

Dinner Scheduled to Honor Millikan's Eightieth Birthday

Epstien to Present Special Edition of "Review of Modern Physics" to Nobelist

Tribute will be paid to one of California's most distinguished citizens and a world-famed scientist and educator this month—Dr. Robert A. Millikan, Nobel Prize winner in physics, Professor Emeritus of Physics at the California Institute of Technology, Vice-President of the Board of Trustees of the Institute, and former Chairman of its Executive Council, next Thursday night.

Honored at Dinner

On the evening of March 15 the Board of Trustees and the California Institute Associates honored Dr. Millikan at a dinner commemorating his 80th birthday (March 22). On April 8 the Caltech faculty will pay him similar tribute at a dinner at the Athenaeum.

Special Publication

At the faculty dinner he will be presented with a bound copy of a special Millikan edition of the Review of Modern Physics, combining both the January and April issues of this leading physics quarterly. The magazine will contain articles on Millikan's scientific interests and achievements and a series of original scientific articles specially written by his former students and associates. It was edited by Dr. Paul S. Epstein, Caltech Professor of Theoretical Physics, who will make the presentation.

Many Guests

Among faculty members honoring him at the dinner will be many with whom he always maintained a close personal as well as academic association during his twenty-five years as head of Caltech. Many have collaborated with him on research problems; others have taken an active part in directing Institute affairs. There will also be many a younger professor who came to know him first as the co-author of both high school and college physics textbooks used extensively throughout the country.

Millikan Still Active

Although Dr. Millikan retired from his administrative duties as Chairman of the Executive Council and Director of the Norman Bridge Laboratory of Physics in 1945, he has continued his teaching, research and writing. Last summer he took an active part in a cosmic ray research expedition which took

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Ohio State Seeks ME For Hydrodynamics

An opportunity exists for a man receiving a BS degree in Mechanical Engineering in June, 1948, at the Ohio State University, Columbus, Ohio, to work in the field of Hydrodynamics. This is research work and the man should have a particular interest and training in field mechanics with some emphasis on Hydrodynamics.

Anyone interested contact the Placement Office immediately.

Campus Calendar

THURSDAY, APRIL 1—
Upper Class Luncheon Club at the Training Table, 12:00.
Throop Club Meeting, 12:20 p.m.
Dancing Class, Culbertson Hall, 7:30 p.m.
Glee Club Rehearsal in Throop Club, 8:30 p.m.
FRIDAY, APRIL 2—
Swimming Meet, Caltech vs. Muir, there. Fleming-Dabney Record Dance.
SUNDAY, APRIL 4—
Musical in Dabney Lounge, 7:30 p.m.
MONDAY, APRIL 5—
CES Assembly, 201 Bridge, 11:00 a.m.
Swimming Meet, Caltech vs. LACC, at PCC.
TUESDAY, APRIL 6—
Band practice, Culbertson Hall, 7:30 p.m.
WEDNESDAY, APRIL 7—
Frosh Luncheon Club at the Training Table, 12:00.
Y Cabinet Meeting, Y Lounge, 7:15 p.m.
Fencing Class, Dabney House, 7:30 p.m.
Orchestra Practice, Culbertson, 7:30 p.m.
THURSDAY, APRIL 8—
Upper Class Luncheon Club at the Training Table, 12:00.
Throop Club Meeting, 12:20 p.m.
Dancing Class, Culbertson Hall, 7:30 p.m.
Glee Club Rehearsal in Throop Club, 8:30 p.m.

ASCIT Social Plans Announced

Two big ASCIT dances are planned for the Spring Term starting with a Sport Carousel at the Altadena Country Club on April 17. A Formal at the Riviera Country Club, featuring Hal Lomen and a Queen of the May, will be presented on May 22.

Since ASCIT funds will support but a single event per term, the Sport Dance will be a bid affair at a nominal rate.

The lush Altadena Country Club atmosphere will lend itself well to the occasion, while Carroll Wax will smoothly charm Tech couples into a soft, romantic haze. Saturday, April 17—come one, come all!

A third ASCIT presentation will be Theatre Night on May 14 when the Drama Club plays host to Tech men and dates with their year's productions.

Summer Courses In Netherlands Set for July, August

Announcement of an inter-university summer school open to foreign students to be held July 21 to August 6 at Leiden has been made by the Netherlands Embassy at Washington.

Eligible are students eighteen and over. Applications should be accompanied by information giving scholastic records and listing major subjects. These should be sent before May 1, 1948, to Dr. N. A. C. Slotemaker de Bruine, Counselor of Embassy, Netherlands Embassy, 1470 Euclid St., N.W., Washington 9, D.C. A maximum of one hundred students from the United States can be admitted.

While a tentative program only has been announced, the main theme of the course will be "Civilization and Modern Society."

Charges for the entire course, paid either in dollars or guilders (fl) are as follows:
Tuition only.....fl. 85. or \$31.50
Tuition, room and breakfast (without hot lunch).....fl. 120. or 44.91
Tuition and hot lunch (without room and breakfast) fl. 120. or 44.91
Tuition, room, breakfast and hot lunch.....fl. 150. or 56.15
The above amounts include the expenses of excursions to points in the Netherlands.

Present tourist rates on the "Holland-America Line," 233 California Street, San Francisco, are \$160 one way; Cabin Class rates are from \$265 to \$350 one way.

The Geologists and "Gorgeous Gorge" (Or, 1000 miles of Bridge, Beer, and "Bull"-Sharp)

By Len Herzog

For many people, the week past was one of vacation and respite from the rigors of life in the Monastery. The Geology Division, however, apparently believes in eating its cake and having it, too. Last week about 50 had it.

The event was the annual, required-for-graduation "Spring" field trip. This year the jaunt took the dauntless rockhounds into the deepest wilds of Arizona, where they explored the liquid potentialities of the G.C., South Rim, the Navajo Country, and the San Francisco Volcanic Field, near Flagstaff, where they visited the Museum of Northern Arizona.

Mush Through Slush

As it turned out, the weather was rather mild for Southern Siberia, and wind velocities such as those experienced have probably been exceeded in the Raymond Ave. Wind Tunnel. But under the intrepid leadership of Dr. Robert "Bull" Sharp, the

party mushed onward, pushing ahead of it the erstwhile means of transportation provided for the jaunt, Dr. John Campbell's "Blue Monster"—a 60-passenger, 175-squirrelpower conveyance "launched in the Bremerton Navy Yard in 1932."

This singular vehicle certainly lent "character" to the expedition, besides providing by reason of the seating arrangement and window condition, ample incentive for playing bridge instead of gawking at the Passing Scene. The "Monster" boasts, among other modern conveniences, a one-way loudspeaker system by which any instructors present can harangue the passengers without fear of question or contradiction; air-conditioning through "vents" in the floor, especially useful on dusty roads; a motor which rolls right out the front of the thing, on tracks, to be repaired, and may be retracted by a built-in winch; an apparent top speed, attained rarely on steep downgrades, of

Initiation Period Ends For Nineteen Taubate Pledges

Drapes Resigns As Glee Club Head; Lacks Time for Job

The Caltech Glee Club will elect a new president and director this evening as the present president and director, George Drapes, offers his resignation. The Glee Club, which has been preparing for an assembly to be given the third week of school might now have to postpone their presentation until the fifth week of this term.

Lack of Time

In giving the reasons for his resignation, George Drapes said, "I deeply regret having to give up my activity in the Glee Club, but I have found that I am no longer able to devote the time and energy to the job that I feel it requires. To build a really good chorus, the director has to put in a great deal of work. Since I can no longer put in what I feel to be the proper amount, I am tendering my resignation so as to give someone else an opportunity to direct this organization."

Departure Regretted

George's leaving is deeply regretted by all members of the Glee Club, since his skillful directing has done much for the club. He has welded the various sections into a unified whole.

Fifteen Techmen in Student "Who's Who"

Certificates of Recognition were awarded to fifteen juniors and seniors at Caltech recently by the publication "Who's Who Among Students in American Universities and Colleges" which will include their names in its 1947-48 edition. Those named were picked by a committee of students and faculty at the Institute for their all-around ability and participation in campus activities.

