

Volume XLIX

Contest End Nears For Selection of ASCT King, Queen

With the deadline date only one day away, organizations planning to enter contestants in the May 14 Beauty Contest Assembly for King and Queen of the ASCT spring formal are urged to turn in their candidates names to Fred Wood, Rally Commissioner, or Bud Mittenthal, First Rep.

Few Entries

So far very few names have

Pictures of ASCT Queen Candidates for publication must be turned in to the Tech office in Lower Fleming not later than Monday night.

been turned in, although preliminary contests have been held by some of the houses and other student organizations to select their candidates for King and Queen. Professional societies are especially requested to enter their version of a Caltech Queen. Their majesties and attendants will be chosen at next Friday's assembly which promises to set a new attendance record.

New YMCA Officers Installed in Ceremony

The Caltech YMCA installed its new board of officers last Sunday afternoon in Dabney Lounge in an impressive ceremony, featuring talks by Dean Franklin Thomas, Wes Hershey, and Stan Barnes.

Glee Club Sings

The program included the rendition of three numbers by the Caltech Glee Club and talks by outgoing officers.

The officers installed are: Burt Housman, President; Vern Edwards, Vice-president; Bob Crichiton, Secretary; Harry Begg, Treasurer; John Fee, National Representative. Buffet style refreshments were served after the installation ceremony.

IRE Nominations Declared Open Now

The Caltech Student chapter of the Institute of Radio Engineers has been officially recognized by the national organization. According to its new constitution, the chapter, will hold election of officers in May—the exact date to be announced later.

Nominations for the two posts (chairman and secretary-treasurer) are now open and names of candidates should be submitted to C. A. Rypinski or Charles Susskind, the retiring officers.

Campus Calendar

THURSDAY, MAY 6—
Upper Class Luncheon Club at the Training Table, 12:00.
Throop Club Meeting, Y Lounge, 7:15 p.m.
Y Cabinet Meeting, Y Lounge, 7:15 p.m.
Dancing Class, Culbertson Hall, 7:30 p.m.
Glee Club Rehearsal in Throop Club, 8:30 p.m.

FRIDAY, MAY 7—
Student Assembly, Dr. Sterling, 11:00 a.m.
Track meet, Caltech vs. Redlands, here.
Blacker Decoration Stag.

SATURDAY, MAY 8—
Conference Swimming Meet at Oxy, 1:30 p.m.
Blacker Doc's Formal.
Dabney-Ricketts Barn Dance.
Fleming Barn Dance.

SUNDAY, MAY 9—
Junior-Senior Garden Party, Dabney Garden, 3:00 p.m.
Musical in Dabney Lounge, 7:30 p.m.

MONDAY, MAY 10—
CES Meeting, 201 Bridge, 11:00 a.m.

TUESDAY, MAY 11—
Band Practice, Culbertson Hall, 7:30 p.m.

WEDNESDAY, MAY 12—
Frost Luncheon Club at the Training Table, 12:00.
Fencing Class, Dabney House, 7:30 p.m.
Orchestra Practice, Culbertson, 7:30 p.m.

THURSDAY, MAY 13—
Upper Class Luncheon Club at the Training Table, 12:00.
Throop Club Meeting, 12:20 p.m.
Y Cabinet Meeting, Y Lounge, 7:15 p.m.
Dancing Class, Culbertson Hall, 7:30 p.m.
Glee Club Rehearsal in Throop Club, 8:30 p.m.

Seniors

Seniors may pick up graduation announcements and invitations in Lower Throop next Tuesday afternoon, May 11, from 1 until 4, or at any other time from Bob Davis in room 13 Fleming. Seniors who failed to order enough of these items may purchase a limited number of extras from Bob at the above times and places.

Caltech Geologist Dr. Chester Stock Elected to NAS

Dr. Chester Stock, chairman of the division of Geology at the California Institute, has been elected a member of the National Academy of Science, it was recently announced.

Active in Exploration

A paleontologist, Dr. Stock is well known for his study of mammalian fossils from Western North America and for his investigations of the great fossil assemblages from the asphalt deposits in Southern California. He has directed a great deal of paleontological exploration in northern Mexico and is at present planning further exploration in that country in an attempt to obtain greater knowledge of the geologic history of Mexico.

In addition to his post as chairman of the division of Geology at the Institute he is also Professor of Paleontology and is Senior Curator of Earth Sciences at the Los Angeles County Museum.

Tech Thespians to Toss Twin Threat To Theatergoers

The Wonder of the Age! The Spectacle of the Year! An Epic in Drama! Such terms, among others, are being used to describe the Drama Club Production to be presented Friday, 14 May 1948 at the Elliott Junior High School Auditorium, 2184 N. Lake. The double-barreled performance will begin at 8:30 p.m. when the curtain rises on Lord Dunsany's thriller *A Night At An Inn*.

Second Feature

During intermission those in need will be treated for shock by Doc Haynes, and it is hoped the majority of the audience will be in condition to view the second smash hit *Divided We Stand*, the product of native imaginations.

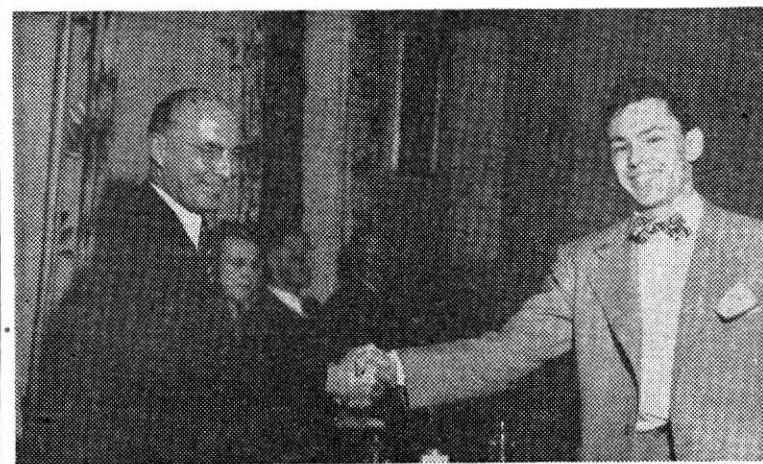
The star-studded cast will include Gretchen Benton, Garland Bradfield, Sharon McFadden, Len Herzog, Blacky Stone, Bob Levy, Bud Klarfeld, and Chuck Murphy.

Low Cost

The phenomenal feature of this all-Tech extravaganza is the cost—\$0.40 per person. Business Manager Frank Wolf has stated that the auditorium has finite capacity, and that the wise ones will buy early. Tickets are on sale in the book store and from members of the Drama Club.

Directors Bill Woods and Len Herzog, along with Property Manager Walt Mudgett have been rooting out props and costumes with great difficulty. The necessity of using a strange auditorium and borrowing props has again pointed up the urgent need of a campus auditorium of practical dimensions.

SEIDEN GETS AWARD



J. Calvin Brown, Regional Vice President of ASME presenting \$50 first prize to Bill Seiden for his paper on "Theory of Plastic Strain Propagation."

Seiden Takes Top Honors In Southwestern ASME Meet

Visiting Delegates Welcomed by Lindvall, Poindexter; Group Tours Campus, Hydrodynamic Lab, Mt. Wilson

The tenth annual convention of the Students' Branch of the Pacific Southwestern Group of the A.S.M.E. was held at Caltech April 23-24. The member Col-

leges, Arizona, California at Berkeley, Caltech, Southern California, Nevada, Stanford, and Santa Clara were represented by 100 men.

The visiting "Engineers" toured the campus when registration was completed, after which they were welcomed by Professor Fredrick C. Lindvall, and Robert Poindexter, president of the Caltech Chapter.

Papers Presented

From 1 to 3:30 p.m. the convention heard papers presented by students competing for the five prizes offered. The papers were judged by three prominent Southern California Engineers.

At three thirty the students left on a field trip to the Hydrodynamics Laboratory.

