

Job Clues Given in Tau Beta Industry Survey

17 Los Angeles Firms Interviewed to Find 'Qualities Expected of Graduates'

Here it is! A report on what industry expects of the graduate, as determined by the Tau Beta Pi survey of 17 Los Angeles industries engaged in research, design, development, and production.

The report will be published in two issues of the *California Tech*; in this issue, "academic qualification expected of applicants for technical jobs" will be summarized, and advice on the personal interview will be given.

Next week's issue will cover, under "non-academic qualifications expected of the graduate", such topics as importance of participation in extra-curricular activities, desired personality traits, and the importance of experience. "Opportunities in local industries", will also be covered with a word on summer job opportunities, and opportunities in training programs.

Grades

Small and large companies in both research and production generally agree that the men whom they hire should have a high degree of "native intelligence", the ability to grasp new ideas immediately, and a practical turn of mind which will enable them to utilize these new ideas and also their old ones in their work.

All companies would prefer to base their judgment of the applicant on information received from previous employers or on an experience record in the line of work in which the applicant wishes to enter, rather than on grades. However, a newly graduated job-seeker's scholastic record is taken as a major criteria in judging his ability, by many industries.

Research—Grades

Companies specializing in research or design work especially wish the recent graduate to have good grades. One company specifically stated that above average grades were required of the new graduate, such a grade being a B in a Caltech course. A low GPA is not necessarily fatal to job chances in the research field; in many of the labs interviewed, recommendations from the faculty giving evidences of a man's ability would be as helpful in securing a job as a high GPA.

"Practical Engineering—Grades

If the company wishes the applicant for an engineering position in the production or operation phase of the industry, rather than in research, design, or development, his scholastic record will not be considered as important as it might be if he were entering the research field. Good grades will still be desirable however. Many companies who desire personnel for operation and production engineering rate congeniality, practical experience, and other attributes (to be dealt with later) ahead of grades.

In summary, the tendency seems to be to lay a certain weight on grades, but not to overemphasize them.

Graduate Study

All the companies interviewed desire men with a broad knowledge in their respective technical fields, as well as a comprehension of the basic principles of fields outside their own.

Grad Work for Researchers

Men interested in research, development or design work

should have some measure of graduate study, according to the research companies interviewed. Two research labs had Ph.D.'s in one-half or more of the technical positions, while at least six of the industries interviewed stated that a M.S. or higher was almost a prerequisite for those planning to work in the research or design field. Only one research lab said that graduate study would be unnecessary.

An advanced degree is not required for production and operation work, but in many cases an engineer with an M.S. or professional degree will get a job before an engineer with only a B.S., other qualifications being equal. Also, an engineer with a M. S. in the same position as an engineer with a B.S. will receive a higher initial salary.

A fifth year of graduate work for chemical engineers is definitely beneficial, according to the personnel manager of a large southern California oil company interviewed: "many fifth year chemical engineers are hired, and in the long run should profit by their additional training." The same oil company mentioned the advisability of working in the field for a few years after graduation, and if exceptional ability has been shown, to return to graduate school. The company has shown a liberal policy in such cases.

No Grad Work for C.E.'s

A contracting firm interviewed was definitely opposed to idea of graduate school for civil engineers planning to enter the contracting industry; practical experience was much more needed. A few other small concerns put practical experience far ahead of graduate study.

Almost all the interviewed companies were agreed that a fifth year course in business administration or business law was ill-advised for men going into technical positions. In fact, men with such degrees are looked upon with suspicion by many employers as not being content with work of a technical nature. Only one company of those interviewed felt that graduate business study was valuable, while only one other stated that such work might be advisable for an engineer hoping to enter the managerial side of industry.

Course of Study

College courses in the subjects which at Caltech are called the Humanities are not given a

(Continued on Page 4)

CALIFORNIA TECH

California Institute of Technology

Thursday, April 13, 1950

No. 23

Volume LI.

Instituters Elect Wheels

Joe "Sugar" Cain was elected chairman, and Jack McEwing entered the office of vice-chairman, when the Instituters, following the example of other campus organizations, elected their officers for the next year last Thursday night.

Replacing Norm Fink as leader and co-ordinator of the student body service organization, Cain plans to have ideas that should keep all its members busy.

Publicity

McEwing's main job will be to inform the reading population on the campus of the Instituters' doings. Anyone interested in obtaining the services of the Instituters for some student body activity should contact either one of these men. Cain lives in Dabney; McEwing in Ricketts.

Yellers Wanted

Anyone interested in the job of assistant Cheerleader for next year should drop a note to Chuck Miller in the M box, lower Throop, as soon as possible.

McKinney Prize Deadline Near

Monday 5 p.m. is the deadline for all entries in the McKinney Prize Contest for 1950, with this year's essays on the subject, "What Price Civilization?"

The rules for the contest are as follows:

1. Each candidate will write an essay of about 1200 words on the assigned subject, drawing ideas for his essay from the required reading; namely, H. G. Wells' *The Time Machine*, Aldous Huxley's *Brave New World*, George Orwell's *1984*, and George R. Stewart's *Earth Abides*.

2. Each candidate should submit two copies of his essay, typewritten and double-spaced: the original and one carbon copy.

3. The contestant, who shall be a junior or senior, shall submit his essay to Prof. MacMinn, 212 Dabney, by 5 p.m. Monday, April 17, 1950.

4. A committee of the English Department will judge the essays, and the four best essays will be entered in the final contest, for which the first prize is \$75 and second \$50. In addition, each of the finalists will receive a book as a trophy.

5. The finalists will present their essays orally before a group of judges, chosen from Pasadena citizens, at an assembly early in May.

6. The winners will be determined by the quality of their essays and the effectiveness of their oral presentations.

Tomorrow's Assembly Will Feature P. C. C. Talent

Color Film On ASCE Docket

"Underground Activities," a color film released by Johns-Mansville will accompany Mr. Omar Hopkins' address on "Sanitary Engineering in the U. S. Public Health Service" at next Monday's A. S. C. E. meeting.

New Officers

Highlighting last Monday's A. S. C. E. meeting was the election of next year's officers. Bob Smith was duly installed as the Chapter President after edging out Don Schmid on the second ballot. Schmid was subsequently elected Vice-President, while the other offices were filled by Brad Houser, Treasurer; Bob Munro, Recording Secretary; and George Cook, Corresponding Secretary.

Chapter Conference

A decision was reached that all new officers should assume control immediately, in order to allow the incumbents more time to prepare for the all-important Western Region Student Chapter Conference set for April 27 through 29 at the Ambassador Hotel.

Host at this convention will be Caltech, and included in the program is a semi-formal dance at S. C. on the evening of the 28th. It was also agreed, by a vote of twelve Seniors to eight Juniors, that a beach party be held Sunday afternoon, June 4.

'Unaccustomed As I Am ...'