The awards were presented by Dr. L. A. DuBridge, president, to the following: Bruce A. Worcester, Frank J. Wolf, William R. Muehlberger, Robert W. Poindexter, Stanley M. Barnes, Thomas Tracy, Leonard F. Herzog, Richard C. Alexander, Jack B. Ottestad, Douglas J. MacLean, Warren M. Marshall, Thomas H. Stix, Julian Sage Burrows, Arthur Robert Benton and Lothrop Mittenthal.

Honorary Engineering Fraternity Takes in New Pledges This Week

Dr. Seifert Speaks and Pledges Give Skit At Wednesday Banquet

On Wednesday evening of this week, Tau Beta Pi initiated 19 new members into the society at a formal initiation banquet in the Athenaeum. Dr. Howard Seifert gave a talk and the pledges presented their required skit for the amusement of the older members.

The Caltech chapter of Tau Beta Pi elects new members each year from the upper eighth of the junior class and the upper fifth of the senior class. These men are elected near the end of the first and second terms and must serve a three week initiation period before becoming active members.

C.E.S. Assembly on Cal. Water Supply

The Consolidated Engineering Society assembly Monday at 11 o'clock in 201 Bridge will feature Mr. Samuel B. Morris, general manager and chief engineer of the Los Angeles Department of Water and Power and will discuss California's water problem.

The emphasis will be placed on future sources and methods of obtaining water to take care of California's rapidly increasing population. Mr. Morris is extremely well qualified to discuss this subject, and is also a very interesting speaker.

Among many accomplishments he designed and built Morris Dam in San Gabriel Canyon, which was named for him by the City of Pasadena. He also was dean of the Engineering School at Stanford for several years.

Interview Schedule

APRIL 1—
STANDARD OIL CO., OVERSEAS, NEW JERSEY.—Mr. R. L. Dab. For details as to type of openings see Placement bulletin board.
APRIL 1 AND 2—
UNION OIL COMPANY OF CALIF., J. P. Rockwell, Sr. and Grad. students in CHE who will fit into two-year Refinery Trainee Program. Lead to practical work, research, process or pilot plant operations position. Primarily to be used in manufacturing department in refinery.
PHD's for research in Chemistry and a few MS in Ch interested in physical or organic applied research Petroleum field. Combination Engineering Geologists interested in oil field production.
Two or three ME's with heat in petroleum industry marine operations and interested in following the sea.
Few CHE's, Juniors or Graduates students for Summer jobs.
APRIL 5—
RICHFIELD OIL CORP., Los Angeles, Calif.—Mr. T. F. Sullivan. Senior and graduate students who are interested in producing operations in the petroleum industry. Juniors, who are interested in summer employment in the same activity. Primary interest in ME and CHE's, but one or two civil or electrical majors may also be considered. Upper 1/2 of class statistically, well-rounded personalities.
APRIL 6—
C. F. BRAUN & CO., Alhambra, Calif.—Mr. B. Mathews. Interview of men notified.
APRIL 6 AND 7—
DOUGLAS AIRCRAFT COMPANY, Mr. C. C. LaVerne—Re-interview of men notified.
APRIL 8—
FAIRCHILD ENGINEERING AND AIRPLANE CORP., (NEPA PROJECT), Oakridge, Tenn., Mr. Murray Lesser. Senior and graduate students interested in experimental and theoretical physics in the field of nuclear physics, mathematicians in the field of applied mathematics and basic physics especially on work dealing with properties of materials.
APRIL 8 AND 9—
NORTH AMERICAN AVIATION, INC.—Mr. William Nance. BS—Ae, ME, CE, EE, MS—Ae, ME, CE, EE interested in Aircraft Engineering. No Industrial Engineering available. PhD's or Professionals who want practical engineering, but NOT theoretical, in above options.
Spot Offers to be made at time of interview.
APRIL 12—
NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS, Moffett Field, Calif. Mr. Edwin Hartman, Western Coordinator at Santa Monica, and Mr. Carlton Bioletti, Asst. to Director of Ames Aeronautical Lab. Senior and graduate students in electrical engineering field, the field of mechanical design, and research in field of aerodynamics. All Aeronautical students—MS and up.
APRIL 13 AND 14—
THE TEXAS COMPANY—For work at Beacon Research Laboratories, Beacon, New York. PhD and MS candidates in Chemistry, Chemical, and Mechanical Engineering.
APRIL 14—
MASSACHUSETTS INSTITUTE OF TECHNOLOGY — OPERATIONS EVALUATION GROUP, a research organization. Mr. E. A. Monaghan, PhD's in Mathematics, Physics and Physical Chemistry; also unusually qualified men receiving MS degrees in the above options.
APRIL 15 AND 16—
ALLIS-CHALMERS MANUFACTURING CO., Mr. R. L. Engel, Mr. C. W. Schweers, Mr. I. C. Matheson. Senior and Graduate students in ME, EE, ID interested in research and development, design, manufacturing or production (administrative end), field service or erection, or sales. Must be willing to go back east for 18 months.
APRIL 20—
STANLIND OIL AND GAS COMPANY, Casper, Wyoming. Mr. W. S. McCabe, Division Geologist. Interviewing men notified.
APRIL 21—
BETHLEHEM STEEL CORP.—Interview of men notified.

Initiation Activities
The pledges started their initiation just before finals last term during which a large copy of the Tau Beta "Bent" could be seen hanging above the front steps of Throop. In addition to the raising of this symbol, the new pledges are required to obtain the signatures of all the active members on campus and the signatures of an additional number of Tau Beta to obtain a total of one hundred. They must also polish up a bronze casting of the bent and prepare a skit to be given at the initiation banquet.

New Members

The new pledges were: John Andres, Stan Barnes, Joe Cantwell, Richard Cornelius, Warren Danielson, Roy Davis, Roy Gould, James Harder, Walter Hirschberg, Jim Hummel, Henry Long, John Marshall, Hardy Martel, Bill Myers, Byrne Perry, Herbert Podell, Clem Savant, Robert Stapler, and Robert Waters.

Initiation Occurs

After having successfully completed their initiation duties, the new pledges were brought into active membership in Tau Beta Pi at a formal initiation held last Wednesday afternoon. Directly after their initiation, the Tau-bates joined the older actives at a dinner in the Athenaeum.

Dr. Seifert Speaks

Dr. Howard Seifert, chief of the Applied Physics Division of the Jet Propulsion Lab, then spoke to the group. Dr. Seifert spoke on "Problems in the Application of Nuclear Energy to Rockets."

York Corporation Offers Graduate Training Course

The York Corporation conducts a College Graduate Training Course to train graduates, initially, to help them develop their ability and capacity, ultimately, to fill key positions in the York Organization. The course covers a total of eighteen months. Trainees, who have completed the course, are filling positions today in the corporation ranging from Junior Engineer to President.

The organization is divided into four major divisions, Administrative, Sales, Engineering and Manufacturing. They have two manufacturing plants in York, Pa., West York and Grantley—Sales offices and branch offices throughout U.S.A., and an International Div. with headquarters in New York.

Graduates, interested in Refrigeration and Air Conditioning and desirous of building a career in the industry rapidly approaching a half billion dollars annually, are eligible to make application. Engineering graduates are preferred in the order mentioned—Mechanical, Industrial, Electrical, Metallurgical, Chemical and Civil.

For additional information and application blanks contact the Placement Office, 120 Throop Hall. April 12, 1948, is the deadline for return of the completed form to this office.

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The California Tech

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Shavings

from the Board
By Stan Boicourt

On the Fourth of March at approximately 8:15 p.m. the retiring Board of Directors performed its last official act when it approved the following men to receive varsity awards in basketball:

Paul Saltman, Bob Stokely, Bill Cox, Jay Montgomery, Manuel Bass, Don Furth, Howell Tyson, Ted Bowen, Thad Vreeland, Don Greenwood, Bob Smoot, manager.

And the following men were approved for the Junior Varsity award:

Dick Brewer, Bud Freise, Thorne Butler, Ray Greutert, Al Sereno, Dick Libbey, Jack Martin, Hiroshi Kamei, Ed Stern; managers, Earl Hefner, Joe Mangin.

