

California Institute of Technology
Thursday, January 12, 1950

No. 12

Volume LI.

Talk To Cover Sales Aspects

The Alumni Placement Discussion Series will resume Tuesday, January 17, at Blacker House at the usual time of 7:15 p.m. Mr. Nicholas A. D'Arcy, Jr., the guest speaker, will examine the interesting subject of "Sales Engineering." Thus the trend of discussing the more specific fields of placement will continue.

Varied Experience

Mr. D'Arcy is a sales engineer handling a variety of types of equipment for industrial applications. After his graduation from Caltech in 1929, he became a partner in the Charles W. Center Co. in charge of sales engineering, and later attained the position of manager of the Sales Office for the Emsco Derrick and Equipment Co. in Los Angeles. He is now operating his own firm.

Thorough Coverage

The exact nature of sales engineering, the personal abilities necessary for employment in this field, the manner in which it may be entered, the type of engineering involved, and the prospective opportunities will all be included in Mr. D'Arcy's promising lecture.

Why Did This Bridge Fail?

The "Tacoma Camera Shop" of Washington played host to more than sixty people as its film, "Tacoma Narrows Bridge Failure," was shown at the ASCE meeting last Monday.

Why It Failed

The film demonstrated what happens when aerodynamic effects on structures are not properly considered. A slight wind blowing at a small angle to the horizontal induced an extreme torsional effect combined with nodes which often reached as many as fifty in number. For further study the University of Washington constructed a 1/100 scale model which undulated at ten times the speed of its prototype. Unfortunately the large bridge collapsed only four months after its completion during a 42 mile an hour wind. This dramatic collapse was completely covered by the unusual pictures.

Ottestad Wins Contest

Max Kreston, president of the student ASCE, announced that Jack Ottestad has been selected as Caltech's representative in the preliminary stages of the ASCE student paper contest to take place at USC.

Next Monday the student chapter will show a 45 minute color film on the "Golden Gate Bridge." All those interested are invited.

Rowdies Slate Oxy Exchange

Ricketts' second term social programme gets off to a rousing start this Friday evening with an Oxy exchange (only girls will be invited, however). The couples will dance in Ricketts' lounge to the soft though scratchy strains of the best in recorded music; delicious refreshments will make the event complete. This hop provides Rowdies a glorious opportunity to avoid the effects of the smudge pots (no personal references intended) toward the East this weekend.

Open House!

Saturday night, following the big casaba show at the P.C.C. (Continued on Page 4)

Campus Calendar

TUESDAY, JANUARY 12
12:00 Throop Club Meeting
7:45 Dancing Class in Culbertson

FRIDAY, JANUARY 13
11:00 Biology Club Meeting, 118K
Blacker House Skating Party
Fleming House Exchange Dance
Dabney Browning Exchange Dance
Throop Club Exchange Dance

SATURDAY, JANUARY 14
7:00 Basketball, Frosh vs. Whittier at Oxy
7:30 Basketball Varsity vs. Whittier at P.C.C. Post-game dance in houses

MONDAY, JANUARY 16
8:47 Tech Staff Clambake

TUESDAY, JANUARY 17
7:15 Alumni Placement Lecture Series in Blacker House

WEDNESDAY, JANUARY 18
7:30 Orchestra Rehearsal in Culbertson
9:00 Glee Club Rehearsal in Throop Club

First Beaver Meeting of '50

The Beavers gathered at the training table last Tuesday noon for their first meeting of the New Year, and in thirty minutes an unusually large agenda was disposed of.

Constitution Amended

An amendment to the constitution provided for election of new members to the Beavers at the first meeting of the third term to be held at a faculty member's house. A committee representing each House and Off-Campus was chosen at the group to nominate the new members at the end of this term. Further speaking assignments in the Beaver sponsored "talks to local high schools about Caltech" were made.

Entertainment Calendar

The majority of the noon discussion centered about the pros and cons of some sort of calendar to be made available to the student body and which would contain current data as to "what's doing" in Pasadena. This seemed particularly pertinent as the number of cars owned per Caltech man decreases yearly, placing increased emphasis on the availability of purely local entertainment.

The meeting adjourned with the selection of a committee to investigate the proposed calendar.

Beaver Casabamen Face Poets In Saturday Tilt

Shy Five In Initial Home Contest

After Dropping Opener to Redlands

At 7:30 Saturday night a spirited five will be gunning for last year's SCIC champions in PCC gym. Coach Shy's ball club, fresh from a severe defeat at the hands of Redlands, don home jerseys to battle Whittier in a game that promises to be a thriller.

Deciding

Beavers are out for the kill in the contest that has high possibilities of determining the second wrung when the final tally is

in. With a good five days of practice since the Bulldog encounter, local hoopmen shall attempt to bury the effects of the idle holidays and give the Poets a game they won't soon forget.

Outlook

In our no-conference tussels we've won two while dropping five. In total points we are within 10 of our opponents and with the predominance of depth, height and speed this, our second conference game, stands a good chance of being a winner.

Whittier's past record shows defeats to Chico State (47-39) and to California Aggies (67-61), which, while not decisive, make us feel better when we saw

(Continued on Page 3)

Seminar In Sound Offered

Arise ye lovers of music, ye builders of multitudinous audio amplifiers! Apply science to your endeavors! A sound seminar is now being given under the direction of John Scott Campbell, illustrious pedagogue of the EE department. The course, seminar in Sound (EE 200), offers from two to four units to the industrious student.