New Toastmaster's Club Holds Second Talk Fest

Caltech's newest organization, the "Toastmasters' Club," held its second meeting last Thursday night at the house training table. Organized by a group of students anxious to improve their proficiency in speaking, the Toastmasters' Club aims to fill this need.

President Hal Martin, the force behind the organization, gathered into his ranks a number of men who have been agitating for the inclusion of a speech development class into the curriculum on an optional basis.

Table Topics

During the second meeting, at which Walt Pfeiffer presided as Toastmaster, extemporaneous speeches were given by Howard Preston, Robin Williamson, Alex Dessler, and Bob Connelly. At future meetings it is hoped that time will be found for six such speeches.

Drama Students To Give Comedy And Three Condensed Plays

Dramatic talent from P.C.C. will entertain Techmen at tomorrow's assembly, at 11:00 in Culbertson.

"The Wedding", a one-act comedy, will be featured at the show. The leading roles will be filled by Joy Lombard, an accomplished radio actress, and by Gil Hoegson. This play concerns a couple about to be married and their many unusual problems revolving about a lost collar-button. The play will be directed by Alecia Roberts, and Morris Buchanan.

Actor's Digests

Following this will come a group of three Actor's Digests, which are condensations or summaries of plays. The first is Sir James Barrie's "Dear Brutus," a fantasy starring Donna Lowe and Bill Linton. Donna Lowe is the star in the main production at P.C.C. and is reputed to be a very good-looking and accomplished actress. Bill Linton received second place in a 20-school dramatic competition at the Playhouse. The second will be Somerset Maugham's "The Rain," a melodrama again starring Joy Lombard and Gil Hoegson.

The finale will be a last-scene comedy act from Shakespeare's "Henry V," with Winifred Fuller starring.

Mayan Culture

Last Friday's assembly offered proof positive that slide rules aren't necessary for the progress of culture.

Mayan culture was the topic with color motion pictures by Mr. Giles G. Heally. Mr. Heally is an expert on the subject with years of research and discovery behind him. He has traveled through miles of jungle and cov-

ered years in the life of the ancient Mayans.

The twenty-one discoveries of ruins with which he is credited offered a great variety of material on which to do research.

Comprehensive Film

The motion picture was in three general parts. The first was a description of the Mayan culture as it had existed before the time of Columbus. The second part consisted of shots of the ruins and a description of the findings, and the third part was a description of the life and customs of the present descendants of the Mayans.

Notable features of the ancient Mayan culture were the development of a very accurate calendar and the development of a numerical system based on the number twenty.

The calendar was made by using observations of the positions of astronomical bodies. A novel method of telling when to plant corn was set up. Two columns were devised so that when the sun set on the horizon in line with these two posts, it was time to plant corn.

Number System

The numerical system was (Continued on Page 4)

Beek Grabs 3rd In Speech Event

Third-place winner in impromptu speaking at the Pi Kappa Delta speech tournament held at College of the Pacific at Stockton last week was Caltech senior debater Alan Beek.

Beek and Ralph Stone were both in the finals, Caltech being the only school to place more than one speaker in the last round of impromptu speaking.

Coach McCreery announced that the competition was rough and tough in the debate events, but added special words of praise for Caltech's up-and-coming team of freshman debaters, Swaroop Bhand Deo and Michael Lorie, which won three out of five contests. Other debaters who took the trip were Dick Fairall, Doug Calley, George Merkel and Bill Dibble.

Interview Schedule

APRIL 17, 18 and 19—BOEING AIRPLANE COMPANY, Seattle, Washington. Mr. John C. Sanders, Staff Engineer—Personnel Interviewer. Mechanical, Electrical, Aeronautical and Civil Engineers—Seniors and Graduates. Design, research and development in the more specialized branches of their work.

APRIL 19—BETHLEHEM PACIFIC COAST STEEL CORP., San Francisco 19, Calif. Mr. Edward G. English, Executive Assistant, Interviewer. Those men who applied for the Loop Training Course, plus a few Mechanical or Civil Engineers with an interest in sales.

APRIL 24, 25 and 26—GENERAL MOTORS CORP., Detroit, Michigan. Mr. E. M. Henderson of their Dayton office, Interviewer. BS degree men in Mechanical, Electrical, and Chemical Engineering. ME & EE— for training to do product development, product design, drafting, testing, process and methods work, power plant work, plant maintenance engineering or manufacturing supervision. CHE—qualified for laboratory work, product design, electroplating, and production work on rubber products.

MS degree men in Mechanical, Electrical, Chemical and Industrial Engineering, qualified for training to do product research, automotive fuel research, or teaching. To qualify for consideration in these interviews, a student should have at least a C plus cumulative scholastic average, and have the interests, personality, and attitude that will qualify him for industrial employment. Most of the openings will be in plants located in Michigan, Ohio, Indiana, and Illinois. There are some openings in the Divisions located in New York, New Jersey, and Connecticut.

All interviews take place in the Placement Office unless otherwise designated in announcement. Contact the Placement secretary as soon as possible for definite appointment, and application blanks—120 Throop Hall. All application forms filled out for interview appointments should be completed and in the hands of the placement secretary two days before the date of each particular interview.

Peace Thru Christ Fellowship Topic

The Caltech Christian Fellowship will discuss the 15th and 16th chapters of John's gospel to see how one can know love, joy, and peace in his heart.

Everyone interested in joining the discussions is invited to attend the meetings on Tuesday and Thursday in 210 Dabney from 12:30 to 12:55.

Campus Calendar

THURSDAY, APRIL 13
12:00 Y Upperclass Lunch Club
12:10 Throop Club Meeting
7:15 ASCIT Board of Directors Meeting in Lower Fleming
FRIDAY, APRIL 14
11:00 PCC Drama Group in Culbertson
1:30 Golf Varsity vs. Occidental at Caltech
4:00 Frosh Track vs. Whittier and Redlands at Caltech
4:30 Swimming Varsity and Frosh at Pomona
SATURDAY, APRIL 15
1:30 Tennis Varsity at Pomona
1:30 Tennis Frosh vs. Pomona at Caltech
2:00 Track Varsity vs. Whittier and Redlands at Caltech
2:15 Baseball Varsity at Redlands
2:15 Baseball Frosh vs. Redlands at Caltech
SUNDAY, APRIL 16
7:30 Film Classic Series in Culbertson
MONDAY, APRIL 17
3:15 Tennis Varsity vs. Muir at Caltech
7:30 Film Classic Series in Culbertson
TUESDAY, APRIL 18
12:00 Y Frosh Lunch Club
3:00 Tennis Frosh vs. Cal Poly (S.D.) at Caltech
4:15 Baseball Varsity vs. L. A. State at Caltech
4:30 Swimming Varsity and Frosh vs. Occidental at PCC
WEDNESDAY, APRIL 19
7:30 Orchestra Rehearsal in Culbertson
9:00 Glee Club in Culbertson

Tech Y Schedules Dual Beach Parties With SC and UCLA

How rough can life get? The hard-working boys in the Y Cabinet are about to find out. Leo Baggerly is cooking up a beach party for the Y Cabinet to be held on the 23rd of April.