Chuck Forester delivered his prize-winning talk on "The Freeways of Los Angeles" to the Engineers and Architects Association last April 28. The speech was so effective that he was invited to repeat it at some future meeting of the Los Angeles Chamber of Commerce.

(Continued on Page 2)

California Institute of Technology

Thursday, May 6, 1948

No. 26

Sterling to Speak Tomorrow

"A Tide In the Affairs of Men" Set as Subject for Informative Talk

"A Tide In the Affairs of Men" Set as Subject for Informative Talk

Dr. J. E. Wallace Sterling, prominent Caltech history professor recently appointed Director of the Huntington Library, will address the student body tomorrow at 11:00 in Culbertson. His topic will be "A Tide in the Affairs of Man."

Dr. Sterling has taught history and government at the Institute for ten years as well as serving as a faculty member of the National War College, and news analyst for CBS.

To Analyze Developments

His address will concern the significance of recent world developments and affairs. Dr. Sterling is a highly regarded and interesting lecturer, and is very well versed on the world situation.

Since he assumes his post at the Huntington Library on July 1, this will be one of his last major talks to the student body in an official capacity and will be of general interest. Don't miss it.

Heppe Receives Conger Prize For Friday Talk

Robert Heppe placed first in the Conger Peace Prize Orations last Friday with John Heath placing second. The contest was judged by Professors Untereiner, Langston, and McCreery.

"World Peace" Heppe Subject

Heppe's speech was on the topic "World Peace" and embodied the principal of a Three way power balance (U.S., U.S.S.R., and a United Europe) to keep the peace until a World Federation could be firmly established. Heath's speech was entitled "St. George or the White Knight?" Heath feels that we are in a critical position and must arm to call the bluff of the opposing power, but at the same time we must show our willingness to sit down and use diplomatic means to settle the world crisis.

Also Ran

Heppe and Heath, both from Blacker House, competed with Leo Breiman, Bernard Rudin, Bernard Shore, and Robert Stone for the fifty dollar first prize and twenty-five dollar second prize.

The contest was held under direction of Dr. Schutz, Caltech debate coach. Irving Sulmeyer, last year's contest winner, was chairman.

DuMond Measures Gamma Ray Length

A Navy bomber and a thin strip of radioactive gold recently played a vital role in completion of a 10 year old research project at the California Institute—a project that makes available to science a new instrument and technique which may mark the beginning of a new era in precision nuclear physics.

Measures Gamma-Rays

The new instrument is a Gamma-Ray Spectrometer. It makes possible for the first time measurements of wave lengths with an error of not more than two parts in ten thousand—a heretofore unattainable accuracy—and was revealed to members of the American Physical Society at Washington, D. C. last week. A paper by a Caltech team of physicists, headed by Dr. Jesse W. M. DuMond assisted by Dr. Bernard B. Watson and David Lind, graduate fellow, announced the new instrument.

Completed in March

The final tests which told the Caltech scientists that their project, which began a decade ago, was a success were made on March 22. This, incidentally, was the same day that Dr. R. A. Millikan, famed Nobel Prize winner in physics at the Institute, under whom the work began, celebrated his 80th birthday.

For the past thirteen months the Gamma-Ray Spectrometer project has had government backing under an Office of Naval Research Contract. It was a Navy bomber that rushed the tiny strip of radioactive gold from the Atomic Energy Commission atomic pile at Oak Ridge, Tennessee, to Burbank, California, which made the final tests possible. Rapid transportation of the isotope of gold was necessary.

(Continued on Page 3)

Houses, 'Greasy' Get New Manager

The appointment of Glenn J. Greene to the position of manager of student houses, the cafeteria and the Athenaeum was announced this week by the President's office. Mr. Greene assumed his duties this week.

Greene will coordinate the activities of all these facilities. No change in present personnel is contemplated, it was stated.

A native of Los Angeles, Greene comes to Caltech with extensive experience in hotel and club management, including 15 years on the staff of the Huntington Hotel. Other positions which he has held include that of manager of the Tahoe Tavern, Tahoe City, California, associate manager of the Hotel del Coronado, Coronado, California, and manager of the Malibu Club, Princess Louise Inlet, British Columbia. His experience in this field began in 1926 at the Mission Inn at Riverside, California, has included nearly every position from bellman to manager.

During the war he was a civilian employee of the War Department, Air Corps, where he served as coordinator of both military and civilian training for one year in all.

Greene is married and resides at 2281 E. Washington Street, Pasadena.

Interview Schedule

TUESDAY, MAY 11—

HUGHES AIRCRAFT COMPANY, Mr. Carl Baberger; interested in professional and PhD candidates and AE, ME, pursuing theoretical problems in aerodynamics, supersonics or dynamics.

The California Tech

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Mayday Celebrated by Dabney Worker Group

The Dabney Workers' Party last Saturday night attracted a good many odd-weekend snakes from the pits to celebrate Mayday with rye bread and punch strongly reminiscent of Vodka.

At twelve, "Uncle Joe" Mangin and his minister, Auerbachski, were presented to the couples for their acclaim. A house beauty contest was held, and Miss Barbara Blair was chosen to represent Dabney at the May 14 ASCIT beauty contest.

At one o'clock, it was decided that all subversive activities should be moved back underground until next year.

Iceplant...

That George Shor has no love for the iceplant that adorns part of the Caltech campus should by now be rather obvious. That he is not alone in taking a dim view of the gruesome stuff is equally obvious. If a poll, "grass vs. iceplant," were to be taken on campus, there would be hesitancy on the part of this observer in predicting a 99.44 percent pure pro-grass verdict.

Such is the strength of feeling on campus. But what is the chance that the iceplant will, in fact, be condemned to a merely historical role by the onrush of a new and grassy era?

To speak very frankly, if you name an epsilon as small as you chose, the chance of grass will be significantly smaller. And, in spite of Mr. Shor's scathing accusation, the burden does not rest with one Wesley Hertenstein, an alleged ogre who heads the Building and Grounds department. Nor does it lie with the Administration Officers of the Institute, specifically one Mr. William Stott, the comptroller, sometimes pictured as an even more formidable ogre than Hertenstein, who holds the purse strings of the Institute in his iron-like miser's clutch.

The answer is not hard to find. The decision in this matter, as in all similar matters, is the responsibility of the Building and Grounds Committee, an august body of lush trustees which, unsurprisingly enough to anyone who thinks about it, actually has the best interest of the Institute at heart.

We can quite easily analyze the committee's decision in this issue by glancing at the very facts which were presented to the committee.

The Institute is now in the red and anticipates a \$400,000 deficit this year.

The maintenance cost of iceplant in the quadrangle in front of Throop Hall is negligible.

The cost of the "iceplant out-iceplant in" operation, now nearing completion, is \$1000. No new iceplant has to be purchased.

To maintain grass in the same area would, according to B&G estimate, cost \$1000 more than iceplant per year.

To put grass in initially in this area—to prepare the soil and install a sprinkler system—would cost \$5000.

Thus to plant grass this year instead of iceplant, without even taking into account upkeep, would run the Institute \$4000 farther into the hole. This \$4000 represents the income on \$100,000 of its endowment money.

After looking carefully at these figures, the B&G Committee decided on iceplant. Since the Institute will probably continue to look up at the break-even point for some time, the committee will probably continue to decide against grass.

Possibly the above figures sound like chicken feed to you when compared to a \$7,500,000 a year business like Caltech. Possibly you think that the cost-difference represents a sound investment in goodwill and increased efficiency and happiness on campus. You may be even a little dubious about the efficiency rating of a department that requires a \$1,000 outlay merely to pull that darn stuff up and stick it back in the ground again. But to assume that the efficiency of this department is going to increase merely because grass is planted in place of iceplant is certainly not justified.

That is the story on iceplant. If someone could be found who would donate the \$5000 to get grass in, the Committee might make a favorable decision. It's not beyond the realm of possibility. But barring the appearance of any such public-spirited soul, the future can be nothing but an icy one.

