the Chucker just 3 plays to run the ball over. Chuck's golden toe was good for the PAT, as Tech fans howled their approval at the score Tech 7, Oxy 6. As the first quarter ended Tech had 3 first downs to Oxy's one.

Frosh Sports Roundup By Leon Michaelson

Having only one game left in the 1948 football season, the Frosh put an all out effort into the game with Oxy last Friday night. The somewhat seasoned team differed greatly from the one that met Whittier three weeks ago. Oxy Frosh felt that difference in the Rose Bowl as the Tigers were overwhelming favorites and won by a surprising 22 to 6.

Looked Better

Notably in the third quarter, the Techmen looked like a real football team. Their aerial attack climaxed by fine line play deep in Oxy territory was rewarded by a touchdown and sliced the Tiger's edge to 13 to 7. The visitors came back again to score but were harassed by a strong line and unfailing spirit throughout.

Backs Karasawa and Patapoff were in the game after being on sideline due to ankle injuries received in the Whittier game. Karasawa sparkled especially on the pass play to Erwin to set up the Beaver score. Patapoff along with Paulson was invaluable in the defensive backfield, showing superb tackling on many occasions.

Coach Ed Preisler and the Frosh team draw a bye this week, but clash with Redlands in the Rose Bowl on November 12.

Oxy Takes to Air

In the second quarter, Craig Marks recovered an Oxy fumble on the Tiger 40, and the Beavers worked the ball down to the Oxy 20 before giving it up on downs. Johnson passed to Levine over the heads of Tech's 8-man line for 80 yards and the second Oxy score. Bill Sylvies made a sensational punt return of 67 yards to the Oxy 15 yard line midway through the second quarter, but two penalties bogged down the Tech attack and Oxy took over once more. Frantically they began to throw passes, and again Mr. Sylvies distinguished himself by intercepting two of them, and running them back for 25 and 30 yards each. The half ended with Tech having 5 first downs to Oxy's one.

(Continued on Page 6)

Blacker Takes Gage Title As Sweet Stars

Finishing up last Thursday, the interhouse basketball tournament ended with Blacker taking first place laurels. Fleming came up to take second place, losing their only game to Blacker.

Blacker Undefeated

The Blacker five had led the race since the beginning and had kept that lead all the way to the end. The playing of Sanford Sweet, the ace Blacker scorer, is worth mentioning here. He rolled up the astonishing total of 55 points in the games.

The scores of the games played are:

Week of October 11- Mon., Blacker 29, Ricketts 26. Tues., Dabney 49, Throop 24. Wed., Fleming 25, Ricketts 18. Thurs., Blacker 29, Throop 17.

Week of October 18- Tues., Ricketts 33, Throop 25. Wed., Blacker 42, Fleming 28. Thurs., Dabney 19, Ricketts 13.

Week of October 25- Mon., Fleming 47, Throop 30. Tues., Blacker 41, Dabney 25. Thurs., Fleming 38, Dabney 35.

Table with 5 columns: Team, Won, Lost, Pct. Rows for Blacker, Fleming, Dabney, Ricketts, Throop.

UCLA Soccer Team Again Defeats Tech By Slim Margin, 3-2

By the slim margin of a 3-2 score the Tech soccer team lost its third game of the season to U.C.L.A. Reduced by injuries, the squad was unable to cope with U.C.L.A.'s superior ball control.

Free Scoring

Dick Fairall scored Tech's first goal on a penalty shot in the first quarter. U.C.L.A.'s Jack Meighan evaded the score before the end of that period. Before half time Jerry Sichel on a pass from Steve Chong scored Tech's second goal, but the opponents' Al Duenas also made a tally. On the fourth quarter Meighan managed to slip the winning goal past goalie Shaller.

SC Next

This Saturday the soccer men will play their second game with Southern Cal at Tournament Park. November 13 the squad

(Continued on Page 6)

Adds Refreshment To Every Occasion



The Pause That Refreshes



Ask for it either way... both trade-marks mean the same thing.

BOTTLED UNDER AUTHORITY OF THE COCA-COLA COMPANY BY COCA-COLA BOTTLING CO. OF LOS ANGELES

Surplus Portable Microscopes

We offer a limited quantity of surplus portable microscopes for sale. These are all new, in original cartons and cost many times the price for which they are now being offered.

Specifications: Overall height 8 inches, turret with three different powers. Will accept auxiliary eyepiece for higher powers desired. Fully adjustable on tiltback base. Optical system: pitch polished lenses.

These portable microscopes are offered subject to prior sale on the following terms: Price \$9.00, includes shipping and packing charges. Check or money order should be sent with your order or \$2.50 deposit, the microscope to be sent C.O.D. for balance. Any check received after quantity has been sold will be returned promptly.

GIBSON PAGE CO., INC. Dealers in War Surplus Box 1130, Rochester 2, N.Y.

Ice Skating

Daily 2:30 to 5, 7:45 to 10:45
Sat. & Sun. Morn. 10 to 12:30
Skates for Rent
Instructions
Pasadena Winter Gardens
171 South Arroyo Pkwy.