With this the retiring board heaved one big sigh of relief as their last toils ended, and the smiling members turned over their individual jobs to the new, fresh, alert and eager officers.

Appointment Made

First on the agenda of the new board was the appointment of Bill Palmer as representative of the major sport of the season. There are two such representatives, Paul Saltman being the other, and this appointment was needed to fill the vacancy caused by the graduation of Doug McLean.

Meetings Open

During the last school year there has been very little student interest evidenced at the Board meetings. Anyone who is interested in how his school business is being handled and how his money is being spent would be gladly welcomed. The meetings are open to anyone; so if you have any suggestions to offer or are just curious, drop in to one of the meetings.

THE FRONT BURNER

"Russett Mantle," current Playhouse offering, closes this Sunday, April 4.

Playwright Lynn Riggs offers a gay and exhilarating comedy in "Russett Mantle," a titular designation taken from Shakespeare. Riggs already has to his credit "Green Grow the Lilacs," from which the successful musical "Oklahoma" was made.

Robert Stevenson and Linda Stirling head the Playhouse company under the direction of Samuel R. Herrick.

Shakespeare Next

That rising young playwright, William Shakespeare, dares the Pasadena boards for a two week run April 7-18, when his "Richard III" will be staged at the local theatre.

"Richard III" is rarely staged; the last Playhouse production was that of the first Midsummer Drama Festival in 1935. The technical problems presented by the play are numerous, as well as the difficulties attendant to casting some 50 roles. Incidentally, the Playhouse is the only

DINNER TO HONOR

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him on an extended field trip from Texas to Canada.

Varied Interests

Dr. Millikan is best known in Southern California for stimulating and guiding the growth of the California Institute of Technology from a small relatively unknown school in 1921 to a leading world center of scientific teaching and research. In addition to his many academic duties he has been for many years active in civic affairs in both Los Angeles and Pasadena. He is a member of the Board of the Neighborhood Church in Pasadena, President of the Board of the Huntington Library and Art Gallery, and on the Advisory Committee of the Los Angeles County Hospital.

American theatre to have staged all 37 of Shakespeare's plays.

"Richard III" deals with the final days of King Edward IV and the struggle that followed for possession of the crown.

Onslow Stevens plays the title role and directs; prominent in the company are Janet Scott, Morris Ankrum, Gilmor Brown, Eda Merin, Leonore Shanewise, and many others.

One Act Tournament

No performances of this play will be given on April 12 and 13, as the Playhouse will play host on these days to the high school and junior colleges of California in the first post-war resumption of the annual One Act Play Tournament.

Shaw, Kandel, Maugham

The "Millionaires," George Bernard Shaw's comedy follows the Shakespearean offering to the Playhouse on April 21 for a two-week run, with Lenore Shanewise directing.

This production will be followed by the world premiere of Judith Kandel's provocative drama, "This Young World," from May 5-16. A country schoolhouse is the setting, and an all-juvenile cast will tell the unusual story Marcella Cisney will direct.

Somerset Maugham's comedy "The Circle" closes the Playhouse Spring Playbill from May 19-30, with Thomas Browne Henry directing.

YOU WON'T WANT TO MISS THE ASSEMBLY FRIDAY, MAY 7

PUBLIC STENOGRAPHER

961 East Green Street

SYcamore 3-7156

Miss Gann

Art Exhibit to Be Brought to Caltech By Mr. and Mrs. Palmer

Mr. and Mrs. Herbert Palmer, connoisseurs of art, will visit Tech on Wednesday, April 17th, it was announced today. They will have with them copies of the works of such famous artists as Picasso, Degas, Domier, and Hogarth, which will be offered on sale for prices of from 35 cents up.

Mr. and Mrs. Palmer will be in the Treasure Room of Dabney Hall of the Humanities from 12 to 4:30 in the afternoon. That evening they will visit the houses, and will be in Ricketts and Dabney House lounges after dinner.

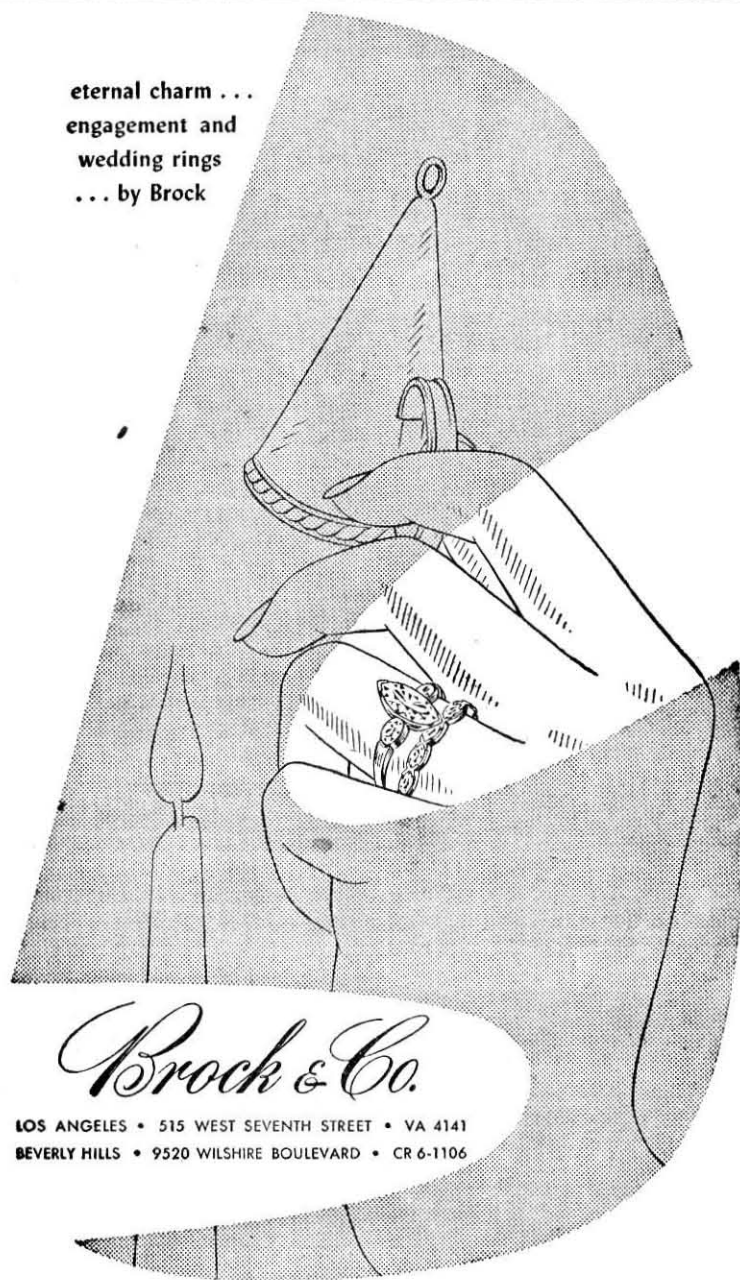
Included in the list of items will be some Hogarth originals dating about 1790, and some lithographs of Domier's works. These are reputed to be well worth seeing, as well as purchasing, and all students interested in owning any of them are urged to see the display.

Caltech Students Welcome At Neighborhood Church



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Dr. Robert E. Fitch of Occidental Student Club, 6:30 p.m.

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A message to you from the Chief of Staff



"April 6 is Army Day. It is a day which will have a special meaning for college men. More than half of you are veterans of the last war. Many of you are members of the Organized Reserve. Many others belong to the R.O.T.C. or National Guard.

"All of you are making a vital contribution toward World Peace and the security of this nation.

"The U. S. Army is the finest army in the world and the only one of its kind among the major powers. It is 100% volunteer. It is composed entirely of civilian soldiers . . . men like yourselves who realize that a strong America is a peaceful America, and that the responsibility of making America strong rests in the hands of every American citizen.

"The U. S. Army is not a large army, as armies go. It is shouldering tasks far greater than any other army of like size has ever attempted.

Our occupation force in Japan is the smallest per capita of any modern occupation army. Our force in Europe is the smallest of the three major powers.