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THE SQUARES' CIRCLE

There is an opinion, held by the great majority of people, that the best way or indeed the only way we can have peace is by being well prepared for war, or as we say, "any eventuality". Since the well-being of every civilized person, and perhaps civilization itself, is dependent on our solving this problem of war, it behoves us to be very careful in accepting a program which claims to be able to prevent war, especially if by warlike means. The idea that being well prepared for war will prevent war needs special scrutiny.

False Premise

In general it is based on some reference to history. "We would have been better off if we had been well prepared," so the argument goes, "therefore we will be better off now—if we will only learn from history." Unfortunately, the middle premise, that conditions are different now from what they were even ten years ago; this should be taken into account. In the first place, we must realize that offensive weapons are becoming identified with defensive weapons. Thus when a nation prepares for defense, it prepares for an effective offense, and it will be very difficult to persuade the second big nation in the world that these preparations are defensive

and are not aimed at her. Second, an arms race becomes much more earnest when there are only two parties to it. When there are a number of nations engaging in an arms race it is bad enough. But when there are only two left, when we make the equation between defensive and offensive weapons so that each looks on the other's "defensive" preparations with fear, and when we consider the terrible destructiveness of these weapons, there exists a situation unparalleled in all of human history.

Event Unlikely

It seems likely that under such condition an arms race could end only in the eventual destruction of both parties. We are engaged in that arms race now.

With these things in mind, many of us have urged Mr. Truman to enter into direct negotiations with Mr. Stalin to establish a mutual disarmament program. (Were there more security against atomic war, there would be a good deal more sanity in the world.) If there is some sense of false pride which makes Mr. Truman declare that he will meet Mr. Stalin nowhere except in the White House, let him swallow this in realization of what an atomic arms race can mean to the world.

Jim Harder

• THE FRONT BURNER

"This Young World," a play by Judith Kandel, had its world premiere at the Pasadena Playhouse last night.

The action takes place in a present-day "little red schoolhouse" of the country, on a day when teacher is away. It pictures the greed, violence, prejudice, and other emotional currents which run rampant in young America as well as old.

Arthur Lubin is co-producer with Marcella Disney directing. Darryl Hickman, Parker Eggleston, Dale Belding, Anne Kimball, Janet Burston, and Doreen McCann are included in the cast, with design by Mordecai Gorelik.

George Bernard Shaw's comedy, "The Millionaires" closed a creditably presented run last Sunday, May 2.

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Musical Baedeker

In spite of impending mid-term examinations, Tech music lovers turned out in full force to hear Artur Rubinstein in his only Pasadena appearance last week.

Big Event

The solo piano recital promised to be an important musical event in a comparatively lean season; Pasadenaans were therefore somewhat disappointed to hear a program consisting entirely of the more conventional items in Mr. Rubinstein's repertoire. His excellent playing and flashy technique helped make up for the deficiencies in programming, however; and Artur Rubinstein appears to be one of the foremost pianists of our time.

Last Concert

The Pasadena Civic Auditorium will close its present season on May 19, 1948 with a concert by the Philadelphia Orchestra, conducted by Eugene Ormandy.

Conventional Selections

The choice of much-played musical selections may be thought of as a doubtful tribute to the town's conservative tastes;

SEIDEN TAKES HONORS

(Continued from Page 1)

Saturday Breakfast

Professor A. Hollander, the honorary chairman of the convention, held a breakfast Saturday morning at which future plans and methods of improving the student branches of the A.S.M.E. were discussed. From 10 to 12 there was another technical session at which the remaining four contestants presented their papers. William Seiden, representing Caltech, presented his paper, "The Theory of Plastic Strain Propagation." The paper dealt with the theory

CAMPUS BARBER SHOP
In Coffee Shop Building
(OLD DORM)

on the other hand, such choice may be governed by the necessity of presenting an entirely different program in nearby Los Angeles, since the audiences overlap to some extent. Nevertheless, it is to be noted that Los Angeles concertgoers are invariably presented with a much more interesting musical fare than their Pasadena brethren.

Hollywood Bowl

The Hollywood Bowl Association announces another season of "Symphonies Under the Stars." The orchestra engaged for the three-month cycle will be the Hollywood Bowl Symphony, which will consist entirely of L. A. Philharmonic players.

Conductors

Eugene Ormandy will conduct; guest conductors will be all Tuesday and Thursday engaged for the Saturday-night "popular" concerts. Season tickets for as low as \$12 (general admission) may be obtained by sending a check to the Hollywood Bowl Association, 2301 N. Highland, Hollywood. The season will begin on July 13 and will last until September 4, 1948.

behind the impact research being done here at Caltech.

Seiden Wins

The award dinner was held at Blacker House where J. Calvin Brown, national vice-president of the A.S.M.E., presented the awards. The first prize of \$50 was won by William Seiden. The second went to California at Berkeley, the third to Southern California, while Santa Clara was awarded fourth and fifth.

The convention was completed with a field trip to Mount Wilson.

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Blacker Exchanges, Views Dramatics

Blacker's last Exchange Dance of this term was held here Friday night with P.C.C. and other groups. Saturday night 25 couples enjoyed a fine showing of Shaw's "The Millionairess" at the Playhouse, returning to Blacker Lounge for dancing and refreshments.

Next weekend promises to be a big one for the House, with a Decoration Stag Friday night followed by the "Doc's" Formal from 9:00 to 1:00 Saturday evening. Music will be provided by Eddie Miller's Band, well remembered for its smooth melodies and intermission "dixieland" of last term's Blacker-Fleming Formal.

Throop Club Schedules Hay Ride, Picnic Lunch

Next Saturday afternoon will see eager Throopmen and their best gals rushing up to the hills for the Club's Hay Ride and Picnic. A truck will leave the Club about 2:15 Saturday afternoon to take the first group to Santa Anita Canyon, and will return for the working men and athletes about 5:45.

Picnic Supper

A picnic supper will be furnished by the Club and will consist of hot dogs, potato salad, beer, cokes, and all the trimmings.

After the dinner, kids will be taken home and the adults will return to the Club for dancing until all hours of the night. Anyone who wants more info will find the whole story in the Club lounge, along with a signup list.

DUMOND MEASURES RAY

(Continued from Page 1) essary because it has a "half-life" of only 2.7 days, and it was rushed by automobile from Burbank to Caltech for immediate use. It had a source strength of one curie.

Made at Caltech

The new spectrometer, which stands three feet in height and is approximately nine feet long and seven feet at its widest point, was not only designed but machined and built in Caltech shops and laboratories. Looking something like an isosceles triangle with auxiliary attachments, it requires most of the floor space of a 15x18 foot laboratory room. It weighs approximately one ton, half of which is accounted for by lead shielding. Although begun ten years ago, all work on the instrument stopped for nearly five years during the war period while Dr. DuMond and his associates turned to war work. Work was resumed in 1946.

The central and most vital element of the spectrometer is a rectangular piece of monocrystalline quartz 1 millimeter thick and 7x8 centimeters in size. This was first cut from a large natural quartz crystal. It was then ground and polished to a high degree of optical flatness and parallelism on both its large faces.

Lattice Planes Focus

Atomic lattice planes in this crystal plate are the "agents" which diffract and focus either X-rays or gamma-rays. They do this in a selective manner so that different wave lengths of light focus at different locations on a portion of the circumference of a circle which, if complete, would be six feet in diameter. In order to get this focus of the radiation, the crystal plate had to be bent to a slight, but very accurate curve—a curve that would have a radius of about six feet.

CAMPUS

The Beaver Initiation Party was a rather novel affair. After going to the beach for a combined beer bust and stout bout, those who were able to find it repaired semi-sober to Herzog's home situated high atop a hill in Hollywood. People could fling beer cans way down at the street below. The entertainment given by the initiates was on an abysmally low plane. This was particularly true in the case of Don Royce. It was interesting to note which women laughed and which shuddered. You learn a lot that way.