Subjects Offered

Prospective subjects for the following weeks are:

Tone production in instruments

Microphones

Loudspeakers

Audio amplifiers

Optical and magnetic recording

Disk recording and processing

Architectural acoustics

Musical scales and harmony

Several men particularly qualified in their fields have tentatively accepted invitations to speak on the above subjects. Among them are Lauris Jones, familiar musician on campus, Knudson, the famed acoustical engineer, and engineers from Altec Lansing and the Olson Company are definitely scheduled. To complete the list it is hoped that Arnold Schoenberg will be the speaker for the final topic.

Next Meeting

The next meeting is scheduled for Tuesday at 1600 in a room to be designated by a notice posted on the bulletin board in Bridge. All students are eligible for the course. Those interested should register immediately.

Darbs Dance With Louise

Aided by recruits from the other houses, Dabney men last Friday transported themselves past the wall of defiance to Harwood Hall at Pomona. Upon arrival they were directed to a narrow door through which a feminine voice whispered seductively: "Caltech men?" On affirmative answer the bemused group was admitted one by one into a large lounge where a receiving line of twenty lovelies just out of George White's "Scandals" welcomed them. It developed, upon introduction, that each of these "Flapper era maiden" was named Louise Handford. However, several hours of close scrutiny by a few erudite members of the group proved that this was NOT SO in all (Continued on Page 4)

Sportsmanship

Recently the deans and athletic directors of all the schools in our conference received a letter from the governing body of the conference pointing to the poor sportsmanship displayed by student spectators at conference games. Of course, most of us at Tech are aware of this situation already (Remember last basketball season?), but here's proof that other people notice these things too.

It would be easy to write a page and a half on the various types of poor sportsmanship but the two which we at Tech are most often guilty of are: 1) razzing players on the opposing team, and 2) boozing officials.

The first of these is particularly undesirable in our conference because it encourages ill-feeling between members of the opposing teams. Look around the country and you'll have a tough time finding a conference with better sportsmanship among team members. It certainly doesn't behoove us, as spectators, to do anything that will destroy this attitude.

It's often pretty hard, when we're sitting in the audience, to realize that the officials are closer to the game and know the rules better than we do. When we boo the officials, we're not criticizing them, we're yelling at ourselves. Every official on the conference's approved list has been okayed by Caltech. He's got to be good, or the conference schools wouldn't have approved him unanimously. He may call one wrong occasionally, but chances are that when we disagree with an official, he's right and we're wrong about ninety percent of the time.

This Saturday is our first home game and our first chance to show that Techmen can get along without razzing their opponents and boozing the officials. To date our school and conference have a reputation for top quality sportsmanship. That reputation is now at stake.

Ulrich Merten

Big T Photos

Big T pictures are scheduled for the following groups next week Monday through Friday. It is essential that all groups be at the place designated exactly on time, if this schedule is to be followed successfully. Officers of these organizations are requested to notify all members and faculty advisors affected. No special dress required. Please be on time!

Monday, January 16

SAE—12:30 in the Mechanical Engineering Laboratory and Shop (not in ME building).

ASME—12:45 in the Mechanical Engineering Laboratory and Shop (not in ME building).

Tuesday, January 17

ASCE—12:30 at EAST entrance of Throop Hall.

IRE—12:45 in 4A Throop.

Wednesday, January 18

AIEE—12:30 in Higg Potential Research Lab. (next to Kellogg).

Math Club—12:45 in Analog Computing Room 3rd floor West Bridge.

Thursday, January 19

Biology Club—12:30 Biology Library—Kerckhoff 2nd floor.

Physics Club—12:30, 101 Kellogg.

Friday, January 20

YMCA—12:30 YMCA Lounge.

of this research.

Tour

The open house consisted of a tour of the biology building showing the various phases of the work at Kerckhoff and a get together after the tour during which the department served coffee and doughnuts. There were ten guides in the tour who were grad students and instructors in the option. The coffee was served by the secretaries and female lab assistants of the department.

Bi 1 Students Tour Kerckhoff

The biology division held its annual open house for Biology I students in the Kerckhoff Laboratories. This open house was to acquaint the students with biology research going on at Caltech. Few of the students could not help but remark on the interesting and challenging nature

Lemmings Plan Postcard Dance

The Fleming house social program for second term, as announced by co-social chairmen "Pharaoh" Matzner and "Buya-Muntz" Klarfeld, should be successful. First on the program this Friday, is one of the famous Fleming postcard exchanges, to which 50 local girls have been invited. This will be followed by two more exchanges, one with the Pasadena Playhouse and one with the Helen Matheson Club, a UCLA Co-op. After this barrage of exchanges no Lemming should be left with an empty address book.

Three Major Events

There will be three major social events this term. The first will be a mammoth snow party on Feb. 4 and 5. Both skiers and non-skiers will find plenty of recreation, and the affair will be well chaperoned by Mr. and Mrs. Barry Schuyler. A colossal Valentine dance at the house with a fine band is on tap shortly after.

Final Dinner Dance

The term will be climaxed by a dinner dance at the Del Mar club in Santa Monica, to be sponsored jointly with Ricketts. The opportunity for having an event at such a fine place doesn't come often, and thanks are due to Jack Scantlin for his part in the arrangements.

After-Game Dances

Besides all this, you may be sure to see a large Fleming turnout at all the basketball games, and dances are scheduled in the lounge after all the home games.

Interview Schedule

WRIGHT PATTERSON AIR FORCE BASE, DAYTON, OHIO is announcing an examination for Junio. Scientist and Engineers grade GS-5 and GS-7 (or P-1 and P-2). Announcements containing full details may be found on the bulletin boards or in the Placement Office. **Closing Date: January 17, 1950.** This is not an interview.