SC Women

Sunburnt maidens from the campus of Southern California are going along to keep things moving on the beach. The USC girls are going to supply the food while the Caltech delegation is going to work up some sort of entertainment.

Frosh Also Bask

The Y's Frosh Luncheon Club is holding another beach party at an earlier date, the 16th of April. Douglas Inglis, Social Chairman of the Frosh Luncheon Club, has gone to the other end of town, at UCLA, to get women for the beach frolic. The affair will take place at Will Rogers Beach, from 12 noon to six at night.

Rides Needed

But with this, as many good things, there is a slight catch—rides will be needed and there will be a charge of 75 cents for food.

Gala Blacker Stag A Bubbling Success

Men of Blacker House turned out in full force Saturday evening to attend a stag that offered beer, and cheese sandwiches, movies, door prizes, and miscellaneous entertainment.

The stag was unusual in that the entertainment for the evening was planned to run on a definite schedule. Ralph Lovberg was Master of Ceremonies and presented such headline acts as a wrestling match between a representative of the Bolivian Athletic Association—Gus Soux—and the New York Nuisance—Bill Pilkington; snappy stories for stags by the honored guest of the evening—Dr. Jahns; song and dance routine by Bumb and Hefner; movies rejected by Hollywood but approved by the L. A. vice squad, and group singing that gathered volume as the supply of beer dwindled.

Ricketts Plans Both Rural, Urban Hops

This Friday evening a rip-roaring square dance will be held in Ricketts lounge. Brought back by request of the Rowdies Rural Regiment, this dance promises to be even more successful than the last.

Round records will be used for the square dancing and refreshments will be served. That old cowpoke, Al Marshall, will call, keeping everyone in high spirits. The gents will be dressed in plaid shirts and Levis, while the ladies will wear cotton prints in true Western style.

Saturday evening the scene shifts from the farm to the city with a local exchange. The social committee has planned some real surprises in the way of entertainment, according to chairman, Phil Halverson.

Darbs Switch Rained Out Frolic to D.P. Camp

Mssrs. Hendrickson and Hall and their now well-known apartment were hosts to Dabney last Saturday. The Grasse Frolic was rained out and the affair was successfully transformed into a rug-warming for H. and H.

Corby, apparently disappointed by the switch, simulated grass by dropping green fruit salad at random around the room.

The social chairman (who does not want his name mentioned) has apologized for the rain and promised good weather for the indoor exchange this Friday. The dance will feature young ladies from the Huntington Hospital and from Erdman Hall at Oxy. The well-filled sign-up lists are indications of a successful affair.

HOUSE SOCIAL NEWS

Secretary's Report

At the last meeting, the Board of Directors elected Duane Neverman editor of the **Little T** for the next year. Neverman will be responsible for both the composition and ad selling of the ASCIT clue book.

Athletic Council

Dave Hanna, Athletic Manager, recommended Jack Martin, Junior, and Norman Gray, Sophomore, to fill the student vacancies on the Athletic Council. The Board unanimously accepted these recommendations. This council determines most of the athletic policy at the Institute.

Combined Charities Drive

After long deliberation, the Board came forth with the following resolution concerning the Combined Charities Drive:

Resolved: that the Vice-President should be given the responsibility for the coordination of the Combined Charities Drive. The Vice-President may appoint, with the approval of the Board, a chairman or co-chairman for the drive.

The setup for the drive next year will be determined in the near future.

Publicity Plans

Bob Stanaway, Publicity Manager, reported that his committee would work on the following three-fold program:

1. National publicity through distribution of the CALIFORNIA TECH.
2. Better distribution of "Facts About Caltech."
3. Orientation of freshmen as Caltech salesmen.

The committee has started working on the last phase of the program, first. This involves making selected freshmen more aware of the advantages of Caltech and thus indoctrinating them as salesmen. This is being done to interest more high school students in coming to Tech and also to increase the national prestige of the Institute.

At the next meeting, Pat Fazio, Second Representative, will report on the new Student Car Repair Lot rules.

—Stan Groner.

Turn In Those Keys

Undergraduates in unauthorized possession of keys to Institute facilities, particularly master keys, must turn them in to W. C. Hertenstein, superintendent of Buildings and Grounds, or Ulrich Merten, ASCIT president.

This is a matter of "grave concern" to the Institute, as was brought out in a meeting of the Student-Faculty Relations Board last Monday. Many keys to buildings and rooms, and master keys are being found in the possession of students who are not authorized by the department in charge of the building to have such a key.

If a student is found in a building or rooms in which he has entered by the use of such keys, he will be under suspicion when any accident or mishaps occur in the building at that time; this is particularly true in the case of buildings having classified information which might be missing or disturbed.

Also applicable to this matter are master or other keys made by impressions, outside locksmiths, etc. Throw away that set of paper clips, too. If you're not authorized to enter a locked building or room, don't go in, without contacting the proper persons.

Remember, turn in keys unauthorized by departments to W. C. Hertenstein or Ulrich Merten.

ON THE RECORD

By BILL WHITNEY

The 1949-50 concert season of the Los Angeles Philharmonic Orchestra was brought to a close last Thursday and Friday with a performance of Gustav Mahler's Symphony No. 2, the "Resurrection," for orchestra, soloists and chorus.

The work is an awe-inspiring one, if only from the standpoint of its length alone (the one symphony constituted the entire concert). Mahler is often accused of possessing Berlioz's ability to be inspired by nothing more than "reams of blank manuscript paper." Whether or not the wealth of ideas which Mahler expressed in his 2nd Symphony are merely an emotionally effective hodgepodge of disconnected thoughts, or actually seem to have a logical structural coherence, can only be deter-

mined after several hearings, and then depend upon one's individual reaction.

The orchestra, under Alfred Wallenstein, gave an excellent reading of the work. The augmented brass section in particular should be mentioned for creditable performance. They had more than enough to keep them busy throughout the hour-and-three-quarters required to play the symphony, and they bore up well under their extra duties, with only occasional falterings in intonation.

The chorus and soloists were given hardly a chance to display their talents. Mahler evidently was thinking only of esthetic considerations when he composed the work; otherwise he certainly must have given the oversized chorus a little more opportunity to perform.

The contralto, Janice Moudry, had the largest solo assignment, which consisted of only 15 lines

(Continued on Page 4)

Who Dealt This Mess

By Carl Fox

In No Trump contracts it is not often that all of the honors in the dangerous suit are in the same opposition hand. In some cases it is possible to take advantage of this fact. A neat play is that of forcing the opposition to either block their suit or give you an extra trick in it, in their efforts to unblock.

S A-8
H K-Q-9-5
D A-J-7-2
C Q-9-5
N
S
S 10-9-6-4
H 7-4
D K-Q-8-3
C A-K-3

Contract—Three No Trump.
North-South vulnerable.

During the bidding West interjected a Spade bid, and his opening lead is the Spade 3. From his bid he is virtually marked with the Heart Ace. How to make the bid?