Alexander wins the award for the week. He started out for this communal debauch with what passes for his true love, when she gigglingly mentioned that she and her roommate had been discussing the idea of switching d-a-t-e-s. Alexander turned around and drove back and made the exchange, much to the chagrin of the fiance of the other girl. Alex recommends it highly, however.

Lover Glover has apparently been giving his sidekick, Bill Woods, very good lessons, for the

Bending of the crystal was accomplished by clamping the plate permanently in a sort of cylindrically curved, hardened, stainless steel vise. The vise jaws have holes in them so that both X-rays and gamma-rays may be studied. Precision of a few millionths of an inch was necessary in profiling the convex vise jaws.

The instrument was purposely planned to permit work in both X-ray and Gamma-ray regions of the spectrum for two reasons. The first reason was for convenient testing of the quality of the focus with easily obtainable X-rays and the second, and most important, to establish a precision link—heretofore unobtainable—between the scales of wave-length in the X-ray and gamma-ray regions.

BREWINS

new Beaver prey seems to have swept a certain Scripp's editor off her pins. Fittingly enough, the campus wheels met with a great wind at Point Doom, and just as the perennial Mittenthal arrived.

At Herzog's "hovel" the shrill sounds heard all evening were partly due to the peacocks, but mostly due to "Das Muhl's" attempted assault on Ottestad's date.

We are happy to report that Tom Stix, undaunted by failing to point at Oxy, is now robbing the Hollywood cradle. We trust that he will feel more at ease with the younger set now that his cast is removed.

The most disgusting member of the group, as per usual, was Windy Marshall who behaved in a fashion most distasteful to the others.

Blacker's Theater Party was most notable for the fact that there were so many more people locked in warm embraces on and about the dance floor than there were attending the dramatic portion of the evening. The floor was getting a double workout with the PCC exchange having been held there the previous evening. It was a quiet sedate affair, that is, the part that was on the dance floor. For an engaged man, Dave Baron doesn't do too badly. He spent most of the evening out in the parking lot, but you can bet your bottom dollar he wasn't showing that girl how his motor ran.

And then there are people like Don Ralph who always take everything so literally. When he told his girl that they were going to the Padua Hills, she naturally assumed he meant the Padua Hills Theater. Not Ralph—he meant the hills as she found out much to her dismay. We hear it is an excellent place for swinging from limb to limb.

Forester & Company

We are pleased to announce that the producers of a product that we highly indorse to all our readers, namely Forester, Ricketts & Co., have expanded their vulcanizing business to include rental of shotguns and cartridges.

We have also received word from another of our producers, J. Williamson & Co., have announced the continued successful launching of their "Mighty Mite," the successor to the Wac Corporal. They announce that rapid progress is being made in a longer range missile and that the target for same lies to the southeast instead of northeast. Good luck men!

Credit Peter Knoepfle with bringing the most conscientious girl to the Dabney Worker's Party. Amply endowed with all the requisite physical assets (plus a little more) she nevertheless was wearing a skirt that scraped the floor. To compensate for this social blunder, she retired for a few minutes, reappearing in a shorter version. What it was and how it was to

Crud Alley Livens Gay Peasant Soire

Competing with a balmy evening and the attractions of the beach at twilight, the Ricketts Rowdies' Peasant Dance got off to a late but memorable start last Saturday eve with the arrival of the Crud Alley contingent.

Looking altogether like sunburned peasants of the fields the group arrived at a previously quiet dance with faces that glowed from more than sunshines.

The queen for Ricketts was not chosen at the dance as had been planned, but honors for the most representative peons went to RA, Rube Metler, and to a peasant named Thorpe. Thorpe's costume added little to his peon appearance.

Athletics Planned For Ricketts, Dabney

Next Saturday eve at a chosen rendezvous on the mount, twenty trained men will tensely wait, their faces sober and serious in the hushed night.

A few words will be said, and at a given signal the two leaders will raise their arms in battle as each tries savagely to best his foe, and the Crew Race will be on in the annual Ricketts-Dabney Barn Dance at Mountain Oaks.

Acme Trophy Ready

Prize for the winner will be the splendid interhouse Crew Race trophy made especially by Acme Brewing Company for the Tech athletes, to replace the old one which was nudged off the piano onto a concrete floor at last term's Blacker-Dabney fracs.

Entertainment

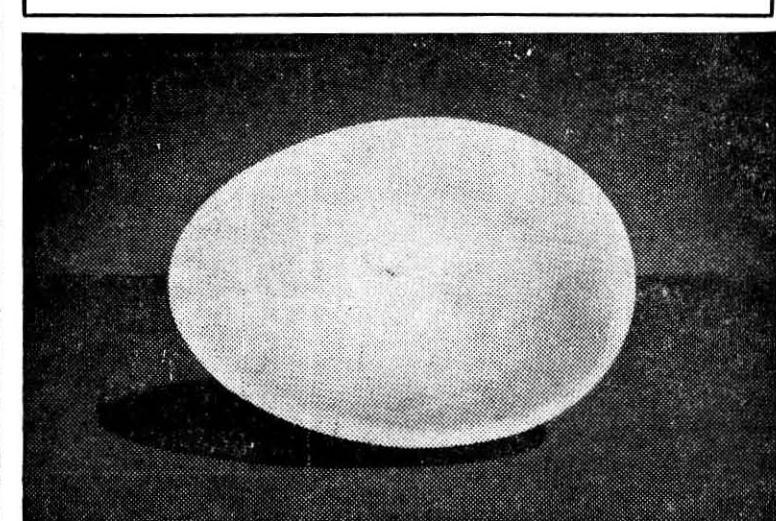
Dave Warren's jazz combo will be featured from time to time throughout the evening, with records furnishing the music for the rest of the time. During half-time intermission, the flamer and beauty contests, the crew race, and the other usual sporting events will be held.

be used is still a mystery, but it looked like the filmy bits of fluff worn by the elephants in "Fantasia." Truly a sporting lady, Scripp's prudes take notice.

Eric Johanssen and date had the most colorful costumes present. He looked like he had just come in from the rice fields of China, while she looked much better—her skirt was well above the legal limit and for two good reasons, nobody remembers what else she wore or did she?

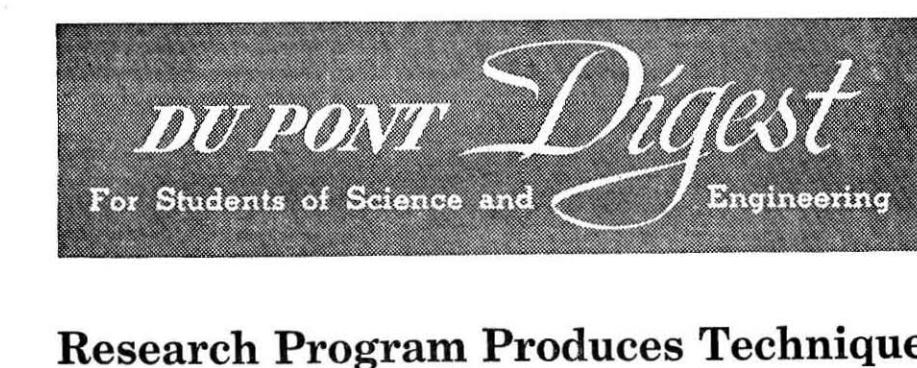
The fruit punch was ostentatiously labelled "vodka" to keep in spirit with the affair, but judging by the number of Fleming men who came over to sample it, the sign must have been more truth than fiction. Comrade Auerbach could not be reached to make a statement before press time.