"But behind this Army stand you men of the Organized Reserve and the R.O.T.C. I have known many of you personally. I have been with many of you in action. I know the fine type of men you are and the realism that leads you to equip yourselves with military training.

"Further, I know the valuable service you can render the nation in time of emergency. A great deal of the success of fast mobilization and the actual winning of the war was due to the 106,000 trained Reserve Officers and the top-notch National Guard units which were available for quick action.

"To you, on Army Day, I believe I speak for millions of Americans in offering commendation for the fine job you are doing."

Omar N. Bradley

CHIEF OF STAFF, U. S. ARMY

You can get full details about the opportunities open to you in the Army's complete military training program at any U. S. Army and U. S. Air Force Recruiting Station.

Musical Baedeker

By CHARLES SUSSKIND

A very interesting cycle of chamber music concerts ended last week with a piano recital by Artur Schnabel in the Los Angeles Philharmonic Auditorium. The series was sponsored by the Music Guild and was sold out by subscription several weeks before its beginning last autumn. A similar cycle is scheduled for next season and subscriptions are now being taken at the Gateway to Music Store, 3089 Wilshire Boulevard.

Grand Opera Coming

The Metropolitan Opera Company will be at the Shrine Auditorium this month, offering a very promising repertoire of

grand opera. Tickets may be obtained either directly at the Shrine Auditorium, or at the local Mutual Ticket Agency (F. C. Nash Department Store). Tech music lovers will be disappointed to hear, however, that only tickets for \$4 and more remain available for most of the Metropolitan presentations; the performance of "Carmen" is sold out completely.

Musicales Activities

The Caltech Musicales wound up its last term's activities with an unusual Sunday-night concert of recorded music from the personal collection of Prof. Hunter Mead. Dr. Mead, who comment-

(Continued on Page 6)

The end of finals saw a lot of happy Techmen dashing off in all directions in various forms of revelry. We shall attempt to report a few of these, naturally omitting all those events which are too foul to relate.

Right after finals there was a big group up at the ski hut. Doug MacLean, Warren Marshall, and Art Bruington were conspicuous for their lack of athletic equipment, although they were fully equipped with girls and provisions for a long stay. MacLean was heard cursing about all the snow and wishing that it and the other people would all disappear.

Then there are nature lovers like Tracy and Bob Poindexter who went off to look at the Grand Canyon. There must have been ulterior motives; no characters so unprincipled would drive that far merely to look at scenery.

Aeronauts

Howard Cohan and Abner Kaplan spent part of their time flying model airplanes in the desert. In keeping with their retarded social development, they next headed for Laguna in an attempt to make contact with some high school quail down there on the prowl for Easter va-

caution. There seemed to be numerous Techmen down there with similar evil intent.

Just think of it, all these sweet innocent high school girls at Balboa and Laguna basking in the sun and getting close to nature while in the background we see a group of evil Techmen hovering like vultures over—well, whatever vultures hover over. The scores have not all been tabulated yet.

South of the Border

Another group consisting of Hugh Carter (custodian of the student body funds), Dave Hayward, Bud Mittenthal, and Warren Marshall were down in Sonora spreading joy and cementing international relations. Marshall took a hand in corrupting two local residents in Hermosillo by introducing them to that wonderful beverage stout, the same which causes cows to give so much milk. Hayward busied himself most of the time chasing after senoritas and tortillas.

Song and Dance Act

In Guaymas, Hugh Carter at a most sharp hotel with the aid of numerous tequilas did an odd sort of dance with castanets in the bar while all the guests looked on in amusements. It

seems that Carter was trying to impress a local character who passed himself off as a talent scout. He didn't get a contract.

The prize winning event was one afternoon on the beach where the Rover Boys were camping, when a young woman (American) dropped by. Marshall was forced to hide unclad under a bush until she left while Hayward, dressed in GI underwear, conversed with her until he realized his social faux pas and grabbed his pants. Informality was the order of the day.

One More Dies

Poor Chuck Murphy, ex of Fleming, bit the dust the Saturday after nals and married his one and only. I saw him for the first time today and he looks older already. From those who remember, his reception was one of the wetter variety with champagne flowing in a raging torrent. Names won't be mentioned but a few drank entirely too much and don't even remember the thing. Fred Nicolai, best man, had to take off immediately after the ceremony and drive like mad to the Grand Canyon to catch up with the Geologists on their spring field trip.

Rock Hunters

At this point it is appropriate to write a few lines about the trek. They made the trip in "THE WORLD'S WORST BUS" a double decker that continuously caught on fire, so the boys spent most of their time filling up water pistols and firing them at the smoldering roof.

The rest of the time they were firing them at the boys on the lower deck who insisted on giving the boys on the second deck "hot foots" or is it feet? Obviously Das Muehl was one of the ring leaders. Upon arriving at the Canyon they found not one but two feet of snow and a temperature that reminded many of the polar regions.

Stimulants Disappear

Nicolai arrived in time to

freeze in the snow with the rest but it so happened that he had some "canned heat" left over from Murph's wedding to keep him warm. When he went to use it, lo and behold somebody had beat him to it. The somebody is rumored to be a certain member of the staff. From what the rest of the boys said when they got back to the land of sunshine and had thawed out, there is a trail blazed the entire route with empty beer bottles, etc.

While all this debauchery was going on elsewhere, Hustlin' Hal, Jr. (Ed Preisler) had the baseball team slaving away practicing in order to win new glory for the old Alma Mater. I am just curious as to what they did at night as playing baseball doesn't put bags under the eyes. Better check into it Ed.

Birthday Party

Thursday night after finals, a gang of the Fleming men put on a surprise birthday party for Deanno Johnson. Actually all the work and food was set up by one Miss Ann Cooper. A few of those present were Stokely, Woods, Boutelle, Glover, Price, and Eschner. Willy Boutelle made an ass out of himself by failing to make a Cardinal Duff in three attempts and chuga lugged three quarts of beer and proceeded to come so close to being an "Old Faithful" that Stokely had to drive him home. Shame, shame, shame.

Why Paper Is Poor

While I'm on the subject of disgraceful conduct, I might as well make a few well chosen remarks about the editor of this rag, namely Leonard F. Herzog III. Many people have accused him of writing this (to quote one of our illustrious English profs) disgusting piece of journalism. However I am sure you will agree with me that any man that pulls down a 4.0, certainly would write in a more acceptable manner. Upon hearing of Herzog's grades my opinion of him went down considerably. I hope

(Continued on Page 6)

CAMPUS BREWINS

Shall have,

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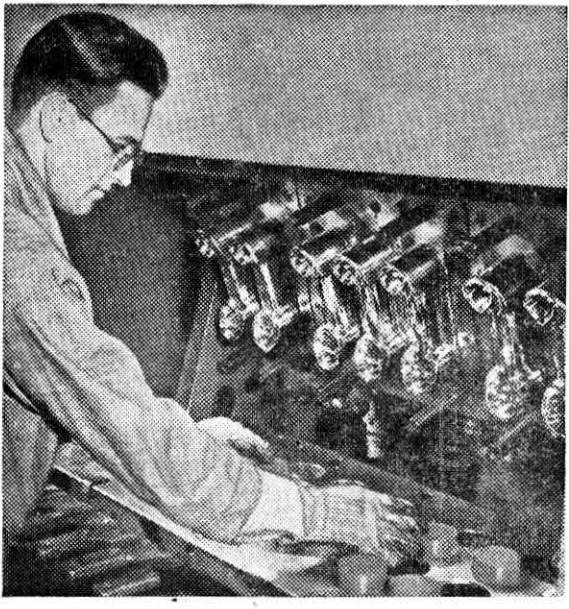
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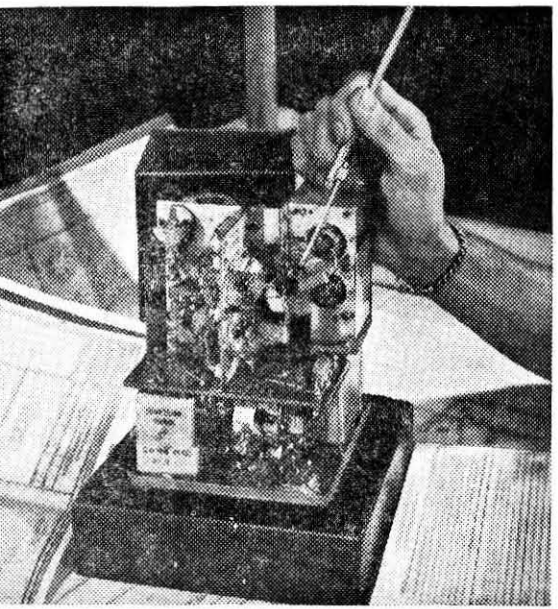
Open Till 1 A. M. SYcamore 3-1002

News-worthy Notes for Engineers



How to make handset handles twice as fast!