Eight immediate tricks are available, with the ninth in hearts. The danger is that West, when let in with the Heart Ace, will be able to run enough Spade tricks to defeat the contract. This is possible only if he holds five Spades, a probable situation. But East must hold one honor in the suit, or West would have led the King.

Normally the play is to duck the opening lead in thinly covered suit. But let's see what happens in this case. East will win with his honor, and return a small Spade, dropping the Ace. Then, when West gets in with the Heart Ace he will be able to take both his Spade honors and run his last card in the suit, setting the contract. This will never do!

If, however, you play the Ace to the opening lead, East must either discard his honor to avoid blocking the suit, thus promoting your 10 to a stopper, or else hold it, forcing his partner to draw it later, again promoting your ten, or block the suit later. Whatever he does you can safe-

(Continued on Page 4)

CAMPUS BREWINS

We were impressed by the large number of faculty members at the Drama Club's third presentation of "Pure as the Driven Snow" Friday. (It is rumored that Mrs. DuBridge recommended it highly.) The production may be considered a success if for no other reason than its being an excuse for the subsequent party hurled by cast members E.Z. Pickens and Purity (But-Like-The-Snow-She-Too-Has-Drifted) Dean. Notable for his operating suave was L. Longfellow, who spent most of the morning on the porch indulging in oral pleasures with a young lady whom our ever-diligent eye had hitherto missed. The early evening air was enlivened by a choir of grad students singing odes to the Division of Chemistry, and our heart was gratified to note the reverence in which it was held. Somewhat later we were amazed by one Ted Harrold (grad, biol.) who in spite of his condition improvised for one half hour in the style of Debussy. We want to hear more of him. We left, wondering why such parties have to end, just as there was talk of washing the glassware.

D.P.'s Host Frolic

Saturday morning dawned malevolently over Dabney House and rained all over the scheduled Grass Frolic. Prospects for the party looked wet until the day was brightened by Hall and Hendrickson (formerly of Blacker) who magnanimously opened their Green Street establishment (call SY. 3-0542 for reservations) to the Dabney men in spite of the fact that said men insisted on bringing with them a keg of (). Our gentle tsk tsk goes to Schimpfs-las Sydna who spent the first half of the party shopping for an Easter appendage (she couldn't find one in Claremont). We also have a sigh of compassion for classmate Angella, whose date didn't want to play bridge. Our hope remains unshaken, though; these girls are only freshmen—perhaps another 3 years at Scripps will mature their social judgment.

Exodus

Friday night also saw several

caravans of Fleming cars on an exodus to the Helen Mathewson oasis at UCLA, for purposes of an exchange dance. As the stary-eyed daughters of Helen swept across the parquet, enveloping the visitors in their fatal charm, the unsuspecting athletes found themselves somehow outnumbered by what appeared to be herds of Dabney frosh.

Once under way, however, the evening proved fruitful in miscellanea. The celebrated Pakistani Don Juan, Ghauri, easily tricked a dewy-eyed pigeon into listening to one of the tales from Arabian Nights, which she did with such enthusiasm that they remained undisturbed all evening. Frosh Forgy, notorious for a previous attachment to a certain Diane in Buffalo, displayed considerable conservatism by dancing all night with—of all things—a Diana.

A hapless Howie Mower is reported to have been thwarted in his gallant pursuits by one of Eschner's Santa Monica cronies, alas twice his (Howie's) size. John Morrison, on the other hand, raised many an eyebrow by boasting of having established a more than passing acquaintance with a damsel yclept Cherie who lives by herself on Sunset Boulevard—no comment. Al Eschner appeared with his kid brother, in no respect his inferior. Craftily waiting a lull in the proceedings, they suddenly produced ukuleles and treated a squirming audience to various ditties. This aroused much latent emotion, and the more monastic element, led by an ever-dissatisfied John Rogers, was later seen to make good their escape through the powder-room, even refusing to take advantage of the proffered coffee and ice

The California Tech

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

California Institute of Technology
1201 East California Street, Pasadena, Cal.
Subscription rates: \$1.50 per year.

Entered as second-class matter Nov. 22, 1947, at the Post Office in Pasadena, California, under the Act of March 3, 1879.
Offices: Lower Fleming
Telephone: SYcamore 6-7121 Ext. 180
Bob Kurland, Editor

EDITORIAL STAFF

Managing Editor.....Charlie Steese
News Editors.....Duane Marshall,
Bud LeTourneau
Sports Editor.....Jesse Weil
Feature Editor.....Bill Whitney

News Staff.....Tom Benson, Tony Malanoski, Duane Marshall, Ulrich Merten, Lawrence Starr, Budd LeTourneau, Ed Pyatt, Stan Groner, Al Eschner, Bob Madden, Ed Worrell, Scott Lynn
Special Writers.....Dave Banks, Bob Crichton, Carl Fox, Oly Gardner, Jon Goerke, Bill Whitney, John Rogers, Bob Stanaway

Sports Staff.....Bob Davis, John Elliott, Pete Mason, Phil Orville, Don Tautz, Perry Vartanian, Jesse Weil, Ed Welch
Copy Staff.....Barney Engholm, Chief; Charles Benjamin, Fred Drury
Photographers.....John Boppart, Chief; George Stranahan, Bob Parnes

BUSINESS STAFF

Manager.....Bill Bradley
Circulation Manager.....Chuck Walker
Business Staff.....Charlie Steese

cream.

Fleming's Finest, Hammond, Bennett, Smoot, and Moffat, saffaring to the La Jolla Beach Club over the weekend dragged along the hitherto unsullied Bill Cox. It is with great mortification that the Beak has to report how, in the course of the ensuing carousal, the noble Cox tumbled from his pinnacle of purity. Fortunately, his head had again assumed normal dimensions by the time of the cap-and-gown fittings on Monday night. Talking of fallen idols, prexy Merten was also reported to have been more than gay during the greater part of Saturday.

(Continued on Page 4)



Clothes Need Cleaning?

Have Your Clothes Ready
Monday Evening When Our
Representative Will Call

Ricketts—John Moss
Fleming—Jack Moffat
Dabney—Ed Worrell
Blacker—Pete Howell

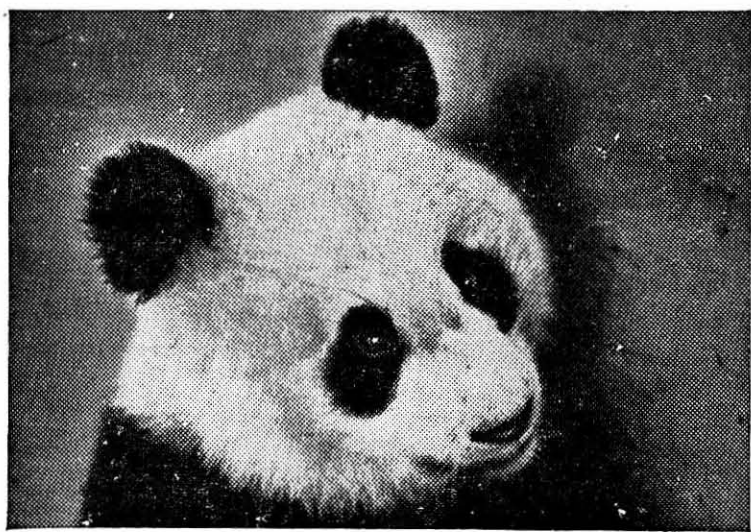
SAVETZ
CLEANERS and TAILORS

"There are plenty other women who can remember to put enough Angostura in my Old Fashioneds!"

