

New class officers elected

Caltech Glee Club to present annual concert this Saturday

The Caltech Glee Club will round out its concert schedule in the next week, to make a total of seven appearances this term. This represents the culmination of much hard work on the part of the club, directed by Mr. Olaf Frodsham.

One of the major events will be the Glee Club's 41st Anniversary Spring Concert this Saturday night at 8:00 in Culbertson.

This concert, for which admission is free, is designed for the enjoyment of the faculty and the general public. The program will include such numbers as "Zion Hears the Watchman Singing" by Buxtehude, "For a Last Good-night" by Schubert, and "Railroad Bill," a modernistic work song, to make a total of fifteen numbers in all. The Glee Club Quartet, composed of Rube Moulton, Howard Berg, Harry Griffith, and Ted Johnson, will also appear on the program, singing "Dry Bones," "Honey Gal," and "Cruisin' in My Model T."

Scripps will be the site of a Glee Club presentation on Thursday when the club will sing at an afternoon vesper service. This will be followed by dinner in the dormitories before returning from behind the "Great White Wall."

Although the Spring Concert will be its major presentation, the Glee Club will participate in the Southern California Intercollegiate Glee Club Festival, which will be held this year at Oxy, on Saturday, May 14. This will be the first time Caltech has participated in about two decades. The Glee Club will sing in mass with the other participating clubs, which represent such colleges as Occidental, Loyola, L.A. State, and UCLA. They will also present two numbers of their own.

Drama club to conduct contest

Featuring a contest of speed and endurance, there will be a special preview of some of the drama club talent tonight in Ricketts court. Unanimously nominated by their houses, Herlein of Fleming, Phipps of Blacker, Mitchell of Ricketts, and that returning star, Seldeen of Dabney, will engage in a competition for the coveted part of the reporter, with the girls in the play as judges.

The victorious candidate will immediately plunge into continuous rehearsals for his arduous part, rewarded by admission to that annual reaffirmation of faith in nature, the drama club cast party.

Tickets for the play, "The Male Animal," may be obtained from the bookstore, at the door, or from these house representatives: Bill Haigler in Fleming, Ray Orbach in Dabney, Fritz Benning in Blacker, and Bill Gray in Ricketts. There are only two chances to see this Broadway production here in Pasadena, so get your tickets now for Friday and Saturday, May 13 and 14.

AFROTC drill unit to compete in Oxy contest

The Caltech AFROTC drill team, commanded by Craig Elliott, will try for its fourth straight win at the annual Occidental drill team competition this Saturday, May 7, at two o'clock. The Caltech drill team has defeated teams from USC, UCLA, San Diego State, Loyola, and Occidental for three straight years to win permanent possession of a trophy which was put up by the Oxy Interfraternal Organization. Caltech has donated a new trophy.

The drill team has been holding hour-long night practices all week and they expect to have their routine well polished for the competition Saturday.

In addition to the drill team, Caltech will be represented by a best squadron picked from the three which make up the local AFROTC detachment. Our best squadron will compete with the best squadrons from other Southern California colleges.

Minerals topic of Friday talk

Professor Thane H. McCulloh will speak on "Dollars from Rocks in Southern California" at the Friday evening demonstration lecture this week at 7:30 in 201 Bridge.

Dr. McCulloh will discuss the sources of minerals of economic importance in the Southern California area. These include such minerals as petroleum, limestone, gravel and talc.

Assistant professor of geology at Tech, Dr. McCulloh is a graduate of Pomona College and received his doctorate from UCLA.

Third annual Lost Weekend scheduled for May 20-22

by Ed Park

It's Lost Weekend time again! The annual ASCIT blast comes on the weekend of May 20-22 this year. The Lost Weekend, originated two years ago by Bob Profet, is designed to give those Techmen who live in other parts of the country a chance to bring dates from home for a Tech social function. Dick Morse, ASCIT first representative, has planned two dances and a beach party for a full weekend.

Girls, imported from every corner of the United States, will arrive on Friday afternoon. They will stay in the student houses, and they and their dates will eat a special student house meal in the Blacker dining room Friday night. Afterwards, Jerry Fuller and his band will supply music for a dance in Dabney lounge.

Beach time

Saturday will be spent in the sparkling sunshine and warm water at Huntington Beach. For dinner Saturday night Dick Morse has planned a sumptuous beach party meal including baked ham and pineapple with cantaloupe and ice cream for dessert.

The climax of the weekend will come Saturday night with a dance. Rick Jones and his Quintones will play for dancing at the Pav-O-Lon in Huntington Beach.

AFROTC to hold jet flight program

The AFROTC is adopting a new program of cadet jet flights to acquaint cadets with the characteristics of jet aircraft. Flights are to be conducted weekly by Captain Henry E. Gibbia, Jr., of the Caltech AFROTC unit.

Tim Harrington was the first cadet to experience a flight under the new program.

New presidents are Leeson, Bloomberg, and Johnson

Techmen chose their class officers for next year in elections held last Thursday and Tuesday. Dick Johnson was elected president of the senior class, while the office of junior class president went to Howard Bloomberg. Dave Leeson was chosen as sophomore class president.

Prof. Brown is chosen as NAS member

Dr. Harrison S. Brown, professor of geochemistry at Caltech, has been elected to the National Academy of Sciences, one of the highest scientific honors in the country. Dr. Brown's election brings to 27 the number of Caltech staff members in the Academy.

The Academy, holding its 92nd annual meeting in Washington, D.C., also elected Dr. Saul Winstein of UCLA, a Caltech alumnus, bringing alumni membership to 22. Election to the Academy is in recognition of outstanding achievement in scientific research. Membership is limited to 500 American citizens and 50 foreign associates.

Professor Brown, 37, came to Caltech in 1951 to establish its geochemistry laboratories after five years at the University of Chicago Institute for Nuclear Studies. Previously he had made key contributions to the atomic bomb, first on the Plutonium Project at Chicago and later as assistant director of chemistry at the Clinton Laboratories, Oak Ridge, Tennessee.