To meet the tremendous postwar demand for telephones, Western Electric engineers were faced with the problem of molding 50% more plastic handset handles per day than ever before. Calling on their wartime experience, the engineers turned to electronic pre-heating, which raises the temperature of the phenol plastic from room temperature to 275 degrees Fahrenheit in just 30 seconds. In this way they cut press time in half, doubled production, improved the finish and increased the strength of the handset handles through more uniform heating.



Laboratory precision in mass production

This line amplifier looks like something made in a laboratory—and destined to spend its life there. Actually, the amplifiers are mass-produced to lead rugged lives up poles, down manholes, or in remote repeater stations along coaxial telephone cable routes. Each amplifier must boost the volume of as many as 600 voice channels, ranging from 64 kc to 3,096 kc, with closely controlled characteristics over long periods without attention. Working out manufacturing methods and controls that assure uniform performance of laboratory precision in telephone equipment is always an interesting project to Western Electric engineers.

Engineering problems are many and varied at Western Electric, where manufacturing telephone and radio apparatus for the Bell System is the primary job. Engineers of many kinds—electrical, mechanical, industrial, chemical, metallurgical—are constantly working to devise and improve machines and processes for mass production of highest quality communications equipment.

Western Electric

A UNIT OF THE BELL SYSTEM SINCE 1882

CAUSE FOR AMERICAN PRIDE...

JEFFERSON'S ROUGH DRAFT OF THE DECLARATION OF INDEPENDENCE

A Declaration by the Representatives of the UNITED STATES OF AMERICA, in General Congress assembled

When in the course of human events it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume among the powers of the earth the separate and equal station to which the laws of nature and of nature's god entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are life, liberty, and the pursuit of happiness; that to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed; that whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it, & to institute new government, laying its foundation on such principles & organizing its powers in such form, as to them shall

Part of the original manuscript of the Declaration of Independence, written by Thomas Jefferson. It is now on display aboard the "Freedom Train." The revisions shown were included in the document finally presented to the Continental Congress.

BE PROUD OF WHAT YOU WRITE . . . and the way you write it!

With a Parker "51", you're bound to take more pride in what you write. You write better—faster—with less effort. No push or coax. The "51" not only does you proud—it's the pen that's smart to own. Beautiful—made to the most precise standards. It's the world's most-wanted pen! See the "51" at your pen dealer's. Choice of custom points. Two sizes: regular and the new demi-size. The Parker Pen Company, Janesville, Wisconsin, U. S. A., and Toronto, Canada.

Parker "51"

"51 writes dry with wet ink!"

Copr. 1948 by The Parker Pen Company

THE GEOLOGISTS

(Continued from Page 1)

of a camera-to-man ratio of 1.17, and the three bid-made grand slams of one foursome.

Fearing a possible tropical storm, the party camped in the bottom of a convenient arroyo and spent a relatively shiverless night.

Fair and Colder

Sunday the party rolled on down the Sacramento detrital valley and then climbed (manually, in part) onto the Kaibab Plateau, stopping amid the recently-fallen snow of South Rim for the night. One of the softer (and warmer) parties rented a cabin but the rest braved the 15- above temperature on the ground, the better to feel ready for Monday's descent into the Grand Canyon proper. The descent, down Kaibab Trail, was accomplished without much ado, but the afternoon ascent, by Bright Angel (for the more hardy) was rather an effort for some. Guaranteed as a never-to-be-forgotten method of impressing the staturgy of the canyon on the eager minds of the troops, this upward journey failed of this for some because, a) it was dark by the time they reached the Supai, or b) it wasn't dark but they were too beat to give a hoot, or c) both. Nineteen miles are a lot, even with El Tovar Bar at the end of the rainbow.

Mud, Monoclines, Misery

The condition of the trail, which varied from (top to bottom and then reverse) — snow, ice, slush, mush soup, dirt, with "poor li'l burros" and products here and there, left much to be desired, but could have been worse. Tuesday one and all were content to observe from the rim and curse silently to themselves. Wednesday, off the expedition rolled, playing tag with the monoclines and into the Navajo country near Cameron to crack open geodes and collect pertified

wood. Camp was made south, some 18 miles and 1 1/4 hours later, near Sunset Crater, where the wind was blowing. By morning it had deposited several inches of snow on the sacks, and continued to blow more and more for Thursday's climbing of the cindercone itself.

Low Blow

The more hardy, such as Muehlberger, were blown right to the top of the crater by the icy blasts, where they saw nothing, since open eyes were soon filled with cinders and ice, while lighter men (viz: Alexander) were blown non-stop over the top and down the other side, also seeing nothing en route. After more prowling around on basal flows looking for squeeze ups, it was decided to throw in the towel on Meteor Crater and go right in to Flagstaff to the Museum. The afternoon was spent at this cultural center in the wilderness (incidentally, it beats our feeble museum badly) and then the party moved on south along U.S. 89 from Ashfork, stopping in a favored spot (a cinderslope) for the night. The wind did not blow, but by 6 a.m. the reading was 11 above, and many were cold and few were frozen. Earlier cooperation on the part of some of the bovines of the region managed to keep at least one camper warm in the wee hours, close by his "coal" fire.

He Puts Out Fires

Two more days of bridge passed rather uneventfully, except for the last hundred miles, when a leak in the Monster's exhaust ignited the roof. Exhaust ignited the roof. Other expedients proved unnecessary, since some foresighted grad students had come equipped with water pistols (bought Saturday for putting out hotfoots in the two-decker, foot-to-face "bus"), and well-aimed shots kept the flames under control until the party reached Pasadena Saturday afternoon, dirty, broke, sleepy, exhausted, ill, and generally all refreshed and ready to start the grind beginning again this week.

Frosh Sports Roundup

—By Earl Hefner

A busy spring sports schedule faces several Frosh teams. The tennis and track squads have already met the opposition although they have not fared too well.

In the Conference Relay Meet March 6 the Freshman team placed fourth among the five participating league teams. Art Miller did more than his share in winning both the shot-put and the discus. The 270-pound Underclassman is tossing the shot and discus for the first time this year. John Lewis grabbed a second for the Frosh in the discus, and the combination of Miller and Lewis in that event may win quite a few points for the young Beavers.

Racketeers

The racket squad has had only one match thus far, with Muir JC. The Frosh dropped the match, 8-1. Number one and two men for the team are Jack Martin and Dean Blanchard, with six or seven men on the team besides these two. A match is scheduled next Saturday at Whittier for 1:30. A home-and-away schedule has been arranged with each team in the Conference and the season winds up with the All-Conference matches at Redlands May 14 and 15.

Batmen Work Out

The Frosh baseball nine opens its season with a non-loop game at Pepperdine this Saturday at 2:15. After a two-week layoff for finals and vacation, the young diamond players have been working out this week in order to be in top shape for their eight-game schedule. The Frosh nine lost a fine prospect this week in Haydn Sanders, who was slated to play third base, but Dean Daily as been working in at the hot corner to take Haydn's place, and may fit in nicely in the infield combination.

Splash, Prospects

Frosh aquamen have been swimming daily with the Varsity at the PCC pool. One of the brightest prospects is Noel Reed,

SPRING SPORTS SCHEDULE

The following sports calendar for the third term was released by the Athletic Office this week and is subject to change. For weekly corrections or additions please see the Athletic Office in Building T-1.