ANGOSTURA
AROMATIC BITTERS

MAKES BETTER DRINKS

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



All panda-monium just broke loose for this little guy with the hairy ears and two black eyes. Somebody snatched his Wildroot Cream-Oil! You may not be a panda—but why not see what Wildroot Cream-Oil can do? Just a little bit grooms your hair neatly and naturally without that plastered-down look. Relieves annoying dryness and removes loose, ugly dandruff. And Wildroot Cream-Oil helps you pass the Fingernail Test! It's non-alcoholic... contains soothing Lanolin. Get a tube or bottle of Wildroot Cream-Oil hair tonic at any drug or toilet goods counter today. And always ask your barber for a professional application. In case there's a panda in your house—keep some Wildroot Cream-Oil handa for him!

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

Wildroot Company, Inc., Buffalo 11, N. Y.



Smartest Under The Sun!

ARROW Sports Shirts



\$3.65 up

You'll find your Arrow sports shirts favorites here. Take your pick from our fine collection of plaids and checks! solid colors! gabardines!—Every shirt washable! Come in TODAY!

HOTALING'S

TWO STORES FOR MEN
54 E. COLORADO ST.

921 CLOSED DURING REMODELING

FOR ARROW UNIVERSITY STYLES



COMFORTABLE! GOOD LOOKING!
ARROW

"Dude Ranch" Sports Shirts

Short Sleeves \$4.50 Long Sleeves \$5

For that next square dance, for picnics, for sitting in the bleachers, you'll be most comfortable, and look your casual best in one of Arrow's smart "Dude Ranch" shirts. Bold plaids and checks in sturdy, washable cotton. They're honeys!

ARROW SHIRTS & TIES

UNDERWEAR • HANDKERCHIEFS • SPORTS SHIRTS

Sagehens Down Beavers; Errors Lead To Defeat

Nine errors were the downfall of Tech diamondmen in their loss to Pomona in the ten inning fracas played on our field Monday. In this postponed game, Beaver sluggers paced the visitors throughout but donated enough free trips to bestow upon them a 5 to 3 victory.

Rookie Norm Gray pitched a marvelous game all the way, finding trouble only in the tenth frame when two foe sticks found pay dirt and sparked the Sagehens' two run rally. Besides arming his way to distinction, the lanky right hander batted a rousing five hundred by collecting a double and a single.

Snider Leads Bats

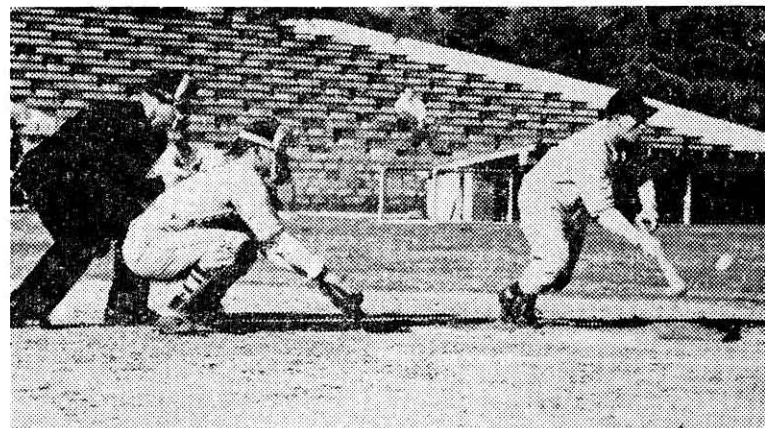
Bert Snider, Sophomore left fielder, lead the hitting with three, a double and a pair of singles. Beltin' Bert accounted for our third run with his double. Babe Karasawa and Walt Pfeiffer finished out Tech's hitting with one apiece.

Men on the way to P.E. class should not cross tournament Park during the course of a baseball game. Instead, please walk around to prevent interfering with the players—thus delaying the game.

Two in Sixth

Stallkamp was hit by a pitched ball to lead off Tech's sixth inning followed by a sharp single by Snider. Dave Koons drove a hard grounder to Salmon at sec-

Pfeiffer Bunts Toward Third



Backstop Walt Pfeiffer lays down a bunt on the third base line in the fourth inning of last Monday's Beaver-Sagehen tussle. Tech errored their way to a ten inning loss by a 5 to 3 count.

ond, who nipped Snider and gave Koons life on first with Stallkamp moving to third. Duane Neverman blasted a bounding ball through the legs of the short stop, scoring the runners on second and third. The third score spree for Tech came in the eighth inning when Snider lead off with a double and (Continued on Page 4)

Beaver Sports

Mermen Lose To PCC at PCC

Although the Beaver natators took two-thirds of the first places against PCC last Monday afternoon, they were still edged by one point, 37-38. The Bulldogs, just back from their Easter vacation, were happy to maintain their winning streak. They appear headed for their conference championship.

No Depth

What looked to be a squad with plenty of depth before the season, has turned out rather poor in garnering second and third places. Only one second and two third places fell to us last Monday.

As usual, Von Herzen and Libbey came through in the 220, 100 breast, 50, and 100 respectively. Other first places were taken by Hall in the 100 back, and the team of Barmore, Houser, Von Herzen and Libbey in the 400-yard free-style relay.

Tight Races

There were several close races in the meet, two of which involved Libbey and Krashaar of PCC. In both these races, the 50 and the 100, Dick managed to touch out his opponent. The best race of the day, however, was the free-style relay. The lead see-sawed back and forth as the first three swimmers did their 100 yards apiece. Again Libbey and Krashaar were pitted against each other, and again (Continued on Page 4)

Footballers

Coach LaBrucherie announces that there will be a meeting of all football candidates Monday, April 17 at 12:30 P.M. in Rm. 206 Dabney. Plans will be made for the spring football practices which start April 24. All men are urged to attend this important meeting.

At A Glance

TRACK— Caltech, 71 2/3; Pomona, 54 1/3. Caltech, 100 2/3; Pasadena Nazarene, 29 1/3. Pomona Frosh, 73; Caltech Frosh, 52.
BASEBALL— Pomona, 5; Caltech, 3. Caltech Frosh, 3; Pomona Frosh, 0.
SWIMMING— PCC, 38; Caltech, 37.
IH FOOTBALL— Dabney, 6; Felming, 0.