Dr. Brown's special fields are investigation of the age of rocks, the abundance of elements in the universe, and the composition of the earth and meteorites. These problems involve the fields of chemistry, biology, physics and astronomy as well as geology, and his work has earned him the \$1000 prize of the American Association for the Advancement of Science and the American Chemical Society Award in Pure Chemistry.

Don Lewis was elected senior vice-president and Hunt Small was elected secretary. The office of treasurer went to Al Poiser, while Louis Fletcher and Ross Brown were chosen to represent the seniors on the Board of Control.

Next year's juniors selected Dick Smisek for vice-president and Bill Hecht for secretary. Treasurer is Gene Barston and social chairman is Doug Ritchie. Larry Griffith was elected athletic manager and Howard Rumsey and Bob Gelber were elected to the Board of Control.

Dick Baron was chosen as sophomore vice-president and Zach Martin was elected secretary. The team of Pete Hoag and Bud Penquite was chosen for the job of social vice-president. Treasurer is Gene Cordes. Ed Krehbiel was elected athletic manager and Dick Kirk and Sonny Nelson were elected to the Board of Control.

Dr. Corcoran hosts fireside

The YMCA faculty fireside this week will be with Dr. W. H. Corcoran at his home this Sunday evening. Dr. Corcoran received his BS and MS and PhD at Caltech before joining the Cutter Laboratory in Berkeley where he became director of technical research.

During the war, Dr. Corcoran worked in problems concerned with internal ballistics of rockets and on rocket propellants. In 1945, he received the naval ordinance development award and in 1948, an Army-Navy certificate of appreciation. Sign up lists for the fireside will be posted in the student houses.

Dr. Paul Epstein, professor emeritus, celebrates 34th year on Caltech faculty

by Bob Deffeyes

If, while on the campus, you've ever paused briefly to stare at an elderly, distinguished looking gentleman with a flowing white beard and secretly wondered who he was, your days of wondering are at an end. The distinguished-looking gentleman, Dr. Paul Epstein, is indeed distinguished, holding the honor, among many others, of having been named professor emeritus by the Institute at the end of the 1953 academic year after thirty-four years of service at Caltech.

In this same thirty-four year period, Dr. Epstein, who, incidentally, celebrated his seventieth birthday last March 20,

has seen the center of science and research shift from Europe to the United States. Dr. Epstein had felt when he first arrived at Caltech in 1921, that it would be necessary that he journey back to Europe at least every other year in order to keep in touch with new European developments. However, the faculty gathered under Dr. Robert A. Millikan at that time was comprised by such distinguished scientists as Drs. A. A. Noyes, Norman Bridge, Millikan and others and they soon convinced Dr. Epstein that such trips would be unnecessary.

Although born in Warsaw, Poland, Paul Epstein spent his undergraduate years in Russia,

at Moscow University. When frequent student upheavals caused the closing in the University in 1905, Dr. Epstein stayed with his laboratory until the reopening of the school in 1906. During that year, he received his BS degree. While teaching at the Moscow Agricultural Academy, he was working for his MS, a degree equivalent to our PhD, and he subsequently received it from Moscow University.

Evidently thriving on the academic life, Dr. Epstein transferred to the University of Munich, where, in 1914, he was granted another doctorate. In 1919, while in transition from

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Athenaeum Parking

Last fall a notice was circulated around the student houses, calling the students' attention to the fact that the parking lot at Hill Avenue and California Street (except for a small section reserved for upperclassmen) was for the use of Athenaeum members and their guests only. Undergraduate students were told not to use this parking space at any time, and the notice expressed the hope that students would comply with this request, as they comply with the other rules and regulations of the Institute.

Students continued to park in this area during the daytime, and sometimes managed to get away with using the lot overnight, especially on weekends. In fact, many students were indignant, complaining that there was insufficient parking space around the Institute campus, and that the Athenaeum lot should by rights be as much theirs as anybody's.

The students certainly have right and reason to complain loudly and vigorously about the parking situation around the Institute, which is deplorable. However, they certainly have no right to use the Athenaeum parking lot, any more than they have a right to use the Athenaeum lounges for their card games, or the Athenaeum tennis courts for their tennis, or Dr. DuBridge's private car for their Sunday drag races. The lot is simply not their property, nor is it intended for their use.

The Athenaeum is, formally, a private club, closely associated with the California Institute of Technology but not a part of it. Members of the Athenaeum are selected in the same way as members of any town or country club—they are recommended by, and approved by, other members who know and respect them. Not all members are associated directly with Caltech; some are with the Huntington Library, others with the Mount Wilson and Palomar Mountain Observatories.

Thus the Athenaeum members are not just Caltech grad students and faculty; they are the acknowledged leaders of the Southland academic community. They should at least enjoy the privilege of parking near the club, in the parking spaces which Caltech has set aside for them.

It is for these reasons that the Institute has recently cracked down on student violators of the parking regulations. It is time for cracking down when elderly men and women who have spent their lives in the service of the Institute and of Pasadena are forced to walk two or three blocks, because undergraduates feel that the walk to T.P. is too much of an effort.

It is time for students to complain about the parking situation. But it is not time for students to occupy spaces in the Athenaeum lot at the expense of the Athenaeum members. This illegal parking ought to be ended. It would at least be nice if it could be ended by voluntary action of the students.

Secretary's Report

Building a magnificent new gymnasium hardly aroused the sentiments of Caltech undergrads as much as adding the little white telephone booth recently placed on the northeast corner of the gym. "It destroys the beauty of the architectural lines," was the cry resounding in the California Tech, Farrago, and student house bull sessions. Lately, not only the ASCIT Board, but also the Interhouse Committee and the Student-Faculty Relations Committee have felt called upon to discuss the matter. The conclusion: the booth must go.