DATE	TIME	EVENT	TEAMS COMPETING	PLACE
Fri. Apr. 2	1:30 PM	Golf	Varsity vs. Redlands	Montebello
	3:00 PM	Track	Frosh vs. Santa Barbara and Oxy	Occidental
	4:15 PM	Swimming	Varsity vs. Redlands and Muir JC	Muir
Sat. Apr. 3	1:30 PM	Tennis	Varsity vs. Whittier	Tour. Park
	1:30 PM	Tennis	Frosh vs. Whittier	Whittier
	2:00 PM	Track	Varsity vs. Santa Barbara and Oxy	Occidental
	2:15 PM	Baseball	Varsity vs. Whittier	Tour. Park
	2:15 PM	Baseball	Frosh vs. Pepperdine	Pepperdine
Mon. Apr. 5	4:30 PM	Swimming	Varsity vs. LACC	Pasadena CC
Wed. Apr. 7	4:30 PM	Baseball	Varsity vs. Muir JC	Tour. Park
Fri. Apr. 9	1:30 PM	Golf	Varsity vs. Whittier	Montebello
Sat. Apr. 10	1:30 PM	Tennis	Varsity vs. Pomona	Tour. Park
	1:30 PM	Tennis	Frosh vs. Pomona	Pomona
	2:00 PM	Track	Varsity vs. Santa Barbara and Redlands	Tour. Park
	2:15 PM	Baseball	Varsity vs. Pomona	Pomona
	2:15 PM	Baseball	Frosh vs. Pomona	Tour. Park
	2:30 PM	Swimming	Varsity and Frosh vs. Occidental	Pasadena CC
Tues. Apr. 13	4:30 PM	Baseball	Varsity vs. La Verne	Tour. Park
Fri. Apr. 16	4:00 PM	Track	Frosh vs. Whittier and Pomona	Tour. Park
Sat. Apr. 17	10:00 AM	Golf	Varsity vs. Pomona	Pomona
	1:30 PM	Tennis	Varsity vs. Redlands	Redlands
	1:30 PM	Tennis	Frosh vs. Redlands	Tour. Park
	2:00 PM	Track	Varsity vs. Whittier and Pomona	Tour. Park
	2:15 PM	Baseball	Frosh vs. Pepperdine	Tour. Park
	2:15 PM	Baseball	Varsity vs. Whittier	Whittier
	2:30 PM	Swimming	Var. and Frosh vs. Pomona and Redlands	Redlands
Fri. Apr. 23	1:30 PM	Golf	Varsity vs. Whittier	Whittier
	4:00 PM	Swimming	Var. and Frosh vs. Occidental	Occidental
Sat. Apr. 24	1:30 PM	Tennis	Varsity vs. Pomona	Pomona
	1:30 PM	Tennis	Frosh vs. Pomona	Tour. Park
	2:15 PM	Baseball	Varsity vs. Redlands	Tour. Park
	2:15 PM	Baseball	Frosh vs. Occidental	Occidental
Tues. Apr. 27	4:20 PM	Baseball	Varsity vs. Chapman	Tour. Park
Wed. Apr. 28	3:00 PM	Tennis	Varsity vs. Occidental	Tour. Park
	3:00 PM	Tennis	Frosh vs. Occidental	Occidental
Thur. Apr. 29	4:00 PM	Swimming	Varsity and Frosh vs. UCLA	UCLA
Fri. Apr. 30	1:30 PM	Golf	Varsity vs. Redlands	Redlands
	3:00 PM	Track	Frosh Conference Meet	Tour. Park
Sat. May 1	1:30 PM	Tennis	Varsity vs. Redlands	Tour. Park
	1:30 PM	Tennis	Frosh vs. Redlands	Redlands
	1:30 PM	Track	Varsity Conference Meet	Pomona
	2:15 PM	Baseball	Frosh vs. Occidental	Tour. Park
Mon. May 3	3:00 PM	Baseball	Varsity vs. Occidental	Tour. Park
Wed. May 5	3:00 PM	Tennis	Varsity vs. Occidental	Occidental
	3:00 PM	Tennis	Frosh vs. Occidental	Tour. Park
Fri. May 7	1:30 PM	Golf	Varsity vs. Pomona	Montebello
Sat. May 8	1:30 PM	Tennis	Varsity vs. Whittier	Tour. Park
	1:30 PM	Tennis	Frosh vs. Whittier	Tour. Park
	1:30 PM	Swimming	Varsity and Frosh Conference Meet	Occidental
	2:15 PM	Baseball	Varsity vs. Pomona	Tour. Park
	2:15 PM	Baseball	Frosh vs. Pomona	Pomona
Tues. May 11	4:20 PM	Baseball	Varsity vs. Glendale JC	Tour. Park
Wed. May 12	4:00 PM	Swimming	Varsity and Frosh vs. LACC	LACC
Fri. May 14	9:30 PM	Golf	Varsity Conference Tournament	Whittier
	1:30 PM	Tennis	Var. and Frosh Conference Tournament	Redlands
	3:00 PM	Baseball	Frosh vs. Occidental	Tour. Park
Sat. May 15	9:00 AM	Tennis	Var. and Frosh Conference Tournament	Redlands
	2:15 PM	Baseball	Varsity vs. Occidental	Occidental
Tues. May 18	4:30 PM	Swimming	Var. and Frosh vs. UCLA	Pasadena CC
	4:20 PM	Baseball	Varsity vs. Pepperdine	Tour. Park
Fri. May 21	1:30 PM	Golf	Varsity vs. Occidental	Occidental
Sat. May 22	2:15 PM	Baseball	Varsity vs. Redlands	Redlands
	2:15 PM	Baseball	Frosh vs. Pepperdine	Tour. Park

who acts as Frosh athletic director on the side. Noel recently placed first in the breast stroke in the IH swim meet, and was, in fact, the only Throop swimmer entered. Dick Libbey took first in the 50-yard and 100-yard free-style events in the same meet, and the speed merchant from Hawaii may tally a number of digits for the Frosh before the season is ended.

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Skiers to Compete In Two More Meets

SKI Team Ends Season With Meets At Vanderbilt and San Gorgonio

Frosh Trackmen Invade Oxy

Frosh trackmen will run up against Conference competition for the second time this season at the Oxy oval, when they meet the Tiger Cubs this Friday at 2:30 p.m.

Oxy will likely have a slight edge in the track events, judging from performances at the recent Conference Relays which the Oxy Frosh won.

Point Prospects

Probable point-winners among the distance men are Bob Cobb in the mile, Dick Smith in the two-mile, and Walt Edwards in the half. Sprinters expected to make a good showing are Ken Berg in the 220, and Charles Paulson in the 100 and 220.

Field Events

Art Miller and John Lewis are expected to control the shot-put and discus pretty thoroughly, judging from their performances at the Conference Relays.

Future Freshman track Conference meets will be held at the following:

- April 10—Redlands.
- April 16—Whittier and Pomona.
- April 30—Freshman Conference meet at Caltech.

Caltech's ski team, which has lost only to USC and UCLA in its previous meets with six other teams, plans to complete the season with two meets to be held this month with other Southern California and western colleges.

Meet Coming

The next intercollegiate ski meet will be held at Vanderbilt, April 11. The Caltech skiers are expected to make a good showing among the western colleges attending. A week later, April 18, the Southern California Interscholastic Ski Union will hold downhill and slalom events at San Gorgonio.

Among members of the SCISU are Caltech, Muir J.C., P.C.C., Occidental, Whittier, Redlands, U.C.L.A. and S.C.

Ski Club to Compete

The Caltech Ski Club (not to be confused with the college team) will enter the meet to be held April 4 at San Gorgonio.

Rated as first three men on the ski team on the basis of past races are Shurmeier, Blom and Bradley. Other men on whom the team will base its chances in the next two meets are Blair, Burroughs, Carus, Gardner, Gunther, McKenney, Mason, Price and Thorpe. Sage Burroughs has been manager for this season.