JAN. 12—U. S. NAVAL ORDNANCE TEST STATION, Inyokern, California. GROUP DISCUSSION AND FILM TO BE SHOWN at 3:45 P.M. on Thursday, January 12th in the Lecture Hall at 155 ARMS, which will deal mainly with guided missile and rocket testing, but will also deal with the housing and laboratory facilities at Inyokern and the underwater ordnance installation at Morris Dam.

JAN. 13—U. S. NAVAL ORDNANCE TEST STATION, Inyokern, California. Mr. John B. Hamilton, a representative of the Personnel Office, along with three or four other professional representatives will interview PhD degree men ONLY in the following options: Chemistry, Mathematics, Physics, Electronics and in Aeronautical and Mechanical Engineering. **JAN. 13—BUREAU OF RECLAMATION, Boulder City, Nevada.** Mr. W. L. Phillips, Interviewer. Sophomore, Junior Senior and MS students in Civil Engineering eligible.

ON THE RECORD

Jasch Heifetz was the guest soloist last Thursday night at an otherwise undistinguished Los Angeles Philharmonic concert. His interpretation of the Brahms Violin Concerto was technically flawless. His intonation was nothing short of being remarkably exact; and he played with warmth and understanding.

The orchestral accompaniment, however, although adequate, was certainly not impressive. One had the feeling throughout that Heifetz was being burdened with the duties of conductor as well as soloist. There seemed to be general disagreement as to the tempi which were to be followed in the first and third movements, and Heifetz, who preferred a more lively pace than Wallenstein, won. The orchestra was unable to adjust itself accordingly, and consequently followed by a nearly constant phase displacement angle.

The Los Angeles premier of the music to Stravinsky's *Ophéus Ballet* was received rather indifferently by the capacity audience which had come to hear Heifetz. This was understandable, since a first hearing of a Stravinsky score is usually a difficult one. Ravel's "Alborado del Gracioso," a somewhat inane combination of various types of instrumental noise, was accorded much applause.

Records Worth Hearing

Music of the Gothic Period and Early Renaissance
Played on Ancient Instruments by the Viele Trio, with Du Bois Robinson, Tenor
Allegro Set AL14
Two LP's \$9.70

This is one of the most unusual sets we have heard for some time, and anyone interested in finding out what the music of Bach's predecessors sounded like should listen to it at his first opportunity.

The anthology consists of liturgical music, secular songs, and short instrumental pieces, performed on vielles, ancient pre-

The Evening Concert

KFAC 8-10 p.m.

Presented by the Southern California and Southern Counties Gas Companies

THURSDAY, JANUARY 12
Alceste—Overture, by Gluck. Berlin State Opera Orchestra conducted by Wilhelm Furtwangler (8).
Symphony No. 2 in C Major, by Schumann. Minneapolis Symphony Orchestra conducted by Dimitri Mitropoulos (37).
William Primrose, Violin.
Concerto in B Minor for Viola and Orchestra, by Handel. Symphony Orchestra conducted by Frieder Weissmann (15).

Serenade No. 1 in D Major, by Brahms. Symphony Orchestra conducted by Henry Swoboda (32).

Gothic Chaconne, by Dopper. Concertgebouw Orchestra of Amsterdam conducted by Willem Mengelberg (20).

FRIDAY, JANUARY 13
Weekly Feature Concert—A Night at the Ballet

Roussalka—Ballet Music, by Dargomitsky. London Philharmonic Orchestra conducted by Antal Dorati (8).

The Sleeping Beauty, by Tschaikovsky. Symphony Orchestra conducted by Leopold Stokowski (52).

Goyne—Ballet Suites 1 and 2, by Khatchaturian. Philharmonic-Symphony Orchestra of New York conducted by Efrem Kurtz (35).

Ballet Suite from Operas by Gluck. Boston "Pops" Orchestra conducted by Arthur Fiedler (17).

SATURDAY, JANUARY 14
The Rhinegold—Excerpts, by Wagner. The Philadelphia Orchestra conducted by Leopold Stokowski.

Siegfried, by Wagner. Famous Soloists, London Symphony Orchestra conducted by Albert Coates and Robert Heger. Vienna Philharmonic Orchestra conducted by Karl Alwin. Berlin State Opera Orchestra conducted by Leo Blech.

MONDAY, JANUARY 16
II Guarany—Overture, by Gomez. Boston "Pops" Orchestra conducted by Arthur Fiedler (17).

Symphony No. 4 in D Minor, by Schumann. The Cleveland Orchestra conducted by Georg Szell (24).

William Kapell, Pianist.

Concerto for Piano and Orchestra, by Khatchaturian. Boston Symphony Orchestra conducted by Serge Koussevitzky (34).

Don Quixote, by Richard Strauss. Gregor Piatigorsky, Violoncellist. Pittsburgh Symphony Orchestra conducted by Fritz Reiner (38).

Omphale's Spinning Wheel, by Saint-Saens. Royal Philharmonic Orchestra conducted by Sir Thomas Beecham (9).

TUESDAY, JANUARY 17

La Finta Giardiniera—Overture, by Mozart. Vienna Philharmonic Orchestra conducted by Bruno Walter (24).

Fantastic Symphony, by Berlioz. San Francisco Symphony Orchestra conducted by Pierre Monteux (36).

Serenade in C Major, by Tschaikovsky. The Philharmonic Orchestra conducted by Issai Dobrowen (28).

WEDNESDAY, JANUARY 18

Semiramide—Overture, by Rossini. Philharmonic-Symphony Orchestra of New York

cursors of the violin. The composers represented are such men as Josquin de Pres, Heinrich Isaac, Guillaume Machaut, and Guillaume Dufay, who, while their music is relatively unknown today, are still considered major figures in the historical development of music.