Tracksters Favored In Double Dual Meet

Track Squad Uses Water Wings To Subdue Sagehens; Nazarenes Lose

This Saturday Beaver Thinclads will meet Whittier and Redlands in what will be scored as two dual meets between Whittier and Caltech, and Redlands and Caltech. Time will be 1:30 p.m. for the field events and 2 p.m. for running events. Inasmuch as the team has been treated to large audiences at Oxy, they expect a good turnout on their home field.

Slightly Damp

Last Saturday saw the Beavers really live up to their name on one of the dampest fields this side of the Atlantic Ocean. There was some feeling among team members that we were in the Pomona swimming pool rather than on their field.

Our mudding abilities seemed to be better than Poomna's because we came out on the top end of a 71 2/3-54 1/3 score to win our first conference dual meet this year.

Poor Times

Because of the poor conditions times were not spectacular. Leading exception was Johnny Lewis, who threw the discus 138' 2 1/2" from a hastily built grass ring. This is the best throw for the Caltech team this season, and may even be the best in the conference. Other exceptions to the mud blight were John Noble's 164' 6 1/2" throw to win the javelin, Hal Tyson's 48' 3 3/8" toss in the shot, and Dwight Schroeder's 10.2 hundred. Dwight also took first in the 220 and seconds in the 220 lows and the broad jump to take high scoring honors with 16 pts. Out because of a bad leg, Pete Welsh of Pomona didn't give Dwight the expected competition in these events, nor did Roger Reinke, present 100-yd. conference record holder compete.

Beat Nazarenes

The Tuesday previous Caltech met Pasadena Nazarene in a practice meet. Despite the fact that Coach LaBrucherie pulled Oxy's trick of shifting men to other events, Caltech rolled up an impressive 100 2/3-29 1/3 victory. No spectacular marks were set though Caltech took every event except the high jump; sweeping four in the process.

Remember! Two track meets for the price of one this Saturday at Tournament Park.

100 yd. dash—10.2, Schroeder (CT), Nerling (P), McWilliams (P).
220 yd. dash—23.5, Schroeder (CT), Nerling (P), Wheeler (P).
440 yd. dash—52.2, Deis (P), Snyder (P), Wheeler (P).
880 yd. dash—2:07.0, French (P), Parnes (CT), Jackson (P).
1 mile run—4:41.6, Linaweaver (P), Mason (CT), Brown (P).
2 mile run—10:34.0, Linaweaver (P), Mason (CT), Brown (P).
120 yd. high hurdles—16.1, French (P), Ward (CT), Irwin (CT).
220 yd. low hurdles—25.9, French (P), Schroeder (CT), Irwin (CT).
Shot put—48' 3 3/8", Tyson (CT), Lewis (CT), Swift (P).
Discus—138' 2 1/2", Lewis (CT), Tyson (CT), Colbath (P).
Javelin—161' 6 1/2", Noble (CT), McCall (P), Woody (CT).
Broad Jump—20' 10 1/2", Waid (CT), Schroeder (CT), McWilliams (P).
High Jump—5' 6 1/2", Waid (CT), tie Hastings (P), Soule (CT), Waid (CT).
Pole vault—11' 6", Waid (CT), tie Tautz (CT), Nidered (P).
1 mile relay—not run.
Final score—Caltech, 71 2/3; Pomona, 54 1/3.

Frosh Sports Roundup by Perry Vartanian

The Frosh baseball nine broke into the win column last week by downing the Pomona Frosh, 3-0. John Winslow was the winning pitcher for the Beavers, going the route and being credited with nine strikeouts against one base on balls and four hits. He also scored one run and two of Caltech's six hits. Terry Sanders got a double and John Gee, Ron Willens and Bill Connor got singles. Coach MacDonald's men had but three errors chalked up against them. Winslow, Fritz Thurstone and Gee scored the runs.

Runners Drown

Our Beavers were literally drowned at Pomona on Saturday as the little Sagehens ran away with the Frosh track meet, 73-52. Techmen getting first places were John Winslow in the high jump, Bob Kubik in the discus, Jim Kliegel in both hurdles, and Al Johnson in the 880. Second-place winners were Dave Stevens, Doug Walker, Neil Stefanides, Gene Muehlberger, George Moore and Al Teague. I think we may say that track conditions were a bit damp Saturday, slowing everything down.

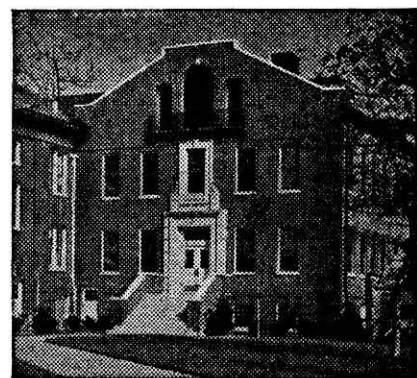
What's Coming

Tomorrow the Frosh trackmen will meet Whittier and Redlands at Tournament Park. Starting time will be 4:00 p.m. Varsity and Frosh swimming teams will travel to Pomona Friday while (Continued on Page 4)

Green Tops Red In Touch Football

The Dabney Green downed the Fleming Red in an interhouse football contest Monday by a 6-0 count. A forty yard run by Tom Paulson left the ball on the two and Drinkward ran it around right end for the counter.

The Darbs sparkled on defense and gave the Reds considerable trouble by blocking most of their kicks. It was Dabney all the way, as Fleming just couldn't get rolling.

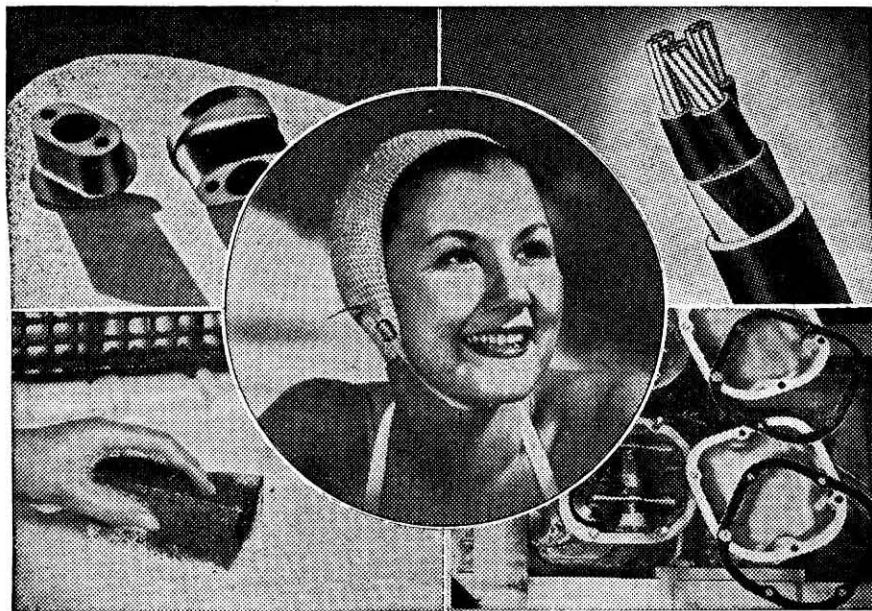


Jackson Laboratory, Deepwater, N. J., one of Du Pont's laboratories which participated in the development of Neoprene Type W.