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



THIS IS no "yoke", son. If people have been calling you egg-head because your hair looks soft-boiled, here's eggs-actly what to do. Get busy with popular Wildroot Cream-Oil hair tonic. It grooms your hair neatly and naturally without that gooey look. Relieves annoying dryness and removes loose, ugly dandruff. Helps you pass the Fingernail Test! Wildroot Cream-Oil is non-alcoholic . . . contains soothing Lanolin. Get a tube or bottle of Wildroot Cream-Oil at any drug or toilet goods counter today. Always ask your barber for a professional application. (Better be hard-boiled with your roommate—keep egg him to get some Wildroot Cream-Oil of his own. It's tops for keeping your sunny side up!) *

* of 327 Burroughs Drive, Snyder, N. Y.



Research Program Produces Technique for Tapering Molten Nylon Bristles

Difficult mechanical problems solved by Du Pont chemists and engineers to make nylon paintbrushes practicable

Nylon bristles used in toothbrushes and hairbrushes are uniform in diameter—that is, they are "level." But paintbrushes made from such bristles did not paint well. Studies of the best natural bristles showed that they were tapered, so a research program to produce tapered nylon bristles was started.

Some difficult mechanical problems were encountered. Level brush bristles were being made by extruding molten nylon through spinneret openings designed to produce filaments of perfectly uniform diameter. A new technique had to be found to make tapered ones. Since it was not practical to taper the filament after cooling and drawing, a precise taper had to be put in just as the nylon emerged molten from the spinneret. And it had to survive the drawing operation, in which nylon is stretched to several times its original length!

Techniques originated in laboratory

The original idea for solving this problem came from Du Pont chemists, who

worked out the techniques in the laboratory, in the somewhat crude form represented in the accompanying diagram. It being largely a mechanical problem, chemical and mechanical engineers were called in to cooperate soon after the studies got under way. After further laboratory development, the engineers put the operation on a production basis.

The final result was a highly efficient process for tapering nylon bristles. As the molten filament emerges from the spinneret, pinch-rolls driven by a series of gears pull it slowly, then quickly. The size of the filament varies with the speed of pulling—thick diameters resulting at slow speeds and thin diameters at fast. Next the nylon goes to the drawing operation, where it is stretched by rollers to give it strength and resiliency.

Engineers designed special machines

Following spinning and drawing, in which many filaments are handled simultaneously, the nylon is "set." Then it goes to a special machine, designed by Du Pont engineers, which "feels out" the crests and troughs and cuts the bristle at these points. This type of design was necessary because of the unavoidable small variations in the length of individual bristles. Sorting the bristles and sandpapering their ends completes the process.

Many techniques contributed to the development of the optimum properties of nylon in tapered bristles. At the laboratory stage, x-ray studies were made to learn the effect of various degrees of crystallization on bristle drawing and setting. Numerous devices were designed to test the bristles—for example, a machine that simulates the abrasive effect on a brush swept back and forth over a surface. Even after manufacture was established, high-speed stroboscopic photography and other stroboscopic studies were employed to improve coordination in the various operations and make a more uniform product.

The development of these bristles furnishes another striking example of the great variety of problems, often intricate, that may arise out of the discovery of a new substance like nylon.

Questions College Men ask about working with Du Pont

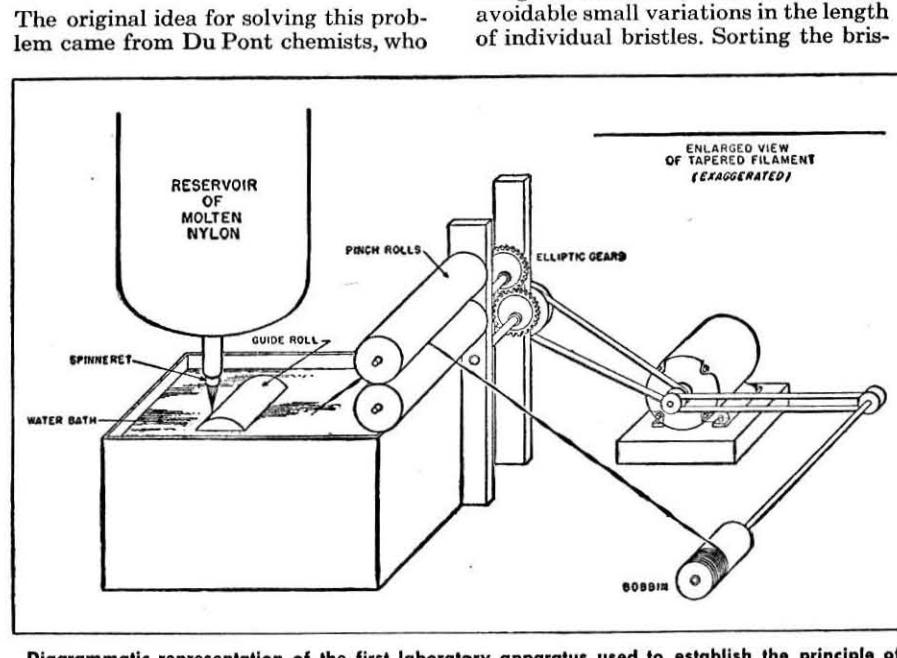
What are the opportunities in development work?

The conception of an idea in a research laboratory is merely the starting point at Du Pont. Men with training in mechanical, electrical, metallurgical, and chemical engineering are required to demonstrate the practicality of the laboratory findings, including small-scale operation of the new process. Even after the full-scale plant is operating, development work is continued to improve efficiency. Write for booklet, "The Du Pont Company and the College Graduate," 2518-A Nemours Building, Wilmington 98, Delaware.



BETTER THINGS FOR BETTER LIVING ...THROUGH CHEMISTRY

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Diagrammatic representation of the first laboratory apparatus used to establish the principle of making nylon from molten plastic. (From an early patent.)

Bull Pups First In Frosh Track Conference Meet

Redlands' Frosh track team took and kept a commanding lead after the first few events, to win the Southern California College Frosh meet, held last Friday at Tournament Park.

In a close fight for the last three places, Caltech's junior spikemen came in fourth, 1 1/3 points behind third-place Pomona, and ahead of Whittier by a narrow 1-3 point.

Miller Wins in Field Events

The only blue-ribbon winner for Tech was Art Miller, who heaved the discus 116 ft. 8 in. for a first in that event. Miller also got a third in the shot-put for Tech's only other place in the field events.

Techmen Place in Distances

In one of the most exciting finishes of the meet, Walt Edwards of Tech nosed out Mann of Oxy for second place in the half. Redlands took first place in the two mile as well, which Creacey won by 150 yards.

Bob Cobb took second in the two-mile, and third in the mile. Cobb was handicapped by a side-ache developed during the fourth lap of the mile, and lack of time to warm up for that first event. Dick Smyth also placed for Tech in the two-mile in a close finish.

New Records Set

Redlands runners also broke the tape in the sprints. Mason of Redlands won the 100 in the fast time of 10 s. and set a new conference record of 21.8 s. in the 220.

Another conference record was shattered, though not by the Bullpups, when Oxy's Jack Strom trekked over the 220 yd. low hurdles in the fast time of 24.3s.

Summary:

Mile—Tanner (R), Creasy (R), Cobb (C), Treasy (P), Hill (O), Steese (C). 4:53.3.

100-Yard Dash—Mason (R), Ruprecht (D), Taylor (R), Nerling (P), tie between Carpenter (O) and Kellogg (O). :10.

220-Yard Dash—Mason (R), Ruprecht (O), Nerling (P), tie between Taylor (R) and Carpenter (O). :21.8.

440-Cotrel (O), Fairbrother (O), Edwards (C), Schurr (R), Beeg (C). :52.8. 880—Tanner (R), Edwards (C), Mann (O), Bowerman (C), Jackson (P). 2:06.1.

Low Hurdles—Storm (O), Newells (W), Mason (R), McClung (O), Shand (P). :24.3.

High Hurdles—Newells (W), Strom (O), McClung (O), Shand (P), Berg (C). :15.5.

Shot Put—Swift (P), 41 ft.; Hubbard (R), 39 ft. 9 1/2 in.; Miller (C), 38 ft. 8 in.; Lawson (O), 37 ft. 10 3/4 in.; Durkee (P), 37 ft. 7 in.