Some of the selections sound strange to our ears; they seem more modern than Renaissance. (Listen, for instance, to "Si j'aime" by Machaut.) The explanation for this lies partly in the fact that the Pre-Bach polyphonists have served as models for many of the modern composers, who have been utilizing early forms and devices quite freely. Another reason is that the pieces are performed on the natural scales, which we are not used to. One wonders how Bach's well-tempered scale must have sounded when he first introduced it to ears which were accustomed to the natural tones.

Another excellent sample selection is a Ricercare by Adrian Willaert. Both recording and performance are excellent throughout.

Symphony in E Flat Major Op. 4 No. 6, Johann Stamitz
The Orchestra of the State, Berlin, Walther Gmeindl, conducting
Deutsche Gramophone Gesellschaft (Released by the London Gramophone Corporation) Three 12" records \$8.93

This is another revival of early music. Stamitz was one of the prominent figures in the development of symphonic form, but very little of his music has survived. The E Flat Major Symphony recorded here is pleasant and sparkling, but it is doubtful that it would stand up after repeated hearings. The recording range is good, but the quality of reproduction is marred by consistent surface noise.

Concert Schedules
Jan. 12-13
Los Angeles Philharmonic Orchestra, Alfred Wallenstein, conducting. All Bach program. Brandenburg Concerto No. 3 in G Major
Cantata No. 78 (with Robert (Continued on Page 4)

Musical Masterpieces

KFAC 4-5 p.m. daily
2-5 p.m. Sunday

Presented by the Slavick Jewelry Company

THURSDAY, JANUARY 12
"Husitska" Overture—Dvorak. Arthur Fiedler and Boston "Pop" Orchestra

**Symphony No. 3 in F Major—Brahms. Eugen Jochum and Hamburg State Orchestra

*Norwegian Rhapsody—Lalo. Eugene Bigot and Paris Conservatory Orchestra

FRIDAY, JANUARY 13
Le Chausser Maudit—Franck. Desire Defauw and Chicago Symphony Orchestra

**Coppelia' Ballet Music—Delibes. Constant Lambert and Royal Opera House Orchestra of Covent Garden

Kikimora—Ladov. Sir Adrian Boult and The Hallé Orchestra

SATURDAY, JANUARY 14

"Paris" Overture—Mozart. Alfred Wallenstein and Sinfonietta

*Symphony Espagnole—Lalo. Yehudi Menuhin, Violinist. Jean Fournet and Orchestra Colonne

Two Nocturnes—Debussy. Eugene Ormandy and The Philadelphia Orchestra

MONDAY, JANUARY 16

"Carnaval" Overture—Glazounov. Leopold Stokowski and Symphony Orchestra

Sea Pictures—Elgar. Gladys Ripley, Soprano. George Weldon and The Philharmonia Orchestra

**Masquerade' Symphonic Suite—Khatchaturian. Leopold Stokowski and Philharmonic Symphony Orchestra of New York

SUNDAY, JANUARY 15

"Paris" Overture—Mozart. Alfred Wallenstein and Sinfonietta

**Symphony Espagnole—Lalo. Yehudi Menuhin, Violinist. Jean Fournet and Orchestra Colonne

Two Nocturnes—Debussy. Eugene Ormandy and The Philadelphia Orchestra

TUESDAY, JANUARY 17

Dance Suite—Prologue—Norton. Howard Hanson and Eastern-Rochester Symphony Orchestra

Symphony No. 1—Barber. Artur Rodzinski and Philharmonic Symphony Orchestra of New York

*Grand Canyon Suite—Grofe. Arturo Toscanini and N.B.C. Symphony Orchestra

Concerto Gross No. 1 in D Minor—Handel. Desire Defauw and Chicago Symphony Orchestra

WEDNESDAY, JANUARY 18

Alcina Suite—Handel. Wilhem Mengelberg and Philharmonic Symphony Orchestra of New York

*Symphony No. 36 in C Major "Linz"—Mozart. Sir Thomas Beecham and London Philharmonic Orchestra

*Variations on a Theme of Tschaikovsky—Arensky. Dr. Frank Black and N.B.C. String Symphony Orchestra

THURSDAY, JANUARY 19

La Finta Giardiniera—Overture, by Mozart. Vienna Philharmonic Orchestra conducted by Bruno Walter (24).

Fantastic Symphony, by Berlioz. San Francisco Symphony Orchestra conducted by Pierre Monteux (36).

Serenade in C Major, by Tschaikovsky. The Philharmonic Orchestra conducted by Issai Dobrowen (28).

WEDNESDAY, JANUARY 18

Semiramide—Overture, by Rossini. Philharmonic-Symphony Orchestra of New York

Potpourri

By Bob Crichton

When Joe Lewis, the alumni president, graduated and went to work for U. S. Steel Products Co., he found that they had been baffled by an order from Caltech for perforated wastebaskets, with diamond shaped holes. The standard perforated model was sent to Tech for inspection, and returned with an order for larger holes.

All this was very confusing until Joe Lewis explained some of the uses that wastebaskets are put to around the houses.

The next year after the perforated wastebaskets had been placed in the houses, the first job that the frosh were assigned to do in initiation, was to vulcanize rubber patches over every hole in every basket.

Talking about Joe Lewis reminds me of the Alumni Fund, which is now about \$45,000.

Talking about the Alumni Fund reminds me of the Senior Gift, which still has to be decided upon this year.

Last year's senior class gave \$500, and they were the first class to give 100%. I hope that the present senior class does as well. I know that Joe Lewis says that it makes a terrific impression on the alumni, and it helps their drive. It also really helps on the gym.

The other day, Brad Houser took some of his clothes up to one of the Launderettes in town, to be washed and dried. When he returned, all he had was a bucket of ashes.