Touch Football, Tennis, Basketball Slated For IH; Fleming Leads Field

The spring interhouse program will get into full swing with touch football competition beginning next Wednesday. Under the direction of Jim Nerrie, teams from the four houses and Throop Club will participate in the pigskin sport which will continue through April 22. The tennis program begins April 26 and extends through May 28, while basketball will be played May 3 through May 18.

The Interhouse trophy race to date is led by the Fleming boys with 92 points. Dabney follows with 78, Throop 59, Ricketts 57, and Blacker 50. Last term Fleming ran and swam off with first places in track and swimming, and shared top spot with Throop for the softball leadership.

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Talkin' It Over with The Goon

Here we are back at the old stand for another few weeks of pleasure. Let's hope that the surf gets a little bigger by June so that some of the immigrant Kanakas won't go back to the Islands with the terrible falsehood that there is no surf in Southern California. It was so flat at San Onofre, a good spot to remember if you're really interested in getting a few good slides, last week that some easterner mistook the Pacific for Lake Michigan.

Cupid at Work

Most of the athletes were pretty conscientious last week with the exception of one or two who broke training to get married. In fact, Don Peterson was so beat Monday after his workout that his wife had to drag him off the track. Understand the little woman had a few words with Doc about Pete's conditioning program. Bullet Bob Funk is back at his usual stand in Doctor Haines' Emporium of Sore Muscles. Something was slightly wrong when I last saw Bob in there; he was lying under the lamp, but it wasn't

TECH BASEBALLERS DROP CHAPMAN NINE

The long overdue hitting power of the Beaver baseball squad proved to be the undoing of Chapman's Panthers as the Engineer nine batted out a 14-7 decision last Monday on the loser's field.

Beginning the sixth inning with Chapman leading 7-3, the Preislermen rapped out nine hits while bringing home eleven runs. Following a strike out on Hedrick, the Tech horsehiders knocked

Muir Sinks Tech

Limiting the Beaver nine to 3 hits, Muir JC won a 7-2 verdict at Tournament Field March 27. Despite the fine pitching of Glenn Chaffee, who struck out 12 Mustangs, and 4 Muir errors, the West Pasadena boys chalked up 4 runs in the fifth inning to decide the game.

Muir	AB	R	H	PO	A
Fitzgerald, rf	5	2	2	2	0
Rettig, cf	4	2	1	2	0
O'Connell, 1b	4	0	0	3	2
Schaefer, ss	3	1	0	1	0
Sullivan, lf	3	1	1	0	0
Wilkinson, 3b	3	0	1	1	4
Petek, c	3	0	0	1	1
Schmitz, p	4	0	0	1	3
Saltzar, lf	1	0	0	0	0
O'Sullivan	1	0	1	2	0
Total	33	7	8	27	14

Chapman	AB	R	H	PO	A
Petrulas, c	5	0	1	12	0
Butler, 2b	4	0	0	1	0
Strauss, 1b	3	0	1	6	1
Patterson, cf	4	0	1	1	0
Norman, ss	3	0	0	2	3
Hedrick, 3b	3	1	0	1	0
Smith, rf	4	0	0	0	0
Chaffee, p	2	1	0	0	2
Winchester, lf	3	0	0	1	0
Total	31	2	3	27	7

Errors: O'Connell (2), Scheerer, O'Sullivan, Butler. Stolen bases: Muir (1), CIT (2). Two base hits: Schaefer, RBI: Schaefer (3), Wilkinson (2), Schmitz, Norman. Double play: Schaefer. Left on base: Muir (6), CIT (12).

turned on. It turned out that the light bothered him so much that he couldn't sleep.

Haines Lauded

And, speaking of Doc, it is gratifying to see that this important and respected gentleman of track and field circles is finally getting the recognition that he deserves. Braven Dyer, one of the older Sagehens now turned sports sage, gave Doc a pat on the back that was long overdue.

Remember not so long ago it was an Orange and White team that pounded the Cardinal and Gold of Dean Cromwell not once, not twice, but three times. But now that the Navy doesn't bring the athletes to Tech, SC seems

(Continued on Page 6)

Beavers on Rampage

White batted in Chuck Norman with an infield single and Hedrick got on first to load the bags. Then Art Spaulding, who pitched the entire game for Caltech, hit a single to left field, bringing in a run. Bill Cox then walked to load the bases again. Butler was hit by a fast ball from Nagai, putting White across home plate. Milt Strauss pounded out a long single to right field, but a fly by Patterson ended the initial half of the free-scoring inning.

Second Contest

A home run by Morrison in the second frame gave the Beavers their first run, and a couple of innings later Spaulding knocked in a pair of tallies with a sharp single to left.

Morrison Hits

Moe Morrison was the batting star for the Engineers with a record of two for three for the afternoon. The Tech third baseman was also the Chapman pitcher's favorite target, getting hit by two pitched balls during the game.

The Beavers played some ragged ball in spots, and were responsible for seven errors, while the Chapman lads were made four mishaps. Their defensive play was at its best in the fifth stanza by virtue of a well-operated double play from Norman to Butler to Strauss. Incidentally Strauss did a fine job at first, making no errors in the game.

Saturday Encounter

Saturday the squad meets Whittier at Tournament Park in the season's opening Conference game. Gametime is 2:15. Next Wednesday Caltech will play host to Muir's Varsity nine. The Mustangs have handed the Beavers two defeats already this

(Continued on Page 6)

CARL'S CALTECH BARBERS
5 GOOD BARBERS—APPOINTMENTS IF DESIRED
ON CALIFORNIA NEAR LAKE

DU PONT Digest

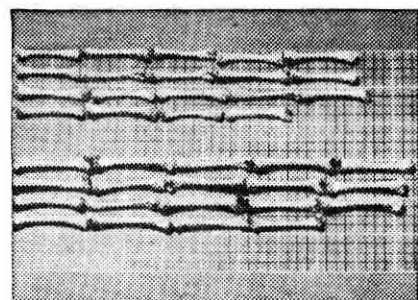
For Students of Science and Engineering

Experimental research results in better Vitamin D source for poultry industry

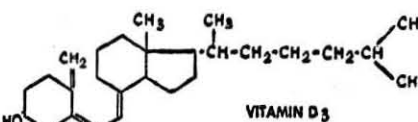
Fifteen years of work by Du Pont chemists, biochemists, physicists, and engineers behind development of "DELSTEROL"

In 1922, it was shown that vitamin D controls the utilization of calcium and phosphorus in the body, especially in the bones of growing animals. This led to the discovery that leg weakness in chicks, poor production, low hatchability of eggs, and other disturbances were caused by a deficiency of this vitamin.

that year, Du Pont research men—who had been studying the chemistry and biochemistry of vitamin D for almost four years—announced that the provitamin in animal cholesterol was not ergosterol. They showed that the activated provitamin in cholesterol gave a vitamin D much more effective for chicks than that of irradiated ergosterol. This fact was based on many comparative assays of irradiated cholesterol, irradiated ergosterol, and irradiated mixtures of these substances on rats and chicks.



Bones at top, from birds fed no vitamin D, are shorter, poorly developed, and fragile, compared with bones at bottom from birds fed Du Pont "Delsterol."



Du Pont chemists and engineers carried this forward by devising a successful commercial process for making 7-dehydrocholesterol and irradiating it to vitamin D₃. Several forms of vitamin D are now manufactured by Du Pont, ranging from oil and dry powder concentrates—used by the poultry trade under the trademark "Delsterol"—to vitamin D₃ crystals of the highest purity.

Today's chickens are healthier, and the average annual egg yield over the last eight years has increased from 134 to 159 per bird. To a considerable degree, this is a result of the fifteen years of research devoted by Du Pont scientists to the development of "Delsterol" "D"-activated animal sterol.