High Jump—Hammond (P), and Conley (R), tie at 5 ft. 9 3/4 in.; Newells (W), Beckner (W), Hastings (O), and Rheinschild (O), tie at 5 ft. 8 in.; Richards (R), 5 ft. 6 in.; Glahn (P), Kamel (C), and Johnson (C), tie at 5 ft. 4 in.

Broad Jump—Beckner (W), 19 ft. 8 3/4 in.; Kellogg (R), 19 ft. 5 3/4 in.; Conley (R), and Newells (W), tie at 19 ft. 5 in.; Siciliano (W), 19 ft. 3 3/4 in.

Pole Vault—Conley (R), 11 ft. 6 in.; Rowland (R), and Holt (W), tie at 10 ft. 6 in.; Follisco (O), 9 ft. 6 in.

Discus—Miller (C), 116 ft. 8 in.; Durkee (P), 111 ft. 8 in.; Swift (P), 108 ft. 8 in.; Finney (P), 105 ft. 9 in.; Ward (R), 105 ft. 1/2 in.

Javelin—Lawson (O), 159 ft. 1 in.; Ward (W), 153 ft. 5 in.; Hubbard (R), 151 ft. 3 in.; Finney (P), 146 ft. 5 in.; Rheinchild (O), 136 ft. 10 in.

2-Mile—Creacey (R), Cobb (C), Treacy (P), Smythe (C), Ward (P). 10:57.9.

Mile Relay—Occidental (Contrel, Fairbrother, Mann, Ruprecht); Redlands (Schurr, Smithpeeter, Ward, Tanner); Caltech (Edwards, Cobb, Bowerman, Sampson), 3:37.1.

Final Score—Redlands 56 5-6, Occidental 43 1-6, Pomona 22 1-3, Caltech 21, Whittier 20 2-3.

*New conference record.

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OPEN EVENINGS

Interhouse Trophy Race Nears Finale

With the scholastic year nearing its end, the Interhouse Trophy race between Fleming and Dabney is reaching an exciting climax. Fleming currently leads Dabney by a narrow nine point lead in I.H. competition.

Interhouse Trophy Race

House	Points
Fleming	112
Dabney	103
Ricketts	72
Throop	64
Blacker	60

Tennis, Basketball Left

Only tennis and the casaba sport remain on the I.H. calendar. The basketball scoring will be 25, 20, 15, 10, and 5 for last place, while tennis scoring will be 15, 12, 9, 6, and 3. The Big Red is assured of the Trophy for another 12 months if they annex first place in the hoop fight, even though the Darbs might take a second in basketball and a first in tennis. In this eventuality the final score would be Fleming at least 140 points, and Dabney 138 digits. Should Dabney take firsts in both the basketball and tennis competition and Fleming runner-up spots in each sport, the Big Red would still hold on to the trophy, by virtue of a 144 to 143 score.

Fleming, Dabney Win

In tennis matches last week, Dabney defeated Ricketts 2-1, and Fleming shut out Blacker 3-0. Dabney won their opening basketball game with Blacker 31-20, and the Big Red took a 38-21 verdict from Throop's cagers, Tuesday.

Sports Calendar

FRIDAY, MAY 7—

Baseball: 3:30 p. m. Frosh at Pomona.

Track: 3:00 p. m. Varsity and Frosh vs. Redlands at T. P.

Golf: 1:30 p. m. Pomona at Montebello.

SATURDAY, MAY 8—

Tennis: 1:30 p. m. Varsity at Whittier; Frosh vs. Whittier at T. P.

Swimming: 1:30 p. m. Varsity and Frosh Conference Meet at Oxy.

Baseball: 2:15 p. m. Varsity at Pomona.

TUESDAY, MAY 11—

Baseball: 4:20 p. m. Varsity vs. Glendale JC at T. P.

WEDNESDAY, MAY 12—

Swimming: 4:00 p. m. Varsity and Frosh at LACC.

Tennis: 3:00 p. m. Varsity vs. Pomona at T. P.; Frosh at Pomona.

Beaver Sports

THREE TOP TECH TRACK TEAMSTERS



The three outstanding Beaver athletes shown above are Hal Tyson, Martin Walt, and Dwight Schroeder. The trio gathered four firsts in the all-conference track meet, Saturday. Tyson took the shotput and discus events, Walt tied with Berokoff of Oxy for first in the pole vault, and Schroeder broke the Tech low hurdle record by winning that event in 24.3 seconds.

BOWLING

Throop Takes I.H. Trophy; Individual Awards Given

The Interhouse Bowling League wound up the '47-'48 season Monday with an individual sweepstakes event and the awarding of trophies. Glen Riedenbach, new manager of the Pasadena Bowling Courts, represented Col. and Mrs. E. C. Goldsworthy in presenting the Interhouse Trophy to Gene Mooring, president of Throop Club.

Individual Awards

Two trophies donated by the Courts were awarded for outstanding play in sweepstakes. These were won by Andy Check of Ricketts and Bob Benton of Throop. Andy fired a tremendous 195-184-216—595 series, plus 42 pins handicap for 637 and an easy high series victory. Bob Benton took high game with 201 plus 16 pins handicap for 217 and a narrow win over Howard Cohen of Blacker at 216.

Beavers Best

Bulldogs, Hens In Net Contests

Those who watched the Varsity tennis team in action last week saw our boys ace out both Occidental and Redlands in two thrilling matches to put Caltech right up on top of the Southern California Conference.

Double Win

The strength and particularly the depth of our Varsity Squad overpowered Redlands University 6 to 3 though they boasted top seeded Homer Richards as No. 1 singles player. Bill Shivar lost to Richards though the outcome was doubtful for a while when Shivar took the lead in the early play.

Rest Win

In the No. 2 spot, however, Ed Alexander sailed through the Redlands netman 6-1, 6-0 for the best score of the day. Charlie Vadhanapanich, Larry Nobles,

Phil Lamson, and Jack Poindexter, all of C.I.T., also came

(Continued on Page 6)

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CONFERENCE SWIM MEET SATURDAY; OXY FAVERED

The conference swimming meet will be held next Saturday at 1:00 o'clock at the Occidental pool. Oxy will be the favorite with Caltech, Pomona, and Redlands following in that order. Whittier's relative standing is indeterminate inasmuch as none of the conference teams have met the Poet paddlers.

Strong Squad

Oxy's team has been especially strong all season long, having defeated UCLA by a narrow margin and the other conference squads quite decisively. The home crew ranks a strong second in virtue of having defeated both Pomona and Redlands by large scores.

Lose to UCLA

Last Thursday the Beavers met defeat at UCLA where the Bruins scored 47 to the Beaver's 28 points. Despite the strong lead of the Bruins, the Tech swimmers gave some stiff competition up to the last event. Techmen Dixon and Shoen upset the Bruins' calculations by nabbing both 1st and 2nd in the next to last event, the 440 yard free style. The Beavers' relay team of Harris, Murphy, Mitchell, and Eschner followed the rally by defeating the UCLA relay squad in the last event.

Dope Sheet

In forecasting Saturday's conference prospects, the Tech squad's best hope is for 2nd place, with Oxy at 1st. The Tigers' strength can best be seen by looking at each event.

Take Firsts

Having fast men in breast, back, and free style, they stand

(Continued on Page 6)

EARLY FOOTBALL WORK NETS GROUP OF HOPEFULS



Coach Mason Anderson talks it over with seventeen of his spring football enthusiasts. The Beaver pigskin coach is conducting a five week spring training period in preparation for next fall's football season. Pictured standing from left to right are George Suman, Bain Dayman, Bill Muehlberger, Craig Marks, Dick Schus-

ter, Don Hibbard, Don Schmid, and Bill Rumer. Shown kneeling are Bill Coons, Dallas Peck, Forest Allinder, Taylor Joyner, Roland Berner, Byron Karzas, Odell Carson, Neal Pings, and Carl Hildebrand.