(Continued on Page 4)

Who Dealt This Mess

BY CARL FOX

During the first term this column has been devoted to the fundamentals of bidding. This term the discussion will center on the bidding and play of specific types of hands. It is to be hoped that the novice will continue to follow these discussions, for there is nothing dark and mysterious about the more advanced plays.

Many players feel that game contracts should be approached pussyfoot fashion. Today's hand is a fine example of what may result from such tactics.

S A76
H KQJ 109
D 752
C 32

S J 10 93 N S Q85
H A2 H 54
D A Q 10 98 W E D K643
C A4 S C 8765

S K42
H 9876
D J
C KQJ 109

South dealer, North-South vul. The suggested good bidding is:

S W N E
P 1D 1H P
4H P P P

This bidding offers a fine example of the merits of bidding what you think you can make without fooling around. Consider what happens if South makes a pretty approach bid of Two Clubs. West is sure to overcall with Two Diamonds. It is then difficult for North-South to reach Four Hearts and, if they do, East-West will find their very correct and very profitable Five Diamond sacrifice contract.

Against the Heart contract East will open, correctly, his fourth highest Diamond, West winning with the Ace. West can now count on three tricks and should immediately shift to the Spade suit, hoping to find the setting trick there before Declarer can set up the Club suit for discards. That this is the only possible defense should be immediately apparent to West.

After the Spade shift, Declarer

CAMPUS BREWINS

Are Housemothers Human?

The great green Beak, unashamed by the scurrilous slander made in Monday's "Tick" by the ill-disguised "B.K.", is back clawing at the typewriter in a noble defense of sarcasm and a collection of tidbits too juicy to let fall by the wayside in any effort to be "cheerful." A jolly Christmas story is remembered of Carel Otte who was seen over the vacation at a wassail imbibition exhibition of San Marino businessmen, playing Santa Claus to a lovely stag, gender, female. The two were invited into another room to inspect a novel pair of cuff-links and unwittingly left there alone. A good half-hour sufficed to inspect the trinkets, as Carel is a man of critical eye, or was it something else? While reminiscing about the pasts of our House Mothers, we remember the story of Harry Ellis, who tried some unprecedented maneuvers with a young innocent from the Ivory Tower to the east last year and was rebuked so violently for his behavior that he subsequently went to his uncle, a doctor, and had a long man-to-man talk on "What Makes Women That Way?" We are now dickering for publishing rights on the letter she wrote to him directly following the incident.

Pomoaning

Notable event of last weekend seems to have been the scintillating hospitality of the Pomona women who invited the Beaver batch to an open house (to which they eagerly drove the thirty miles with dripping fangs) only to disclose later that closing time was 10:30 p.m., as Saturday is a regular class day with hard-working Pomona girls. Some guys

faces a difficult situation. He can see that he has insufficient time to take out the adverse trumps and still establish the Clubs. If he attempts this he will lose the trump Ace and get a Spade return. Then, after extracting trumps, he must still lose the Club Ace. Another Spade lead then sets the contract.

Consequently he is forced to run for cover, trying to find a discard for a Spade before pulling trumps. Starting at the beginning again, the Diamond Ace is won by West and a Spade returned. This Declarer wins in either hand and leads Clubs, losing to the Ace. West's Spade return is won, a second Club trick led and followed with a third, in hopes that they will split. When West trumps the third Club round, the future looks dark indeed, since North must overruff. But there is still a hope. Perhaps West will fail, or be unable, to ruff a second time. Dummy is entered with a Diamond ruff, and another Club led.

West, with only the trump Ace, has little choice. Whatever he does, North discards his Spade loser and makes his contract. Nicely played.

It may be noticed that the fortuitous opening of a Spade by East, originally, will set the contract, since North will now be short one entry for the above line of play. But who, in his right mind, will open a Spade from East's hand?

even got to dance a whole hour . . . Nonetheless, Darbs celebrating the end of their first rigorous week found the balmy southern atmosphere pleasant after the so many years in the Frigid north and chatted gaily with the natives. Sole exception to the light-hearted frivolity was Stanaway, who viewed the whole affair as a sinful, clandestine escapade on his part. Seems that Bob got himself engaged over the vacation.

Evidently overstimulated from leafing through the liquor ads in the latest ESQUIRE, Mono-brew MacKenzie steamed down the reception line, gallantly kissing the hand of each of its twelve lovely members. He seemed a little confused when he reached the twelfth, as her name was Louise Hanford—a name that ordinarily wouldn't have bothered him, except for the fact that each of the other greeters had been named Louise Hanford also. A further idiosyncrasy was observed in these young ladies in that each was attired in a costume of the minimal neckline-to-hem style of the 1920's. Apart from the dimly remembered fascination about the jaunty bounce of a knee length hem, we must concur with LIFE in calling the style "The Dark Ages" and put up with it with a grimace knowing that Modern Woman is drunk with power and no mere male can prevent her from clothing herself in potato sacks and shaving her head if Fashion so dictates.

Faux pas of the evening was promulgated by the same DB MacK, who greeted the announcement that there was about to be a mixer with a booming "GOOD!" that caused his partner of the moment to turn a dusky pink.

Stockebrand, in the closing moments of the dance, independently arrived at a startling conclusion: "Why not," reasoned he brightly, "take one of these lovely young things out into the outside world for the rest of the evening?" Inquiry amongst the fairer sex soon revealed that others, too, had paralleled his reasoning (Blom, MacKenzie, Dutch, Shepard, Royce, and tch-tch—Stanaway)

Champ Tennismen Out to Hold Top

From now till the end of the year the tennis courts over in Tournament Park will be humming with activity as Coach John Lamb starts to mold his team for the 1950 season. Our team last year tied for the conference championship, and with a lot of hard work the team should be able to duplicate last year's record.