While it is true that many unperceptive, unartistic souls weren't really violently agitated by the little shack that disrupts the curve of the gymnasium roof, the fact that so many people got excited about a point of appearance would be enough to turn any ear.

Accordingly, the Interhouse Committee last week drafted a letter urging that the booth be moved to the corner of the tennis court area. The ASCIT Board will second the recommendation this week, and Building and Grounds has promised to comply.

Also in last week's Board meeting, the perennial darkroom problem came up, and, as usual, was tabled until consultation with photographers. It looks like the poorly furnished, shoddy ASCIT darkroom is in line for a remodeling and equipping.

The Lost Weekend, May 20 to 22, one of the highlights of Caltech's social year, is shaping up into a very promising event. The plans announced in Board meeting this week will be presented in California Tech news articles.

Tom Bergemen

The World and Tangora

by Jesse Tangora

Among the courses required of many sophomore scientists in this institution is Astronomy 1, Introduction to Astronomy. Since most freshmen do not really know what to expect of this course, I feel that duty compels me to give here something of an Introduction to Astronomy 1.

The first thing to know is that Ay 1 is one of those sophomore courses known as "culture courses." These "culture courses" are very much different from "problem courses" such as freshman math or freshman physics.

The main difference is that "culture courses" are held in Kerckhoff or Arms, whereas everybody knows that "problem courses" are held in Bridge.

The student soon learns that astronomy is an exact science. This is obvious from a typical problem. For example, the mass of a star may be estimated to within a factor of three, and its temperature to within a factor of five or so. Giving arbitrary values to M and T, the number of excited hydrogen atoms may then be calculated to eight or ten decimal places.

Other cultural aspects of this glamorous science include learning Maxwell's velocity distribution formula, memorizing light curves of eclipsing binaries, and deriving Kepler's laws for special cases which are known to be incorrect.



Campus Brewins

May I boil in oil and fry in Crisco, If I ever call San Francisco "Frisco".

O. Nash

Bay area

Although in Fleming the sacred trio of fun, food, and females are usually worshipped in that order, the Beak has heard of heresy among the frosh. One Glen Converse in particular claims that a three day weekend deserves three dates with the same doll. "Get along home, Cindy." Another non-conformist has been Pete James who is under the mistaken impression that these three day weekends are created to spend a few evenings in Frisco, Frisco, Frisco, Frisco.

No-Justice Theorem

The Fleming Waiters' Union was shook by the treachery of former Head Horace Furumoto who dastardly denounced his former comrades for the pinkish Anti Waiters' Union Union. However, the former's ranks will be well padded tonight when three luscious lady actors from El Animal Masculino assist the well-mannered Phlegms.

One summer of happiness

When Helgesson learns anything, he really lives it. Latest triumph in Al's fight to learn Swedish before the end of school is squiring a genuine Swedish girl to the prom. Naturally, he began the evening at a restaurant known as "A Little Bit of Old Sweden." Being Swedish is not her only asset, according to Al.

Just keeping score

Boy student C. Mosher has begun his long-awaited campaign to become a Blacker house UCC. Latest word is that our hero demonstrated his house spirit by

showing up for the Blacker-Fleming softball game, complete with open physics book. What's the score, Chuck?

Goof-off king

Winner of the Helgesson bean-counting trophy, undisputed crudball champion of Lower Doc's, All-American Goldenberg has turned his many talents to greener pastures and currently holds the high-point record on George Hall's dart board.

Noise level

Alas. The deathless dating team of silent Paul McHorney and driving Dale Burger is no more. The team looked like a good bet last weekend when Burger fixed Horney up with a fine blind date (Horney driving). Sad to tell, Baloney Burger and Horney's beauteous broad spent the whole evening shooting the bull while silent Paul drove, siller than ever, and Burger's date foamed at the mouth. Anybody know a good reusable conversation stopper?

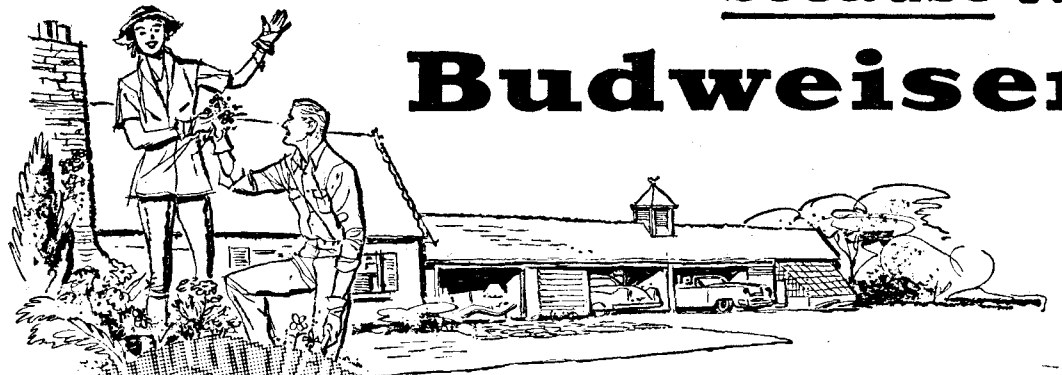
J. Robert Schroeter

The AEC has appointed Hard Luck Schroeter special observer for the next series of Nevada bomb tests, in recognition of his meritorious services last weekend. First Schroeter, Wheatley and Chilton zoomed out to Nevada to watch the blast, which was postponed. Net result as they zoomed back to Tech: nothing but a night in the sand. Undaunted, Schroeter organized Bailey, Adams and himself into a second atomic expedition and set out again for Nevada. Postponed. Score another hard luck night. Sob.

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Truth told: three lovely damsels will take parts as wives and maid in 'Male Animal'

by Sam Phillips

In spite of several very tempting offers to print nothing but pictures and leave out the commentary, here is this week's briefing session on three more of the gorgeous gals who will star in the drama club play, "The Male Animal."