THE DU PONT DIGEST

With the development of Neoprene Type W

Science Again Outpoints Nature



Motor mountings, wire and cable, sponge, gaskets, swim caps are among possible uses for Du Pont's new Neoprene Type W.

NEOPRENE—the chloroprene rubber produced by Du Pont research—has long outpointed natural rubber on many counts. Because of its greater resistance to chemicals, flame, heat, sunlight, weathering, oxidation, oils, grease and abrasion, it is widely used in such products as industrial hose, conveyor and transmission belts, insulated wire and cable, hospital sheeting, gloves and automotive parts.

Until recently, however, certain natural rubber compositions couldn't be beaten when it came to "permanent set" characteristics. Released from the pressure of prolonged deformation, they returned more nearly to their original shape.

This recovery factor is important to some manufacturers, particularly the people who make gaskets, seals,

diaphragms, sheet packing, soft rolls and vibration-dampening devices.

NEW PRODUCT NEEDED

Much as they wanted to use neoprene because of its other superiorities, they often needed more resistance to permanent deformation than it afforded. So they used natural rubber, but were never quite satisfied with the way it resisted deterioration in severe service.

Du Pont scientists went to work to solve the problem. Skilled research chemists, physicists, engineers and others pooled their efforts. The result was a new polymer named Neoprene Type W.

NEOPRENE TYPE W INTRODUCED

Chemically, the new neoprene is quite similar to previous types. But

its molecular structure has been changed so that the mechanical properties of its compositions are more nearly like those of rubber. With Neoprene Type W, it is possible to produce vibration-dampening devices that are not only highly resistant to oils, heat, grease and sunlight, but recover better than rubber from prolonged pressure.

Neoprene Type W also provides the basis for compositions that have a low modulus of elasticity—are easy to stretch. More attractive colors are possible. Soon it may appear in such articles as swim caps, where bright colors and head comfort are important. The brighter-colored compositions should also appeal to makers of appliance cords, coasters, sink mats, stove mats and toys.

In developing the uses of Neoprene Type W, Du Pont is working with hundreds of manufacturers and distributors. Once again a "partnership" of big and small businesses will cooperate to give Americans the benefits of an advance in science.

SEND FOR "The Story of Coal, Air and Water," a 28-page illustrated booklet describing the chemical ingenuity behind the development of neoprene, nylon, and other products. For your free copy, write to the Du Pont Company, 2503 Nemours Bldg., Wilmington, Delaware.



BETTER THINGS FOR BETTER LIVING ... THROUGH CHEMISTRY

Great Dramatic Entertainment—Tune in "Cavalcade of America" Tuesday Nights, NBC Coast to Coast

OAK KNOLL

Cleaners and Laundry

ONE DAY Cleaning Service

AT REQUEST NO EXTRA CHARGE

FOUR-DAY LAUNDRY
902 East California Street
(4 Doors East of Lake)

SY. 3-6704

Next Door to Caltech Barber Shop

PASADENA BOWLING COURTS

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

WHEN YOU ARE HUNGRY
WHEN YOU ARE THIRSTY
OR
WHEN YOU JUST NEED RELAXATION
IT'S THE

SKIP INN

Beer - Plate Lunches
1352 E. WALNUT
Open Till 2 A.M.

YOUR COLLEGE RECORD SHOP

Headquarters for the best selections in

RECORDS - RADIOS TELEVISION

L. C. TAYLOR CO.

145 N. Lake Sy. 2-5107

Open Evenings

ASSEMBLY

(Continued from Page 1) based on the number twenty and its powers rather than on our tens system.

The Roman arch, however, was a little stronger than the Mayan arch, but many shots of ruined Mayan structures with the arch still intact give proof of their strength.

The location of the ruins is a delicate matter; often they are so well hidden by the jungles that astrofives have to be taken on them in order to relocate them.

Mayan architecture included many structures over one hundred feet tall. Over most of the structures was a very ornate type of sculpture showing the skill and mastery the Mayans possessed in that form of art.

Mayan religion was one which used the polytheistic system. There were the usual gods of rain and corn and a host of other things.

The descendants of the Mayans today are a very backward people still living a very primitive life.

Only about 200 of the Mayan descendants are left.

FROSH SPORTS ROUNDUP

(Continued from Page 3) on Saturday Pomona's netmen will come to Caltech for a match against our Frosh. At 2:15 on Saturday the baseball nine will make its bid for a second victory as it meets Redlands here.

SMOOTH The lines are uniform in weight and tone because the clay and graphite in Venus Drawing Pencils are blended evenly in the Colloidal* process. STRONG Venus Drawing Pencils are Pressure-Proofed* which means that the lead is bonded to the wood.

ACCURATE Your work is easier with Venus Drawing Pencils. Scientifically tested at each step of manufacture and uniformly graded in all 17 degrees. For better results, use Venus Drawing Pencils with the green crackle finish. Buy them at your College Store.

SEND FOR THIS HELPFUL INSTRUCTION BOOKLET! Try Venus on your drawing board! American Pencil Company, Hoboken, New Jersey

JOB SURVEY

(Continued from Page 1) great deal of weight by most of the companies in the hiring of applicants. It is considered desirable that a man be able to express himself clearly in speaking and writing, but no other work in the Humanities was deemed necessary.

More Lab, Machine Shop The present general training that Caltech gives in the sciences and engineering is considered adequate except in one respect:

Two small companies feel the engineer just out of college should have more practical experience with machinery and instruments and more laboratory know-how; to this end they advise more engineering laboratory courses in the undergraduate curriculum, and a course in machine-shop practice which, it is felt, would enable engineers to get a better relationship between design and production.

Personal Interview

There is disagreement as to how important the personal interview is in the choosing of employees from among a number of candidates. Some companies are convinced that they are able to pick good men with reasonable accuracy by means of judgments based on the personal interviews.

Interview Preparation Nevertheless, the interview is of importance, and the applicant should prepare himself for it. He should be neat in appearance and well-mannered. He should not be too forward, but he should have self-confidence, and give all his qualifications.

The interviewee should have

MERMEN LOSE

(Continued from Page 3) Libbey was the victor, posting the very creditable time of 56.5 seconds.

To Pomona This Friday the Engineers visit the Pomona tank. The Sagehens have a 2-and-2 record, having defeated Whittier and Redlands, but lost twice to Oxy. Next Tuesday we are host to Oxy ourselves.