Returning Lettermen

The backbone of the team will be four returning lettermen from last year's team—Sid Stone, Jack Martin, Jack Poindexter, and Dean Blanchard. These four will be aided by other squad members and a few members of last year's Frosh team.

On Tap

The team has quite a complete schedule lined up. There will be two matches with each of the other conference teams, as well as a match with Santa Barbara. The first four of the conference matches will be played away from home and the season will be concluded here at Tech.

Tennis Schedule:

Mar. 4, Santa Barbara at Tech.
Mar. 11, Whittier at Tech.
April 1, Tech at Redlands.
April 8, Tech at Santa Barbara.
April 11, Tech at Occidental.
April 15, Tech at Pomona.
April 22, Redlands at Tech.
April 29, Whittier at Tech.
May 5, Loyola at Tech.
May 6, Pomona at Tech.
May 10, Oxy at Tech.

SPEAKIN' SPORTS with Mike

Although the boys of pumpkin dribbling fame seem to overshadow other sport contenders nowadays, we mustn't fail to keep a watchful eye on those sports just around the corner.

Stressing basic exercises for conditioning, Coach LaBrucherie is commencing to work the kinks out to the cinder men. Even though the track is still a bit muddy in spots, we see the pleasing sight of trackmen pounding the oval. Men are still needed for the shorter distances.

On the Mark

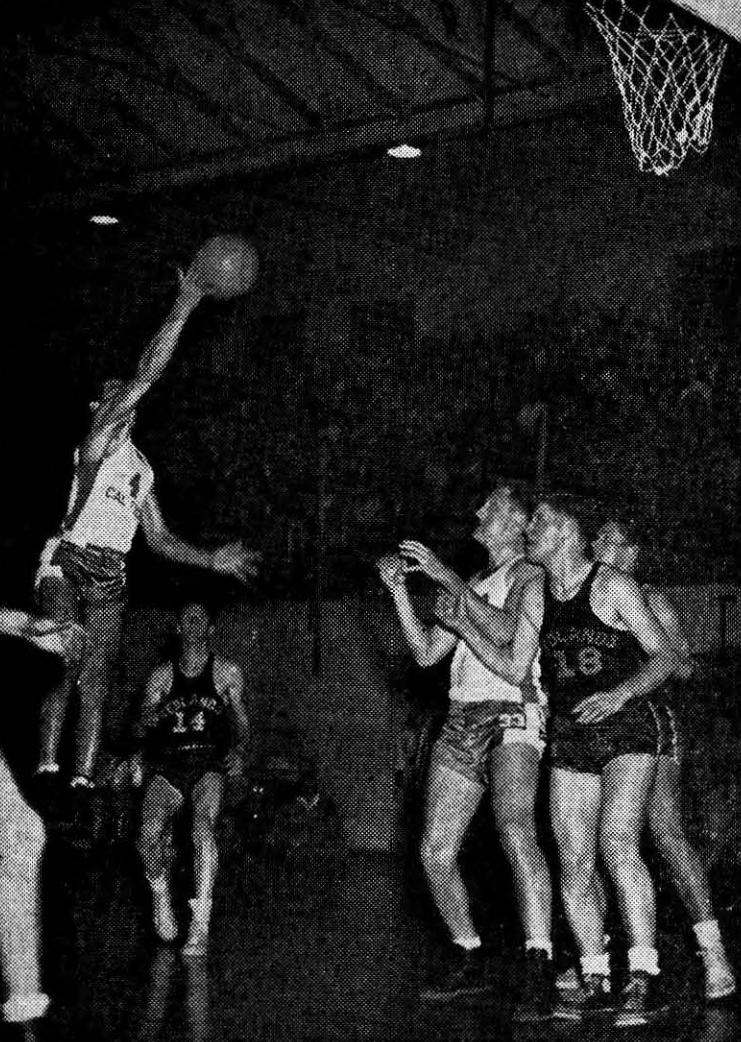
With the recent snows in the mountains comes the news that the Caltech ski team is organizing and getting ready to go. Team manager Jim Blom tells me that the schedule is still questionable but that it will be four races—one championship with all Southern California schools competing and three with conference teams. Members of the Caltech team are Bill Bradley, Olly Gardner, Pete Price, Dick Jones, Bob Stanaway, Pete Mason, Bjorn Thorstensen and Blom. We will remember that last year we were beaten only by UCLA and USC. This year our chances are even better than last, with only a few losses in (Continued on Page 4)

May 12, Conference Tourney at Pomona.

May 13, Conference Tourney at Pomona.

Beaver Sports

POOSH!



Above is an action shot from last year's Redlands game. Al Sereno is caught just prior to making a two pointer for the Beavers. Interested bystander is center Thorne Butler.

She wore a dress with neckline low enough to make a baby cry.

Lettermen Named In Fall Sports

Fall sports were effectively brought to a close on December 8 by the choosing of award winners in water polo, cross country and soccer. Water polo men received their letters on the basis of time played, cross country on points made, and soccer on minutes played. All letter winners were recommended by the respective coaches and approved by the board on the 8th. Awards are on their way.

The following is a list of men winning awards:

Varsity Water Polo:

Ed Reineke, Captain; Dick Libby, Stan Boicourt, Bob Stert, Dick Von Herzen, Bill Barmore, Mike Hall, Ronald Quandt, manager.

Frosh Water Polo:

Alan Haire, captain; Jim Wyman, John Ogilvie, Bob Lynam, Frank Connor, Larry Starr, Halstead Harrison, Leon Vickman, Lawrence Smith.