Lynn Averill



Dorothea Bradley

Clymer to talk at SAE meeting

The Caltech Student Branch of the Society of Automotive Engineers has arranged for Mr. Floyd Clymer, automotive publisher, to speak at a meeting of the SAE to be held Wednesday, May 11 at 7:10 p.m. in 206 Engineering.

Mr. Clymer will speak on the motor industry in Europe. His talk will deal primarily with the production methods used in automobile factories throughout Europe, including those used by Renault, Mercedes-Benz, Volkswagen, Fiat, and Ferrari.

He is publisher of the Official Indianapolis 500 Mile Race Yearbook and the AAA Mobilgas Economy Run Yearbook. He also conducts the monthly tests of new cars and Owners Poll for Popular Mechanics Magazine.

Dr. Orr to conduct religious seminar

This Monday evening, May 9, the third in a series of discussions on the Christian faith will be held in Blacker House lounge. The meeting will be led by Dr. J. Edwin Orr, an outstanding Christian of our time, on the subject "What Evidence Supports the Authenticity of Scripture."

The meeting will start right after dinner, and will be open for questions and discussion.

Lynn Averill, playing opposite Don East as the wife of the chairman of the Midwestern University board, is from Oak Park, Illinois, and now lives in Altadena. A student at PCC, majoring in palmistry (astronomy to the frosh), this tall brunette miss likes hiking, swimming, and MEN! No stranger to the stage, she has acted in several plays of the PCC drama department and will certainly be an attraction here.

Imported from the Chicago stage to that in McKinley Junior High School, lovely Barbara Stotler is now a theater arts major at the Pasadena Child Clinic. This well-constructed lass likes tennis, riding, and woe to the Chamber of Commerce, ice skating. Barbara has acted in plays at the Playbox, the Penthouse and at PCC, and in the "Male Animal" she has the part of the wife of the Dean of English, Roy Paul.

Born in a theater trunk in New Jersey, and presently a student at PCC from San Marino, Dorothea Bradley comes from a long line of actors and theater people. In addition to being a part-time recreational therapist in a mental hospital, Dorothea has also taught theater arts at the Pasadena Recreation Department and the Girl Scouts, and is now studying to be a teacher of sociology. In the play she has the part of Cleota, a hilarious character reportedly modeled after Thurber's own maid.

Reserve May 13 and 14, and buy your tickets to the drama club play now. They are available in the bookstore and from house representatives, or they may be bought at the door.

Houses plan social events

Ricketts this weekend is having a beach party at Emerald Bay. The sand spree will last from about noon Sunday until night. Blacker will also hold a beach party this Saturday afternoon and evening. Throop Club, too, is spending Saturday at the beach.

Dabney House will decorate Friday for its annual dinner formal to be held in Dabney courtyard Saturday night. After a dinner of roast beef, the Dabney men and their dates will dance to the music of Don Ricardo and his band from 8:00 until 12:00. The decorations will follow a palm frond motif.

Fleming House is taking over Alumni Pool Saturday evening for a swimming party from 7:00 till 10:00. After the swimming, the party will move to Fleming lounge, where hamburger snacks will be served. The refreshments will be followed by dancing.

Debaters receive speaking awards

Awards for members of this year's debate squad were approved by the ASCIT Board at the meeting Monday night.

An award for his fourth year of debating was given to Bill Lindley. Third year awards were given to Myron Black and Ray Orbach. Mike Bleicher, Leon Keer, Don Meyer, Rube Moulton, and Herb Rauch were given second year awards, and first year awards were approved for Gene Cordes, Jerry Freeman, Mike Gray, Tom Gunkel, Mauritz Kallerud, Duncan Mac Duffie, and Andrew Perga.

Certificates for limited participation were given to Eugene Barnes and John Young.



Lynn Averill

L.A. offers jobs at pools, beaches

Summer employment in the pleasant guise of lifeguarding at beach and pool, and pool managing has been advertised by Los Angeles City. Pay rates are \$1.94 for pool managers, \$1.74 for beach lifeguards, and \$1.41 for pool lifeguards.

Minimum ages are: pool lifeguard, 17; beach lifeguard, 18; pool manager, 21. Interested parties may obtain further information at Room 5, Los Angeles City Hall, or at branch city halls in West Los Angeles, Van Nuys, San Pedro and Venice.

For the price of a phone call (Michigan 5211, ext. 2936) one can collect a bulletin by mail concerning requirements and duties, and an application blank.

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Positions available for qualified mechanical engineers: The Radiation Laboratory at Berkeley and Livermore employs over 100 mechanical engineers engaged in the design of a wide range of equipment for use in fundamental and applied scientific investigation.

This work includes nuclear and thermonuclear test devices and instrumentation, high energy particle accelerators, ultra high speed cameras, large scale high vacuum equipment, devices for remote control in high radiation fields, equipment for remote handling and processing of radioactive materials, and accessory equipment for nuclear reactors.

Organization is on a project basis with close contact between engineers and scientists and the extensive laboratory shops. Emphasis is not on designing for production manufacture. The work calls for an understanding of principles and ingenuity rather than the application of standard practices. The projects of the laboratory include practically all aspects of nuclear engineering.

Inquiries should be addressed to: Professional personnel office, University of California Radiation Laboratory, Berkeley 4, California.

Sportingly yours,

by Bill Davis

The relay finish in the conference track meet was a real thriller. Only a yard separated second from fourth. Tech's best effort would have given the team a second in both the relay and the meet.

Conley was nosed out by a quarter inch for fourth in the broad jump when he turned in his best ever leap. Many close events that could have gone either way certainly didn't go Tech's way.

Biggest loss to next year's team due to graduation will be Jim Tyler. High point man again this year, Jim usually comes through with the points when they are needed.