Caltech Pharmacy

COURTESY . . SERVICE
SATISFACTION
Dependable Registered Pharmacists
Prompt Free Motor Delivery
882 East California Street
SYcamore 2-2101
Pasadena, California

YOUR COLLEGE SPORTS SHOP

Headquarters for Sporting Goods
WYNN MACE Tennis Shop
Phone SYcamore 6-5804
912 EAST CALIFORNIA ST. Pasadena, Calif.

JOHN'S BICYCLE SHOP

SINCE 1909
BICYCLES
TENNIS
BADMINTON
42 North Fair Oaks Ave. Pasadena Telephone SYcamore 2-4767

TECHSTERS PREPARE

(Continued from Page 1)
For these stalwart men life at Tech has become too much to bear and the result is a completely different and Bohemian attitude. Fleming will feature the rhythm of Doug Maple's band.

Dabney Underground

The Dabneyites have gone underground in a post A-Bomb theme. Noble Caltech has been forced underground after an atomic bomb explosion which leaves things on the surface rather hot. As a result, all couples must be radioactively decontaminated. Dabney is having the Jack Carr Quintet for atomic melodies.

Throop Goes Video

Across the wilds to Throop Club the sweet strains of Max Bickley's band can be heard. Upon entering you will find yourself in a huge television set. In fact it is as big as Throop Club. This set will be on a bar at the entrance.

OXY FROSH

(Continued from Page 5)
on the first play found a hole in the right side of the line and smashed for six—Oxy 13, Tech 6.

Tigers Score

Again in the late third quarter the Baby Tigers climaxed a ground drive with a long pass down the center and a score. The fourth quarter saw a kicking duel, both squads spirited in the night air and neither giving yards. At the gun: Oxy 22, Caltech, 6.

Classified Ads...

FORD '37 for sale—club coupe, '41 motor excellent shape. Marv Hyman, Ricketts 53.

CALTECH BARBERS

on California Near Lake

Oak Knoll Cleaners

THREE DAY

Cleaning Service

FOUR-DAY LAUNDRY

Rain or shine we're ALWAYS on time.

Special Features
Peraseptic, cleaning, mothproofing service, tailoring and repairing.

Pressing While You Wait

"Service With a Smile"

902 East California Street
(4 Doors East of Lake)

SY. 3-6704

UCLA SOCCER TEAM

(Continued from Page 5)
will go to U.C.L.A., and on the following Saturday will play Pepperdine in the last game of the season. In addition it is hoped that several practice games can be scheduled with the Los Angeles Soccer League.

Tech Starting Lineup

- G Shaller
- LF Jackson
- RF Noble
- LH Houser
- CH Walt
- RH Fairall
- LW D. Madden
- LI H. Martin
- CF Sichel
- RI Chong
- RW C. Price

DABNEY MOVES UP

(Continued from Page 4)

Rowdies No. 1 High

Ricketts No. 1 fired the best series to date in this league as they racked up 2156 pins including a big 767 game while downing a rough Throop No. 2 team. Woody Bratnober's 589 series and 227 game contributed somewhat to this effort. Other Tech bowlers sporting large scores this week include Bob Benton of Throop with a 210 game and 518 series, Ray Heggland of Throop with a 201 game and 511 series, Gene Mooring of Throop with a 206 game, Dave Baron of Blacker with a 200 game, Fred Jones of Fleming with a 194 game, and Blouke Carus of Ricketts with a

AIEE Meet To Plan Hoover Dam Trip

Plans for the AIEE sponsored Hoover Dam field trip over Thanksgiving week-end will be discussed Monday, November 8 at 11 a.m. in 206 Dabney. All those members of the AIEE, ASME, and ASCE who are interested in making the field trip at that time are urged to attend this meeting.

General Electric To Bring Traveling Light Program

The General Electric Lamp Department, under the auspices of the AIEE, CES, and Electrical Engineering Dept., will present a demonstration entitled "Light Sorcery" Dec. 2 in Culbertson Hall.

This program tells about the first days of modern light, the progress of research and a glimpse of its further details will appear in next week's Tech.

190 game.

U.S.C. Lineup

The tentative lineup of the Caltech team for a forthcoming match with U.S.C. is as follows:

Name	Ave.
1. Ray Heggland	178
2. Sid Stone	166
3. Carl Fox	165

McCann To Give Demonstration Talk

The California Institute of Technology Friday Night Demonstration Lecture series will begin this year with a lecture on "Lightning and Atmospheric Electricity" by Dr. Gilbert D. McCann, professor of electrical engineering. The lecture will be given Friday, October 29, at 7:30 P.M. in room 201, Norman Bridge Laboratory at Caltech.

The lecture, which will be illustrated with color slides, will deal with the general nature of atmospheric electricity that exists on the surface of the earth and in the atmosphere around it. How the earth, which carries a negative charge, is continually being discharged and how it is again charged by lightning; how thunder clouds are charged and how they are discharged; where you are safest during a lightning storm, are among topics to be discussed by Dr. McCann.