Varsity Cross Country:

Pete Mason, captain; Bill Pilkington, Bob Cobb, Brad Houser, Mike Sellen, Ray Bowerman, Dick Dickenson, Bob Parnes, John Bjerklie, manager.

Frosh Cross Country:

Duane Marshall, captain; John Pollet, Terry Thomas, Ed Stoefel, Francis Scott, Dave Twining, Don Romine.

(Continued on Page 4)



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Tech Drops Opener To Bulldogs, 58-38

Red Hot Redmen Lead All the Way; Bevos Off After Holiday Idleness

It was a red hot team the Beavers met last Saturday out at Redlands, and being pretty cold themselves after a practiceless vacation, the Beavers lost 58-38. Thus far the Bulldogs have won from both Caltech and Pomona, the latter team subsequently defeating both Whittier and Oxy. So we can't feel too badly about losing to the probable 1950 Conference champs.

Out of Shape

Lack of practice and conditioning was quite evident in the Engineers' game. Happy holidays at home are lots of fun, but they raise heck with a basketball team. We just weren't able to keep up with the well-conditioned Redlanders or match their accuracy under the hoop.

This would indicate that with a little hard work, the Shy-men can get back up where their abundance of talent indicates they should be. This year's squad is potentially a very good one with lots of height, experience, and depth. All that is needed now is to develop this ability and get it in good shape through practice.

Trailed

The Beavers took a 1-0 lead, after which they remained on the low end of the score. The Bulldogs showed their class by steadily pulling away till at half-time they had doubled the

Current Basketball Schedule

Jan. 14, Whittier at PCC
Oxy vs. Redlands at PCC
Jan. 20, Pomona at Pomona
Jan. 21, Cal Poly (S.D.) at PCC
Oxy vs. Whittier at PCC
Jan. 28, Oxy at PCC
Feb. 9, L.A. State at LACC
Feb. 11, Redlands at PCC
Oxy vs. Pomona at PCC
Feb. 14, LaVerne at Armory
Feb. 18, Whittier at Whittier
Feb. 22, Pomona at PCC
Feb. 25, Oxy at PCC

Caltech scoring 30-15. Despite the uneven score, it was a well-fought up to this point; however, our lack of condition showed in the last half and Redlands second-stringers played most of the last quarter.

Rebounds

A little advantage in height helped the Bulldogs control the backboards and pick up the rebounds. The Engineers shot often but were wide of the mark, although Cox turned in a good game on defense and dunked six points besides. Hopes for future years are good with three sophomores, Patapoff, Gray, and Tautz playing varsity ball.

Statistics:

Caltech (38)	(59) Redlands
Patapoff (4)	RF (14) Fosenberger
Bowen (7)	LF (16) Krutzberg, R.
Butler (12)	C. (13) Krutzberg, W.
Cox (6)	RG (10) Griffiths
Montgomery (1)	LG (7) Stanley
Scoring Subs: Caltech, Dailey 2, Libby 2, Fulmer 1, Hiatt 1.	
Half-time score: Redlands 30, Caltech 15.	
Fouls: Caltech 12-20, Redlands 16-20.	

Remember

At the Caltech-Whittier basketball game this Saturday, Caltech students will enter the door on the east side of the gym and sit in the bleachers to the south of the playing floor.

Probable starters:

Caltech	Whittier
Patapoff	F Reeder
Bowen	F Craven
Butler	C Snyder
Cox	G Pedersen
Montgomery	G Sayer

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Next to Pasadena Playhouse

FREE PARKING in J. H. BIGGAR LOT

Tuesday Set For Caltech CSO Meet

The next meeting of the Caltech Christian Science Organization will be held at 7:30 P.M. Tuesday evening, January 17, in room 202 Dabney. Students, faculty, and CIT personnel are cordially invited to attend.

HAAGEN-SMIT

(Continued from Page 1) shown and their method of use explained. As usual, the conversation will follow the interest of those present as long as time warrants.

Smog Problem

Dr. Haagen-Smit is well known for his work on essential oils, and has more recently done some work on the smog problem, discovering by the fractional distillation of liquid air that some organic peroxides may be responsible for its effects. The investigation of these organic peroxides is another part of his current research.

Field Trips

During the meeting, there will also be some discussion of proposed field trips for this term and a report on the program of meetings for the rest of the term. It has been necessary to adopt Friday as the meeting day due to some conflicts that arose with the new term's schedules, any objections should be voiced promptly.

POTPOURRI

(Continued from Page 2)

All the blame cannot be laid to the Launderette, since this is the first time that it has happened to them. It also appears that Brad had a pair of oily levis, and they weren't thoroughly washed before they were dried.

* * *

Ralph Stone went up to visit his girlfriend in Canada over the Christmas vacation. The snows came, and Ralph Stone is stuck up there. They have not had any supplies of food or mail for the last two weeks. The roads are impassable. Ralph is planning on following out the first snowplow that reaches the village.

* * *

Just recently, there came to my attention, some interesting verses that were composed for last year's Geology Banquet. Far be it from me to continually harp on my beloved department, but this verse was too good not to print. (It can be sung to the tune of "And when I die.")

RIGOR MORTIS AND BEYOND
And when I die, don't bury me in rock,
Just ship my bones to Chestah Stock;
He'll substitute me for a horse,
That's the only way I'll pass his course.

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Caltech Fellowship To Discuss Gospel

The Caltech Christian Fellowship will be considering John's Gospel, Chapter 6, where Jesus Christ's statement "I am the bread of life" is found.

Everyone interested is invited to the discussion of this chapter of the Bible next Tuesday and Thursday at 12:30 in 251 Bridge.