I hate to bring up the coaching situation, but I think basketball needs more than just a passing glance. Coach Shy is a nice enough guy, but that might be part of the trouble. He is afraid to get mad. He does very little coaching in practice. The team seems to run themselves, and not very well. As far as firing up the team and showing a little spirit, he does well as an undertaker. This seems to be the general team opinion as well as this writer's and when a team doesn't have confidence in the coach, they don't win games.

The remarkable losing streak of the Beaver baseball team seems to stem from their potent team batting average of .165. Ray Weymann did a beautiful job against Oxy in holding them to only one run, but he received no support in the scoring column from the rest of the team, and so racked up a loss.

With three swimming records already under his belt, Clark Rees is pointing at the 100 and 220 yard freestyle records this week. The meet here with Pomona tomorrow afternoon should produce some very fine times.

With interhouse volleyball starting this week, it seems to be a two team race between Dabney and Fleming. None of the other houses seem to have much. At this point Dabney must be rated a slight favorite due to more all-around heads-up ball players.

Frosh mermen beaten by Oxy

The powerful Oxy frosh stroked their way to a win over Tech by the surprisingly slim margin of 12 points. A lack of depth cost the Techmen the meet as nearly all second's and third's went to Oxy.

As usual, Clarke Rees and Vince Taylor led the Tech troops. Rees picked up three victories and two records for his day's efforts. The versatile freshman from Inglewood easily copped the 440 as he smashed both the school and conference records for that event. Far ahead of the field he also splashed his way in first in the backstroke and individual medley. Taylor picked up a pair of blue ribbons in the 100 and 220 yd. events.

Tech's final first place was taken by Don Wiberg as he out-distanced the field in the breast-stroke.

Linksmen beaten

Last Friday the golfers sustained their second loss to Pomona in conference play. The potent Sagehen team, favored to take the conference this year, had an easy time in downing the Beaver golfers 27-9.

Oxy tankmen take relay to edge Beaver swimmers

Oxy's potent swimming team edged out a narrow victory over the Beaver tankmen 46-38 last Friday. The meet was a real thriller with the final relay deciding the outcome. Oxy lowered their best previous relay time by over seven seconds to nose out the fastest Tech relay in several years.

Oxy took the opening medley relay, but John Bush and Dick Johnson came back to finish one two in the next event, the 220. Ed Park nosed out Jim Ball in the 50 for another Tech sweep.

Bill Below picked up a second in the individual medley and George Madsen took third in diving. Oxy's Ken Koster then won the 100 and followed immediately with a victory in the backstroke. Jim Ball and John Bush followed him in for second and third in the 100 and Dick Johnson and Don Roberts did the same in the backstroke.

Racketeers down Poets

Battling on their home courts, Tech tennis players beat Whittier 8½-½ to cop their third conference victory against two losses.

Gene Barnes came from behind to take the featured first singles match from John Avila of Whittier 4-6, 10-8, 6-4. This win over Whittier makes an overall record of nine wins and three losses on the year for the racketeers.

Bill Davis won the breast and returned immediately to grab a third in the 440. Blaine Navroth lowered his best 440 time by more than fifteen seconds to take that event.

This put the score at 39-38 in favor of Oxy and set the stage for the deciding relay. The freestylers went stroke for stroke with the Tigers finally pulling away to take the event and the meet. This was the closest Tech has ever come to beating Oxy in a swimming meet.

Interhouse sports

Fleming House won the Interhouse Football Championship last Thursday squeaking by a surprising Blacker team 13-12. The Big Red won all four of its games and was followed by Ricketts, Dabney, Blacker and Throop in that order.

Fleming took advantage of an intercepted pass in the opening quarter to score first on a pass from Chambers to Horace Furumoto. During the second period, after a poor punt put the Big Red on Blackers ten yard line, Chambers passed to Mager for the TD. The same combination clicked again for the conversion. Late in the second quarter Blacker scored on a series of passes climaxed by Helgesson's 30 yard pass to McLaughlin. Helgesson completed a conversion pass but it was disallowed because he passed ahead of the line of scrimmage. This later proved decisive. The final Blacker score came on a long pass from Helgesson to Stark in the last period. The conversion failed however, and Fleming was threatening at the final whistle.

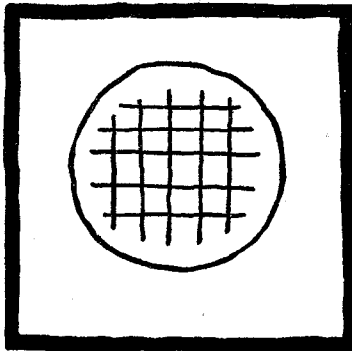
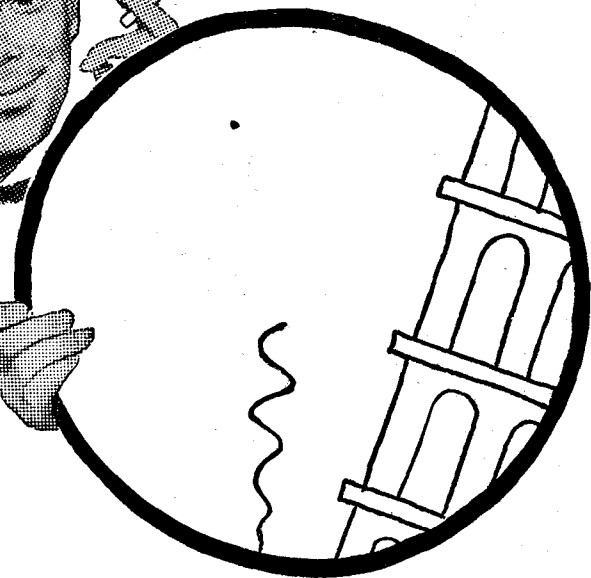
Blacker garnered its lone win earlier in the week over winless Throop 7-0. The game's only TD was scored on a long pass from Helgesson to McLaughlin.