The lecture is open to the public.

4. Bob Benton	169
5. Woody Bratnober	182
Total	860

While these are the top five men in the IH league at present, there may be changes before the match, which will not take place earlier than Nov. 14.

BEAVERS TOPPED

(Continued from Page 5)
downs to Occidental's 3.

Oxy Again

Early in the second half, the Beaver line showed its determination by sewing up the Tiger attack, holding them for 4 downs inside the Tech 5 yard line. Manuel Bass punted from the rear of his end zone to the Beaver 42 yard line, but 7 plays later Oxy scored their third TD as Tassy plunged over from three yards out. Slowed down by the injury of Chuck Norman, the Tech offense seemed to falter. True, Don Baker was averaging over 25 yards on his kick-off returns, and Huge Art Miller was able to plow through the Oxy line, but the punishment delivered by the rugged Tiger efforts to put individual Techmen out of the game was beginning to have effect.

Kick to Baker

The final Oxy score was set up by a bad pass from center to Manuel Bass, who was back to kick. Manuel chased the ball to the Tech 19 yard line, and fell on it, but it was fourth down, and Oxy's ball. Frieze ran the ball over. Bass, who with Bob Walquist at the other tackle spot, had been playing Herculean ball all night, really set the Bengals back on their heels with a late fourth quarter punt that traveled 47 yards from scrimmage. Three plays later, Don Hibbard recovered an Oxy fumble on the Oxy 28. Bobby Funk made 9 yards, and an unnecessary roughness penalty against

TALKIN' IT OVER

(Continued from Page 5)

the back of the downed man with cleats flying. All you have to do is take a look at some of the cuts and bruises on our players and the evidence is there.

Men like Bass, Hibbard, Funk or Norman don't just say a guy played dirty because they lost. When Bass said after the game that he would like to tell Roy Dennis that he coached a dirty brand of football, you know something is wrong. Our league is not the big time money circuit; we just play ball for the enjoyment we get out of it. It's about time Oxy found that out and began to make the football rules required reading for all of the players.

Oxy put the ball on the one yard line. Seeing the Oxy line all set to stop Art Miller in the obvious line-plunge, Bobby dropped back and pased to Don Baker in the end zone for the score.

Bengal Play Shady

Tech can well be proud of their team, who continued to play the game the clean way, while the Bengals were apparently trying to make up for Oxy's lack of finesse and man to man player ability by seeing how many Tech players they could put out of commission.

SCORE:

CALTECH	7	0	0	6	13
OXY	6	7	12	0	25

CHESTERFIELD IS BUILDING ANOTHER FACTORY

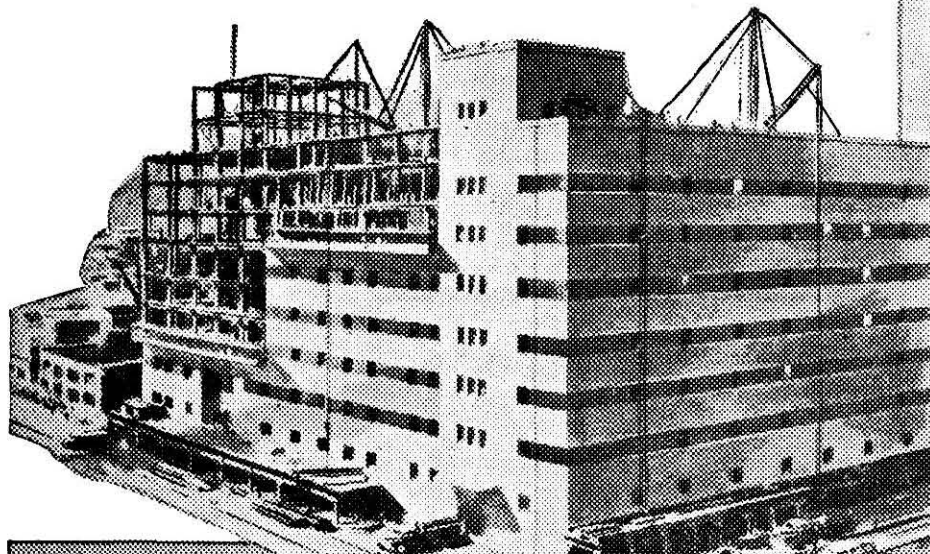
BECAUSE ALL OVER AMERICA MORE MILLIONS OF SMOKERS ARE ASKING FOR

The Milder Cigarette

Soon our newest factory will be taking its place in the Chesterfield sky line in Durham, N. C., where the Chesterfield factory group is already "A city within a city."

With the addition of this modern factory, efficient in every way, Chesterfield will continue to keep smokers from coast to coast well supplied with the cigarette that is—

**SO MILD THEY SATISFY MILLIONS
SO MILD THEY'LL SATISFY YOU—**



A *Always* **B** *Buy* **C** **CHESTERFIELD**

MAKE YOURS THE MILD CIGARETTE... They Satisfy

Copyright 1948, Liggett & Myers Tobacco Co.