Statistics: 300 Medley—PCC (Kendall, Sebenius, O'Brien); CIT; 3m. 45s. 220 Free—Von Herzen (CIT), Scott (PCC), Houser (CIT), 2m. 35.9s. 50 Free—Libbey (CIT), Krashaar (PCC), Case (PCC), 25.6s. Diving—Lang (PCC), Florian (PCC), Reineke (CIT). 100 Free—Libbey (CIT), Krashaar (PCC), Case (PCC), 59.2s. 100 Back—Hall (CIT), Kendall (PCC), Schofield (PCC), 1m. 15s. 100 Breast—Von Herzen (CIT), Sebenius (PCC), Melvin (PCC), 1m. 16.8s. 440 Free—Scott (PCC), Houser (CIT), Lantz (PCC), 6m. 08.4s. 440 Relay—CIT (Barmore, Houser, Von Herzen, Libbey); PCC; 4m. 07s. Final score: PCC, 38; CIT, 37.

WHO DEALT THIS MESS

(Continued from Page 2) ly lead Hearts, setting up the ninth, and contract fulfilling trick. It may be noticed that, if East elects to hold his honor rather than throw it under the Ace, this permits you to make an over-trick. Plays of this nature are practically guaranteed to produce considerable moaning from the opposition. What more can any Declarer ask?

ready a sheet summarizing his educational and work experience ready for the interviewer; this sheet should contain (1) a list of courses taken with a short description of the material covered, (2) previous work experience, (3) hobbies, (4) interests, (5) technical organization membership; it should be in the form of a business letter, typewritten, not mimeographed.

Above all almost all industries interviewed state the job applicant should be sincere, neat, and sell himself in a pleasant manner, during the interview.

SAGEHENS DOWN BEAVERS ON THE RECORD

(Continued from Page 3) went to third when Koons grounded out second to first. Snider came home easily when Neverman knocked a long fly to center, tying up the ball game 3 to 3.

Gray's credit for seven strikeouts can be accredited mainly to his vicious slow curve and very good control. He issued only three passes by way of walks.

Redmen Next The Preislermen journey to far away Redlands next Saturday to take on the Bulldogs. The Redlands nine is expected to have a somewhat better team than the Sagehens, but with a little glue, a little more bunched hitting, and a bit of jinx shaking, the Beavers will give them a game to remember.

Box Score: Caltech Player AB R H PO E Karasawa, 3b..... 4 0 1 1 0 Smith, J., cf..... 4 0 0 1 0 Pfeiffer, c..... 5 0 1 8 2 Stallkamp, ss..... 4 1 0 3 3 Snider, lf..... 5 1 3 2 0 Koons, rf..... 4 1 0 1 0 Neverman, 1b..... 3 0 0 7 3 Johnson, 2b..... 4 0 0 4 1 Gray, p..... 4 0 2 3 0 *Monro..... 1 0 0 0 0 Totals.....37 3 7 30 9 *Batted for Johnson in the 10th.

Pomona Player AB R H PO E Mathews, ss..... 4 0 0 1 0 Pinther, ss..... 1 0 0 0 0 Salmon, 2b..... 5 1 1 3 2 Piper, 3b..... 4 2 3 3 1 Deleo, cf..... 5 0 0 1 0 Greene, 1b..... 3 2 1 15 0 Miller, lf..... 3 0 1 2 0 Lloyd, rf..... 2 0 0 0 0 Allen, rf..... 3 0 0 1 0 Rathbun, c..... 5 0 0 4 0 Voorhis, p..... 4 0 1 0 0 Totals.....39 5 7 30 3

"Will this suit hold its shape?" "It's 100 per cent virgin wool, sir." "I'm not interested in the morals of the sheep—I asked you if this suit will hold its shape!"

TOASTMASTERS

(Continued from Page 1) John Noble, vice president; Bob Connelly, secretary-treasurer; John Lewis, Alex Dessler, Ed Welch, Kent Stratton, Fred Wood, Tom Coons, Robin Williamson, Stan Boicourt, Walt Pfeiffer, Mal Hickey, Sonny Crump, Howard Preston, and Paul McCready.

the Kirsten Flagstad recital at the Pasadena Civic Auditorium. An interesting attraction which might be mentioned is a presentation of Schubert's Mass No. 6 in E Flat at Royce Hall, UCLA, 8:30 p.m. tomorrow night. Schubert's choral works are so little known that an opportunity like this will be hard for devotees of music for chorus to miss.

CAMPUS BREWINS

(Continued from Page 2) Genesis It has come to our attention that a copy of one of those books is surreptitiously being read by our young Eastern girlfriends. Story has it that a Tech man (known to this source only as "Hookie") gave his girl a copy of "The Ideal Marriage" by van de Velde. We are pleased to hear that reading this text has changed the ideas of at least one of the young maidens. Bravo. We suggest an addition to the required reading list.

Our wonderment wanders to Cece Drinkward, formerly of Westwood; now of Claremont, city of bright lights and good times. An all-time bemoaner of the burning of dollar bills in his gas tank, he has attracted our attention by his silence after two round trips to Laguna in one week. We fear for Cece.

Ecclesiastes

The lambs of Dabney were taken into the fold Monday by newly robed Pope Whitney, who gave the house its new College headed by Cardinal Richard Brewer, henceforth to be known by a more contracted appellation. After dinner the lambs, not so meek, officiated in the belated baptism of His Holiness, along with Wood and Welch.

Peter Knoepfler enhanced his reputation of "a new date every weekend" by making a blind date with the Huntington Hospital nurses' social chairman while bartering for girls for Dabney's coming H.H. exchange. We recommend a study of Pete's techniques to all those who bemoan the lack of dates here.

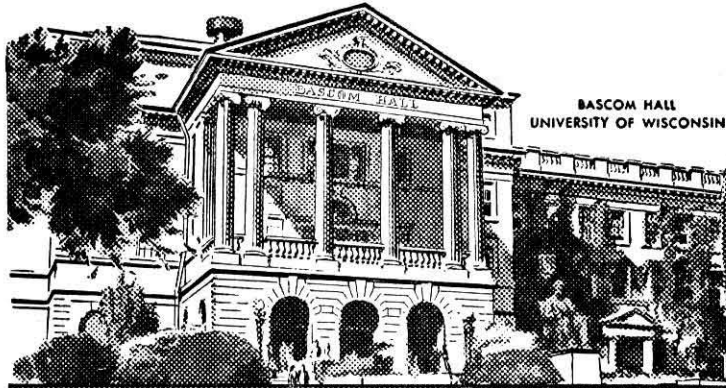
But beyond this action, spirits ebbed, and midnight found the Beak's taillights slowly receding into the gray mist.

At WISCONSIN and Colleges and Universities throughout the country CHESTERFIELD is the largest-selling cigarette.*

DENNIS MORGAN Famous Wisconsin Alumnus, says: "Chesterfield satisfies because it's Milder. It's my cigarette."

Dennis Morgan

CO-STARRING IN "PERFECT STRANGERS" A WARNER BROS. PRODUCTION



Always Buy CHESTERFIELD

They're Milder! They're TOPS! - IN AMERICA'S COLLEGES WITH THE TOP MEN IN SPORTS WITH THE HOLLYWOOD STARS