In a Discobolus softball game Fleming, behind Jim Welch's control pitching, beat Blacker 10-4, to lengthen its lead in the trophy race. Home runs were hit by Larry Whitlow of the winners and Dave Netboy of the losers.

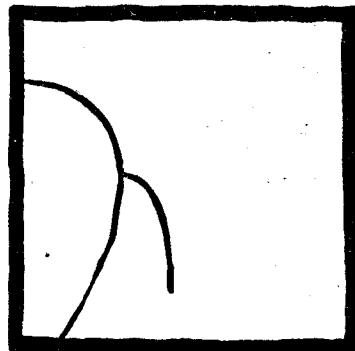
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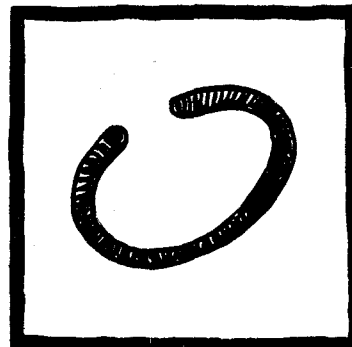
WHAT'S THIS?
For solution see paragraph below.



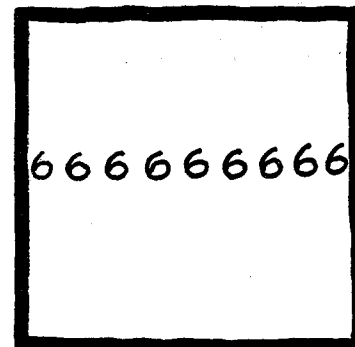
SPAGHETTI SERVED BY NEAT WAITER
Pamela Schroeck
University of Connecticut



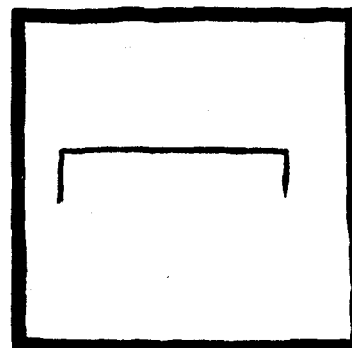
PIG WHO WASHED HIS TAIL AND CAN'T DO A THING WITH IT
Maurice Sapiro
U. of Rochester



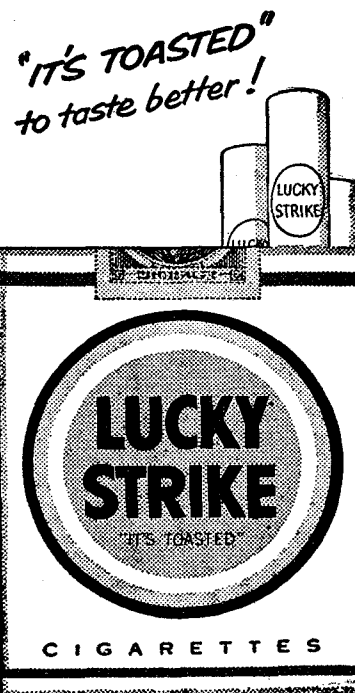
PENILESS WORM TRYING TO MAKE ENDS MEET
Lester Jackson
Duquesne University



AMMUNITION FOR SIX-SHOOTER
C. J. Grandmason
U. of New Hampshire



OLD COME
Kenneth Black
Stanford University



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Tech third in track meet; Conley sets javelin mark

Pomona-Claremont nicked Tech by half a point to gain second place in the SCIAC championship meet last Tuesday afternoon at Oxy. The fight for second was very close, with Pomona getting 24, Tech 23½, and Whittier 21. Redlands trailed with 10 points. Once again it came down to the mile relay, with Whittier upsetting both Tech and Pomona with a 3:25.3 time, after a hair-raising race. Pomona was right there with 3:25.5, and Tech was less than a stride back at 3:25.6.

Oh yes, Oxy won the meet with 145½ points. So what else is new? (Comforting thought: USC beat Oxy.)

Conley bags record

Phil Conley stole a first place away from Oxy, the only one the Tigers didn't get, as he set a new conference meet record with a toss of 213 ft. 3½ in. Phil had to come through, despite his still painful elbow, as Ernie Smith of Pomona threw 204 ft. to break their school record and take second place. Conley had another heave of 216 ft., but he fouled that one. Phil also competed in the broad jump, taking a surprise fifth with a leap of 21 ft. 1½ in.

Six other meet records were broken, all by Oxy men. Bob Gutowski scaled 14 ft. 3 in. in the pole vault for the meet's best mark, making him the nation's second best collegiate vaulter. Tom Meyer put the shot 54 ft. 10¼ in., Kelly Hester twirled the discus 160 ft. 3 in., and Dick Had-don high jumped 6 ft. 5½ in. for the other field event records.

Ed Shinn barely held off Tiger Chauncy Pa to win a spine tingling 880 duel in 1:53.9, knocking 0.7 second off the old standard. Oxy ran a beautiful mile relay, setting a new meet record of 3:16.8.

Tyler scores in jumps

Jim Tyler broadjumped 22 ft. ½ in. for third place. Tigers Phil Presber and John White both jumped 22 ft. 5 in. to tie for first, a rather unusual occurrence for that event. Tyler also came through with a tie for third in the high jump, getting over 6 ft. ½ in.

Roger Wileman took third in the 220, and John Lukesh was fifth for Tech. Lukesh had previously picked up fifth in the 100, a race marred by five false starts.

Lloyd vaults 12 ft.

Jim Lloyd vaulted over 12 ft. for the best competitive mark of his varsity career, and took fourth place. Fred Witteborn chopped five seconds off his best time in the two mile, running 10:19 and taking fifth. Tom Trilling and Marty Tangora received Tech's only other medals, coping fifths in the low hurdles and the 880 respectively.