Tech Tenpin Topplers Throttle Troy Twice in Two Tournies

Tech bowlers downed U.S.C. again this Sunday at the Trojan Bowl in Los Angeles, thus sweeping both ends of this home-and-home match. The strikes didn't come so easily over there as both teams finished with lower scores than last week. Totals: Caltech, 2956; U.S.C., 2865.

Heggland Leads

Sparking the Engineers to victory was lead-off man Ray Heggland, whose 194-179-198-571 series was high of the afternoon. The remainder of the Tech squad finished as follows: Bill Root, 454; Roger Anderson, 473; Andy Check, 474; Bob Lynn, 466; and Woody Bratnaber, 518.

High Man

Trojan standout this week was Dick Nielson, whose final game of 240 was high for the match. A match with U.C.L.A. is being arranged at present, but no definite time or place has yet been set.

Beaver Golfers Win Over Bulldogs; Poor Scores Mark Play

Last Friday, the golf team toured to Redlands for their last away-from-home match of the season. Team Captain and Head Scout Ed Revay finally found the golf course, with the help of 2 service station attendants and a homing pigeon. The team was seriously handicapped by the absence of Harry Moore, the regular number one man, but they were still able to hack their way through the mesquite thickets to an 11 to 7 win over the Redlands boys.

Poor Showing

All in all, the golf played was very mediocre. Revay's medal of 77 was low for the day. Benton and Barrie, playing num-

(Continued on Page 6)

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Preislermen Drop 11-6 Home Tilt to Tigers

The Varsity horsehiders lost another conference game at Tournament Park Monday afternoon to the Occidental Tigers, winding up on the short end of an 11 to 6 score.

Spaulding Starts

Five unearned runs in the fourth inning, after two outs, cost the Beavers the ball game. Art Spaulding started on the mound for Tech, yielding nine runs and seven hits, and Glenn Chaffee finished the last three innings for his third assignment in six days.

Tech Leads

The Engineers led 4 to 2 in the third stanza but the roof fell in during the following inning. Spaulding almost got out of the inning unscathed when he caught a runner off second base, but Don Baker's throw to second hit the runner and the parade across the plate began.

Cellar Battle

Next Saturday the Pomona Sagehens host the Beavers, and the two teams should stage a hot fight for possession of the conference cellar. In a previous meeting the Hens took a close five to four decision from the Engineers.

S.C.L.C. Baseball Standings

	Won	Lost	Pct.
Whittier	6	1	.857
Redlands	3	1	.750
Occidental	2	3	.400
Pomona	2	3	.400
Caltech	0	5	.000

Oxy 0 0 2 5 0 3 1 0 0 -11

Caltech 1 0 3 0 0 2 0 0 0 -6

S.C.L.C. Baseball Standings

Won Lost Pct.

Whittier 6 1 .857

Redlands 3 1 .750

Occidental 2 3 .400

Pomona 2 3 .400

Caltech 0 5 .000

The Beaverbabes rackets finally came through on Monday, by decisively defeating their rivals from Eagle Rock. Even though the second doubles was cancelled because of lack of time, the final score stood 6-2.

Beaver Babes Trounced By Oxy Batters

The Beaver Frosh baseball outfit still has fans scratching their heads as to how they could blow a 7-5 lead by giving up 14 runs in the last four innings. The Beaverbabes did just that Saturday as they lost to Oxy's Freshmen squad 19-7.

Frosh Lead, 7-5

After Oxy brought in 4 runs in top half of the fifth to take a 5-2 lead, the Tech Frosh put across 5 counters, thanks to good solid blows, and wildness on the part of Oxy chucker, Sturdevant. The spree was started by Moss getting a single, Sereno on first due to an Oxy error, and a walk to Bates. Louis Stallkamp then stepped up to the plate and pounded out a long triple to bring in three runs. Before the

(Continued on Page 6)

Frosh Netmen Squash Tigers In 6-2 Victory

The Beaverbabes rackets finally came through on Monday, by decisively defeating their rivals from Eagle Rock. Even though the second doubles was cancelled because of lack of time, the final score stood 6-2.

Change of Heart

Everyone seemed to have forgotten his troubles which have been so bothersome for the last three matches. After a dismal showing at Redlands, where the Engineers took a 8-1 waxing, the Oxy match was a decided improvement.

Clean Sweep

Against the Tigers, the Beavers won all the singles except for

(Continued on Page 6)

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Oxy Annexes Track Title

Beavers Last in Conference Meet As Schroeder Breaks LH Mark

Despite the fine performance of local trackmen, the Beaver cinder squad settled for last place in the Conference Meet Saturday at Pomona behind Oxy, Redlands, Whittier, and Pomona.

Tyson Shines

Hal Tyson upset the Whittier applecart by taking firsts in both the shot-put and the discus. According to past performances this season, Yates of Whittier should have beaten Hal in both events, but it was Tyson's day to shine, and he made the most of it. His winning mark of 47 ft. 5 in. in the shot-put brings him close to Don Tillman's C.I.T. record of 47 ft. 3 in., and considering the fact that Hal is only a sophomore, it is very likely that he will top that record in the near future.

Record Broken

As brilliant as Tyson's performance was, the most outstanding upset that the Tech tracksters pulled all day was Dwight Schroeder who, tabbed to take a fourth in the low barrier event ran a brilliant race in the time of 24.3 seconds to erase the old Caltech record of 24.4 seconds set in 1929 by Perry. This brings the total of broken records to three for this year.

Other Digit Men

Other point getters for the Tech team included Bob Funk who nabbed a fourth in the 220 yard dash in a close race. Funk, who has been sidelined all season with a pulled muscle ran much better than expected to obtain his place.

Record Broken

Martin Walt, Tech's new record holder in the pole-vault, was

in his usual good form and tied for first in his event, by clearing the high bar at 13 ft. 1 in. Elroy Chin took a third in the broad jump with a leap of 22 ft. Doug Brown took a fourth in the 880; and to complete the Caltech scoring the relay team came in fourth place.

Last Meet

Friday afternoon Varsity and Frosh cindermen meet Redlands, in the season's finale, at Tournament Park. By virtue of the Bulldogs' showing in the conference meet, Tech is due for a shelling. However, a little support from Beaver fans may aid Tech trackmen in garnering points.

100—Welsh (P), Brownell (W), tie for third between Barton (W) and Hackleman (R). Time 9.9s.

220—Barton (W); Hackleman (R); Hayes (W).

Funk (C). Time 21.9s.

440—Inman (O), Sabichi (P), Dunning (R), Smith (R). Time 50.0s.

880—Martin (W), Wagner (R), L. Lee (W), Lee (O), Moreman (P), Everison (R). Time 4m 30.9s.

Two Mile—Livingood (R), D. Weed (R), Heaton (R), Olhausen (P). Time 10m 29.1s.

220 Low Hurdles—Schroeder (C), Welsh (P), Beauprand (W), Wallner (R). Time 24.3s. (new school record).

(Continued on Page 6)

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CHAPMAN AND LAVERNE LOSE TO BEVONINE

Coach Ed Preiser's Varsity baseball team ran up a two game winning streak last week with a 6-2 verdict over Chapman Tuesday at Tournament Park, and an 11-5 win at La Verne Saturday. Glenn Chaffee pitched near shut-out ball in the Chapman game, while his mates were pounding out 10 hits. Tom Petrus, Milt Strauss and Chaffee each got two hits.

Beavers Hit La Verne

The Beaver bats really boomed at La Verne, as everyone in the lineup collected at least one base knock for a grand total of fourteen hits. Chaffee, Bruce Hedrick, and Chuck Norman each pitched three innings. Chaffee did not allow a hit or run during his stint on the mound.