ON THE RECORD

(Continued from Page 2)

Wagner Chorale
Suite No. 2 in B Minor for Flute and Strings
Aus tiefer Not screi ich zu Dir
Lobe der Herren, den machtigen Konig der Ehren
Liebster Jesu, wir sind hier
Jesu, Joy of Men's Desiring
Prelude and Fugue in F Minor
Philharmonic Auditorium
Jan. 15 Matinee
L. E. Behymer Series
Andres Segovia, Guitarist
Philharmonic Auditorium

FRONT BURNER

(Continued from Page 2)

clashed with the problems of prejudices and the power of wealth.

The solution of these problems is tolerable, and there is a lot of good sense in the play. It will certainly affect the thoughts of many people about the advantages of such a school, and their own solution to similar problems. Overall the play is enjoyable for the picture it presents, even though it is tedious to the normal unsensitive male.

DARBS DANCE

(Continued from Page 1)
cases.

Dancing Begins

After complying with these formalities, the men were led into a large room, where, after exchanging commonplaces about the frequency of a certain name, a few hardy ones began to dance. Later mixer dances were announced, (causing one happy individual to yell out "GOOD.") and refreshments were served.

Original Entertainment

Entertainment consisted of a short piano interlude, a ukulele duet by Messrs. McQuiston and Thomas, and a quartet of Harwooders noteworthy for their interestingly adorned pajamas. Since there were lighting difficulties, and most of the girls were fresh too young to know about Caltech, the evening was most pleasantly spent.

SPEAKIN' SPORTS

(Continued from Page 3)

men. UCLA will be the team to beat, however, since they reportedly have been working out all of the Christmas vacation.

Volleyball

Before long we may see volleyball become another on the list of Caltech's minor sports. A petition is currently being made to the Board of Athletics for admittance in such a status, but meanwhile, the team has been practicing every Monday, Wednesday and Friday at the Pasadena YMCA under the direction of Coach Vogel.

I leave you the tender tidings

CAMPUS BREWINS

(Continued from Page 2) weekend. Willis, Walker, Bailey, McEwing, and others, seated steadfastly in Ricketts dining room, finally wound up drinking their milk and eating their desserts; much bitterness prevailed over the courses which weren't served in between!

FLASH! After 2½ years of unrewarded effort on the part of fellow Lemmings, Fred Eisen has finally gone to dancing class

LETTERMEN

(Continued from Page 3)

Varsity Soccer:

Dave MacKenzie, captain; Ed Welch, John Noble, Hal Martin, Leo Baggerly, Don Asquith, Dick Fairall, Steve Chong, Pete Price, Ed Schlenger, Henry Clutz, manager.

Frosh Soccer:

Bob Wood, Robin Williamson, Bob Inglis, Swaroop Bhanji.

ROWDIES SLATE

(Continued from Page 1)

gym, the lounge will be open to Techmen, their dates, and visiting guests for a record dance. This is the first of the post-basketball get-togethers and should prove just as popular as last term's football dances.

Announcements concerning the terrific Winter Term Social Programme at Ricketts will be soon forthcoming; it will pay to watch for them!

of "Pound the Poets," and hope to see you at the PCC gym Saturday night at 7:30.

and looked at a woman—he even enrolled! A sadder report is told of Ed Schlenger, a man eminently suited to the occupation of sitting, who has recently contracted an occupational hazard of that activity and is in the hospital with a cyst, suitably located. A salty tear is shed for Ed. Pardee, who is evidently serious about getting married to the other three-quarters of his barbershop quartet back in Indiana, has given up his nightly treks to Fisher's in a burst of economy; further hoping to build up a nuptial nest egg, he has contracted a \$5 wager with Big Don Barrie that he will be married by next Christmas. In reference to the sad plight of Christmas marriaging is the tale of Blacker's powerful intellect, D. Cooper, who was so crushed over his "B" in Smythe that he blindly rushed home over the holidays and took the banns of matrimony.

Blacker Bicker

The weekend from the Southeast was reported consummated in a Snow Party at Arrowhead, where Abell and Freed and petite friends saw little snow but enjoyed cultivating a glowing feeling before the large fireplace in the lodge. Lovberg returned to his affairs of state Monday after the party beaming broadly, for he had couped the weekend with a Friday telephone call to a sweet one he had met at Asilomar, who accepted. Entertainment for the assembled was provided by Ogilvie and Swaroop who were learning how to ski . . . The Ogle became so exuber-

antly athletic over the event that he once leaped up on the back of a couch where his girl was sitting, thus overturning both of the latter; other girls in the crowd were truly envious of such manly cave-man technique.

Hendrickson, who received for Christmas a mammoth Blue Cheese, decided it could only be consumed properly in the company of beer and found many friends on Saturday afternoon who were willing to agree and help, i.e., Schuyler, Stowe, Shepard, Madden, Lynn, and numerous transients. After dinner, feeling no pain, Madden and the aforementioned Cheesy carted a bottle of cognac up to the home of two female acquaintances for an impromptu evening. When Hendrickson's woman yawned and went to bed, he was forced to drag Madden from the clutches of the eager other and leave, embittered. It must have been the cheese?

With the triumphal entry of Gil Peppin into the arms of the Rowdies, Throop Club loses an able Crew Coach. Gil's own capacity will be remembered by Mike Callaghan, who stepped into his room at midnight before leaving for home after last term's exams to find that a strange reveler (Peppin), encircled with limpid pools of dubious liquid, had appropriated his sack. The pallet piferer sickly asked Mike to leave, which he was only too glad to do, holding his nasal orifices in the process.

Parting Thought for the Week:
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