All in all, what can you say? Oxy took fourteen firsts, ten seconds, and eight thirds, plus a few fourths and fifths. They almost doubled the score of the rest of the conference; if the meet had been scored as a dual meet, Oxy against the rest of the SCIAC, Oxy would have won 111-20. Pretty good team, them Tigers. Yessir.

Frosh tennis team takes close match

The frosh tennis team edged out a narrow victory over Whittier last week 5-4. Bob Tokheim, Roger Wallihan, and Dick Lewis all won singles matches.

Tech took two out of three in the doubles matches with Tokheim and Bob Calaway teaming up to gain one match and Wallihan combining with Jim Rode for the other victory.

Oxy dominates frosh track finals

Last Friday's windblown frosh track finals at Whittier produced some fine marks. Oxy took 11 of the 15 first places with Redlands taking the other four.

There were five double winners, the most outstanding of which was Zetzman of Oxy who set a record in winning the 440 in 50.2 and came back to set another one in the 220 with a 21.4 clocking.

Schumaker of Redlands won the mile in 4:31.2 and the two mile in 10:17. Shargur, also of Redlands won both the discus with a toss of over 131 ft. and the shot with a 45 ft. 7½ in. put.

Hadley of Oxy produced another record in winning the 880 in 1:54.9, breaking the existing record by nearly four seconds. The Tigers had other double winners in Jamison who took both the javelin and the high jump and Biggs who nabbed both hurdles.

Oxy also took the 100 with Alston in 9.9, the pole vault with Couchman, and the broad jump with Jeffreis, and well as romping in the relay.

Tech points were scored by Tom Moore, third in the two mile; Forrest Cleveland, third in the 100; Gerry Lawrence, fourth in the high hurdles; Reed Saunders, fifth in the mile; Dan Horowitz, fifth in the discus; and the relay team which finished third.

Score: Oxy 118; Redlands 45; Pomona 27; Whittier 19½, Tech 13½.

All-interhouse football team

OFFENSE

- END Welsh (F)
- END Malone (T)
- CENTER Mager (F)
- BACK Chambers (F)
- BACK Wann (R)
- BACK Helgesson (B)

DEFENSE

- END Mager (F)
- END Crocker (R)
- LINEBACKER Furumoto (F)
- BACK Welsh (F)
- BACK Nelson (R)
- BACK Chambers (F)

OUTSTANDING PLAYER

Welsh (F)

Tigers shutout Beaver club in mound duel

Dick Sovde, Occidental pitching ace, bested Ray Weymann Monday in a thrilling pitcher's duel as the Tigers won 1-0. After being rained out the previous Saturday, Occidental came to Tournament Park to hand the Beavers their fifth straight conference loss. Both Sovde and Weymann were superb as Tech batters were only able to garner two hits to Oxy's four. Sovde struck out sixteen Tech batsmen while eleven Tigers were going down by the K route.

Occidental's one run was unearned as the Bengals capitalized on a fielding error by Tech third baseman Ed Nelson and a smashing

Cal Baptist drops frosh horsehidors

Caltech frosh baseballers dropped their third consecutive game since their only victory of the season as Cal Baptist squeezed by them in a tight 6-5 thriller. Tony Howell started on the mound for the Beaverbabes but was relieved by Bill Kern in the fourth. Kern was the eventual loser.

The game was shortened to five innings to avoid conflict with the curfew but had to be lengthened an extra inning as Tech evened it all up at the end of five. Behind 5-4 going into the final scheduled inning, the Techmen loaded the bases and Dick Van Kirk singled home the tying run. Two successive squeeze plays failed however, and the inning ended with no further scoring. The old nemesis of Tech baseball showed itself again in the final inning as two fielding errors let across an unearned run. Tech could not get a man on base in their half of the sixth and the ballgame was all over.

This week's schedule lists one game at home against Nazarene on Wednesday, and one game away against L.A. Pacific College on Friday.

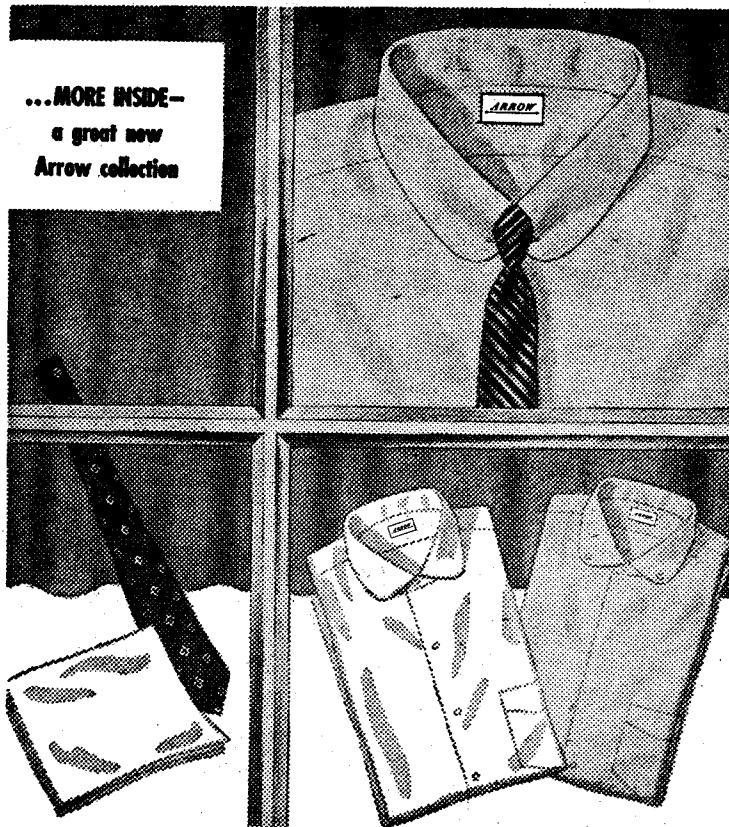
line drive single by pinch hitter Mike Lomen to score in the seventh inning. Oxy had threatened once before when left fielder Hess smashed a sixth inning triple with two away. Weymann took care of the threat by forcing the cleanup hitter to pop up to George Madsen, Beaver second sacker. Alert defense by Weymann and catcher Warren Furumoto kept men off the bases as two runners were caught stealing and another was neatly picked off of first base.