Box Scores:

	R. H. E.
Chapman	0 0 0 1 0 0 1—2 7 4
Caltech	2 0 0 2 0 2 x—6 10 2
Nagai and H. Brown; Chaffee and Petrus.	

R. H. E.
Caltech0 0 2 0 1 0 0 2 6—11 14 5
La Verne ..0 0 0 0 0 2 0 0 3—5 8 1
Odom and Masters: Chaffee, Hedrick, Norman and Petrus.

BEAVER GOLFERS

(Continued from Page 5)

bers 2 and 6 respectively for the Beaver team, were the only ones able to take all of the three points at stake in each individual match.

Meet Pomona

This Friday will see the Beaver team on their home course, Montebello, battling it out with the conference-leading Pomona group. A victory for the Tech team in this match would possibly put them in first place in the conference, by virtue of total points won in the matches played to date.

SCORING

Reyav (C) halved Smith (R); Benton (C) def. Johnston (R), 2 & 1; Rieger (R) def. Sims (C), 1 up; Moffat (C) def. Peterson (R), 2 & 1; Flora (R) def. Burrows (C), 2 up; Barrie (C) def. Henning (R), 3 & 2.

BEAVER BABES

(Continued from Page 5)

Tigercubs could gain control, two more men scored in the inning.

Oxy Scores in Eighth

The Beavertabe downfall came in the fantastic eighth, in which Oxy scored 9 runs on 7 hits and 6 Caltech errors. Catcher Walt Pfeiffer came in the ninth to take over pitching chores from Stallkamp, and gave a fine performance in his debut as Frosh moundsman.

Sturdevant again struck out 15 Beaver batters, and held the Engineers to 5 hits. Oxy batters pounded out 20 hits off of Daily, Stallkamp, and Pfeiffer.

Meet Pomona Friday

Tomorrow the Tech Freshmen squad travels to Pomona in their first and only game away from home this season. In a previous meeting the Sagechicks rapped the Beavertabes 15-3, and are favorites to repeat a win.

Score:
Oxy1 0 0 0 4 3 1 9 1
Caltech0 0 0 2 5 0 0 0 0
Sturdevant and Wheaton; Daily, Stallkamp, Pfeiffer and Bates.

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FOR RENT 10x20 guest cottage and bath at Laguna Beach. Sleeps 2 comfortably or possibly 4 students. Prefer to rent all summer at \$20 for two weeks. If interested contact Bradley of the Tech.

FOR SALE—1934 American Austin, \$225. Call Sy. 3-7550.

FOR SALE—Thordarson one output tube amplifier, 2/3 net \$22 and one K & E LLD Decitrig slide rule. Leave note in "H" box in Throop for Herndon.

LOST—Ring of keys about two weeks ago. Walter Mudgett, Fleming 76, Sy. 2-9562.



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SWIM MEET

(Continued from Page 4)
to take 1st place in the Medley Relay with Tech pushing a close second. In the 220 yard free style Oxy's Scoles will take first without trouble while Dixon and Curran of Caltech fight with Oxy's number two man, Evans, for second place.

Free Style

The 100 yard free style should see Oxy's men, Crosby and Wolfe, at 1st and 2nd with Caltech at third. Tech will definitely take a back seat in diving while Oxy will sweep the field.

In the 150 yard back Techmen, Montgomery and Hall, will show strength with 2nd and 3rd, but Occidental again stands best chance of 1st with Wadsworth.

Breast, 440 Free

The 200 yard breast stroke can go either to Butterfly Bill Palmer or to Oxy's Brubaker. Bill Palmer has dropped the event to the Tigermen twice already, but his time has since dropped below either of those races.

The next to last event, the 440 yard free style, will see Oxy, Oxy, and Tech at 1st, 2nd, and 3rd, with Redlands and Pomona tailing.

The 400 yard free style relay will go to Oxy, Tech, Pomona, and Redlands in that order.

Dark Horse

Whittier is still the dark horse,

BEAVERS BEST

(Continued from Page 4)
through with rousing victories for the conclusion of the singles matches.

Singles Decisive

Caltech had won the contest without the help of a solitary doubles match which is something of a record in itself. To give us an additional margin of victory, Larry Nobles and J. C. Bear captured their doubles match with little trouble.

Last Matches

Three conference matches remain to be played before the netmen can relax, but the deciding match will be that with Pomona on Wednesday, May 12, on Tournament Park courts.

OXY ANNEXES

(Continued from Page 5)
120 High Hurdles—Lawrence (O), Schlegel (O), Beauprand (W), Wallner (R). Time 15.2s.

Relay—Occidental, Pomona, Redlands, Caltech. Time 3m 25s.

Shot Put—C. Yates (W), Levin (O), Farren (O) 47' 4" 5' 8" in.

High Jump—Tie for first among Doty (O), Laughard (W), Robinson (P), and Price (W) 5 ft. 10 7-8 in.

Discus—Tyson (C), Colbath (P), Mertens (R), Pearson (O) 135 ft. 7/8 in.

Pole Vault—Tie for first between Walt (C), and Berkoff (O), 13 ft. 1 in. Cran dall (W) tie for fourth among Lapp (P), Pike (O), and Henny (O).

Broad Jump—Brownell (W), Tucker (W), Chin (C), Harris (W), 22 ft. 11 1/4 inches.

Javelin—Coster (O), Flowers (R), Utman (P), Elias (O), 187 ft. 9 in.

Final scores: Oxy 39 5/12, Redlands 36 1/2, Whittier 35, Pomona 30 1/12 CALTECH 24.

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SUNDAY WORSHIP 11 A.M.

REV. CURTIS BEACH
MINISTER

TALKIN' IT OVER

(Continued from Page 5)

Which brings me around to putting in a plug for the little talked about managers who put in twice as much work and get half as much credit as the guys that compete. This past year we have a group of men that took plenty of the load off the coaches' backs. Andy was saying the other day the Bill Jarmie was as good as two assistant coaches and he wished that more men would sign to give him a hand out there.

however, and can upset any of these predictions. The Poets could be a blessing in disguise by robbing the Tigers of their point in free style while Tech came through with the other events, thus making it a close three-way race.

Good Work

Speaking for the rest of the men on the cage five, I can say that Englar and Smoot were infallible in seeing that the men had every piece of equipment needed plus putting in plenty of extra hours providing milk, soap, keeping the %\$@! Armory in shape.

More Needed

This term's squads are ably cared for, but mostly by Freshmen or Juniors. It was originally intended that the senior manager be a Senior. But lately only Sophomores and Juniors have been applying for the job. If any of you are interested in serving in the capacity of manager, the two Queens of the Athletic Department, not to mention the coaches, will welcome you with open arms.

FROSH NETMEN

(Continued from Page 5)
one. Both Dean Blanchard and Don Schmid continued their winning ways, making their individual records at 4 wins and one loss. Jack Martin won his first match of the season, when he settled down in the second set

and won easily. Thorne Butler took his match after going three sets and Crosswhite required three sets to win his match. In the doubles Martin and Blanchard had their own way all the time.

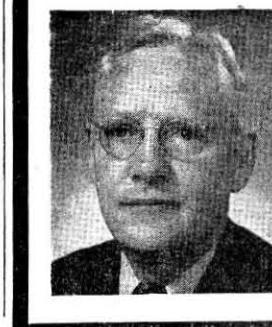
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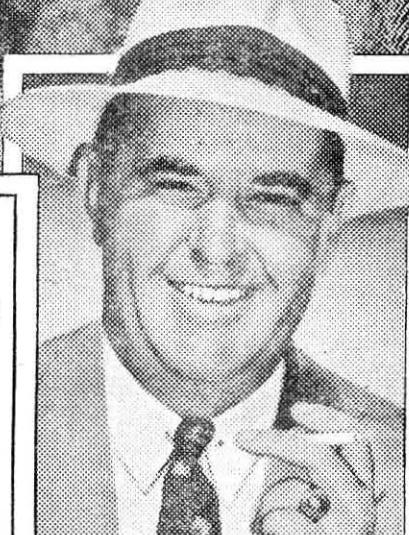
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