Almost

Sovde had a no hitter going into the sixth inning but Weymann beat out an infield single to break the ice. Tech's other hit came with two away in the ninth inning as Gene Nelson smacked a single to right. Following Nelson to bat was Hal Morris, who drew his second base on balls of the game. With runners on first and second and two outs Jim Koontz became Sovde's sixteenth victim as he watched a third strike to end the game.

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Cool Corner

by Frank Kofsky

Owing to the rather warm reception accorded the Lighthouse Allstars on their concert visit last Thursday, and especially because of the interest of several people in the oboe-flute duets, we decided to review "Howard Rumsey and the Lighthouse Allstars, Volume Four" on Contemporary label. This long-playing disc contains eight selections, all of them spotlighting Messrs. Cooper and Shank on oboe (or English horn) and flue (or alto flute) respectively. Incidentally, five of these numbers were written by members of the Allstars especially for the recording session.

"Aquarium," composed by pianist Claude Williamson, is perhaps our favorite. It is a slow, warm creation, and it features a sweet and lilting solo by Shank. "Warm Wind," a Bob Cooper original, is an atonal tone poem, the mood being maintained throughout by the excellent brush work of drummer Max Roach, who was with the group at the time of this recording. Created by Dizzy Gillespie, "Night in Tunisia" is given a subdued treatment by the Allstars, again spotlighting Mr. Roach's superlative talents. The last selection on the first side, "Albatross," was written by Roach, and to refresh your memory, was the second flute-oboe selection played at the Thursday concert. The subtle undertones contributed by Rumsey on the bass are more apparent here than they were in Culbertson.

Flipping "Volume Four" over, "Still Life," also by Cooper, leads off. This piece is the most intricate of the eight, for here flute and oboe intertwine to contrapuntally develop the melody. "Still Life" also enables pianist Williamson to display his more than adequate talents.

The last three selections are "Bag's Groove" written by Milt Jackson of Modern Jazz Allstars fame; Cooper's "Hermosa Summer" and lastly, "Happytown," a lively little number composed by Bud Shank which was the last oboe-flute duet played last Thursday.

Because of the nature of the instruments, most of the selections in "Volume Four" are of a slower nature, providing an opportunity for Shank and Cooper to delve into the euphonic sounds which can be produced by the happy combination of oboe and flute, although both have demonstrated their ability to play up-tempo numbers with flute and oboe as well as with their more conventional alto and tenor saxes.

As far as an overall rating of the album goes, I would say that it is one of the best modern sounds efforts ever to see the light of day. Not only is "Vol-

ume Four" a tribute to the talent and versatility of Cooper and Shank, but it is also a monument to the skill and good taste of the other three Allstars: Rumsey, Roach and Williamson. The flute and oboe are, of course, delicate instruments, and they create a mood all their own. It would have been easy to break this mood, but fortunately, nowhere in the album does such a thing occur. Whether you are looking for a record to begin your modern sounds collection, or if you're just in the market for a new record, I cannot recommend this epic work too highly—it's a record you're sure to treasure.

Jazz notes from all over: Los Angeles division

Conte Candoli, who spent a couple of months at the Lighthouse, begins his third week at Zardi's on Hollywood Boulevard tonight. Elsewhere, Stan Kenton's band has stepped into the Crescendo on Sunset, replacing June Christy at Norman's Nitery. Incidentally, Ann Richards, Kenton's new thrush, is another carbon copy Christy.

AAAS to hold meeting here

Caltech will be host to more than 1000 scientists when the Pacific Division of the American Association for the Advancement of Science holds its 36th annual meeting in Pasadena June 20 to 25. Those attending will represent 25 societies affiliated with the AAAS and will comprise the largest scientific gathering ever held in Pasadena, according to Dr. Arthur Galston, Caltech biologist who is general chairman of the meeting.

Pauling to speak

Addresses will be given by Dr. Dean Rusk, President of the Rockefeller Foundation, and Dr. Linus Pauling, Caltech's most recent winner of the Nobel Prize. Dr. George Beadle, chairman of the Division of Biology, is the national president of the AAAS.

In preparation for the meeting, officers of the organization have planned a variety of off-campus activities and tours. On campus, scientific, educational and commercial exhibits will be displayed in the geology and biology buildings.

DR. PAUL EPSTEIN

(Continued from Page 1)

Zurich University to Leyden, where he was to work in conjunction with Professor Lorentz, he met Dr. Millikan, who was successful in persuading him to come to Caltech.

As a result of his myriad travels, Dr. Epstein speaks fluently in German, English, Russian and French. A proof reader of one of his works in English asked him once if he thought in German. Came the reply: "No. I think in Russian, translate into German and write in English."

Dr. Epstein has been honored several times, in addition to having been made professor emeritus at Caltech, in the course of his outstanding career. He is a fellow of the American Physical Society, a member of the American Association for the Advancement of Science, of the National Research Council, the National Academy of Sciences and the Societe Francaise de Physique, to name just a few.

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Lunch clubs list week's speakers

Tuesday noon at the training table, Rev. Curtis Beach will speak on "The Nature of Liberal Christianity" to the Undergraduate Lunch Club. Rev. Beach is the minister of Congregational and Unitarian Neighborhood Church in Pasadena.

In the Athenaeum Wednesday, "The One-Party Press in Southern California" will be the topic of Sara Boynoff in addressing the Graduate-Faculty Lunch Club.

Dr. Mayhew will give his "History of the Student Houses" at the Frosh Lunch Club on Thursday.

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