Questions College Men ask about working with Du Pont

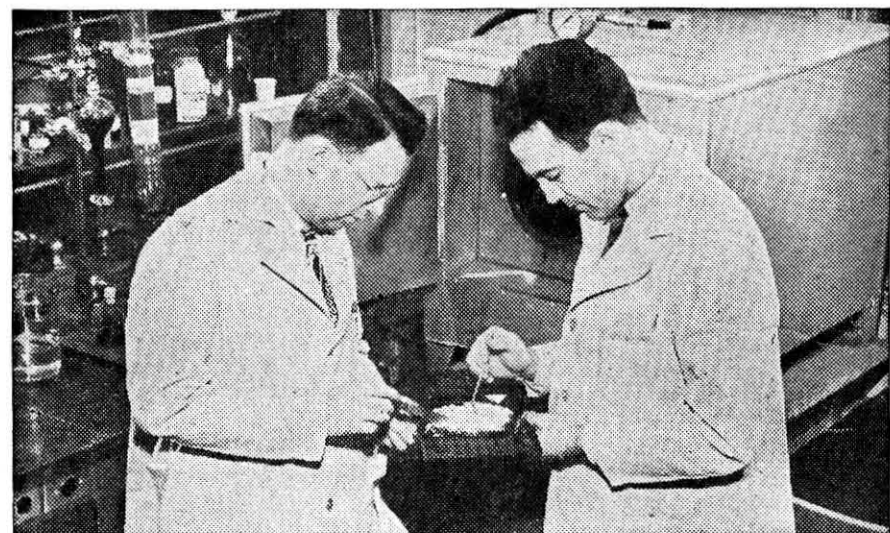
What are the opportunities in sales?

Separate sales staffs are maintained by each of Du Pont's ten manufacturing departments. Training in chemistry or chemical engineering is a prerequisite for some sales positions, which may be in one of three fields: technical sales, sales development, or direct selling. New employees usually acquire technical background by first working in a control laboratory or in production. Write for booklet, "The Du Pont Company and the College Graduate," 2518 Nemours Building, Wilmington 98, Delaware.



BETTER THINGS FOR BETTER LIVING ... THROUGH CHEMISTRY

More facts about Du Pont — Listen to "Cavalcade of America," Mondays, 8:30 P.M., PST on NBC



L. Fullhart, Ph.D. 1946 in organic chemistry, Iowa State College and W. F. Marlow, chemist, B.S. 1941, George Washington University, preparing to examine a sterol product for quality and yield.

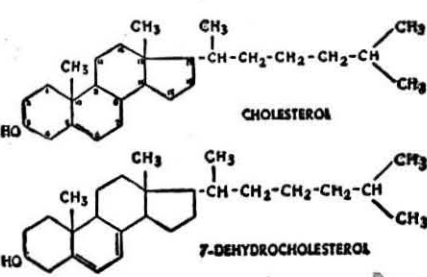
Scientists subsequently discovered that vitamin D could be made by irradiating plant or animal tissues with ultraviolet light. This reaction has since been shown to consist of transforming certain provitamins from the group known as sterols, into vitamin D. The final result of these discoveries was the present large-scale commercial production of the vitamin by a series of complex chemical and photo-chemical reactions which require careful control by chemists, biochemists, physicists, and engineers. In this development, Du Pont scientists played an important part.

Ergosterol once the only source

For years before 1934 it was assumed that ergosterol, a sterol first isolated from vegetable sources, was the only provitamin that yielded vitamin D. In

Synthesis from Cholesterol developed

Other investigators showed that the provitamin in cholesterol was 7-dehydrocholesterol by developing its synthesis from cholesterol. The relationship between cholesterol, 7-dehydrocholesterol, and vitamin D₃ is shown by the following formulas:



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CAMPUS BREWINS

(Continued from Page 3)
the rest of the men in the Geology department will take appropriate action upon such disgraceful conduct—and he isn't even a Tau Bete.

Ski Bust

One more item to finish up this diatribe. Dick Ferrell, Tom Stix, Steve Morrison, and Bob Brown took off for Brighton, Utah, immediately after finals. Stix has just recently taken up the sport and was eagerly anticipating his first big trip. Arriving there, they found the snow perfect and the weather delightful. Eager Beaver Stix and the rest dash out to try their hand. All did very well except poor Tom who broke his ankle in the true "Rube Metler" style within the first three hours. Even though he is now bobbing around the campus his spirit is undaunted and he intends to go back as soon as possible and try to break the other one. And I thought Tau Betes had some brains?

TECH BASEBALLERS

(Continued from Page 5)
spring, one a six-inning no-hitter, and the Engineers will be out to make the third time a charm.

	AB	R	H	PO	A
CIT					
Winchester, lf.	4	2	1	1	0
Butler, 2b	4	2	1	3	10
Strauss, 1b	5	5	2	1	0
Patterson, c	4	2	1	2	0
Norman, ss	4	2	1	0	0
Morrison, 3b	4	2	1	0	0
Chaffee, rf	2	0	0	0	0
Smith, cf	2	0	0	0	0
Brown, p	4	2	0	3	1
Spaulding, p	4	2	1	0	0
White, rf	4	2	1	0	0
Hedrick, cf	2	3	0	0	0
Cox, lf	0	0	0	0	0
Total	36	14	13	21	7
Chapman	AB	R	H	PO	A
Chapman, ss	4	0	0	1	2
Johnson, 2b	4	0	0	0	0
Raab, lf	4	1	0	0	0
Turner, c	4	1	0	0	0
Brown, rf	4	0	0	0	0
Bracco, cf	4	1	0	0	0
Smith, 3b	4	1	0	0	0
McBride, 1b	3	0	0	1	2
Nagai, p	3	0	0	1	0
Miller, rf	1	0	0	1	0
Dolby	1	1	0	0	0
Total	34	7	9	21	7

*Batted for Brown in 5th.
CIT: Chapman 0 1 0 2 0 11 0-14
Chapman 0 2 3 0 2 0 0-7
Errors: Morrison (4), Winchester, Norman, Smith, Nagai (2), Johnson, Turner.
Stolen bases: CIT (2), Chapman (2). Two base hits: Strauss, McBride. Three base hits: Dolby. Home run: Morrison. RBI: Strauss (3), Norman (2), Spaulding (3), Butler, Patterson, Morrison, White, Hedrick, Bracco (2), McBride (2), Nagai (2).

TALKIN' IT OVER

(Continued from Page 5)
to be getting their share in the age-old tradition of most universities. Need I say more?

Al Hershey, LAAC ace weight man and Olympic hopeful, is currently lending an expert hand in helping Tyson and Art Miller in the discus and shot. This boy Miller, if he keeps plugging like he has, will surprise a lot of peo-

ple with some mighty fine marks.

Murph Marries

Another athlete succumbed to a woman's charm; this time one of Merrick's Mermen. The Murph took the vows and headed for a dude ranch honeymoon, where, according to the little woman, he worked out daily—in the pool.

Butterfly Bill was eyeing a spot on the Olympic squad for a time until he saw the marks

MUSICAL BAEDEKER

(Continued from Page 3)
ed briefly on each recording, presented a program consisting largely of music by contempo-

rary composers. His illuminating remarks, together with the excellent records played, served to make the evening one of the most interesting of the year.

The Musicale will resume its informal presentation of recorded music next Sunday, April 4, at 7:30 p.m. in Dabney Lounge with a concert featuring works of the neo-classical school.

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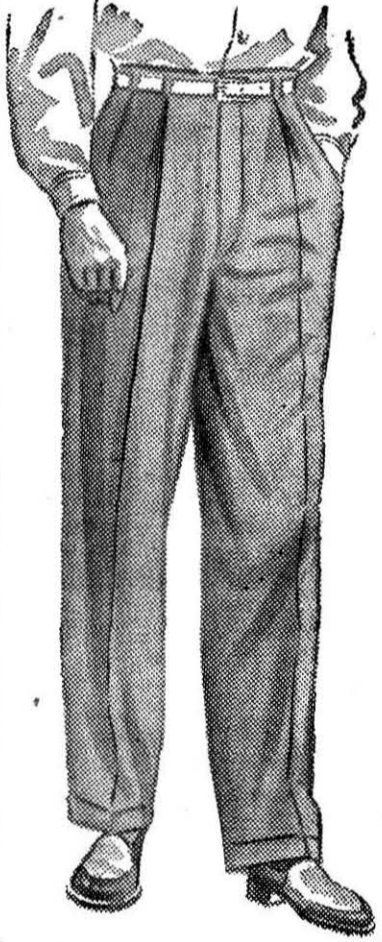
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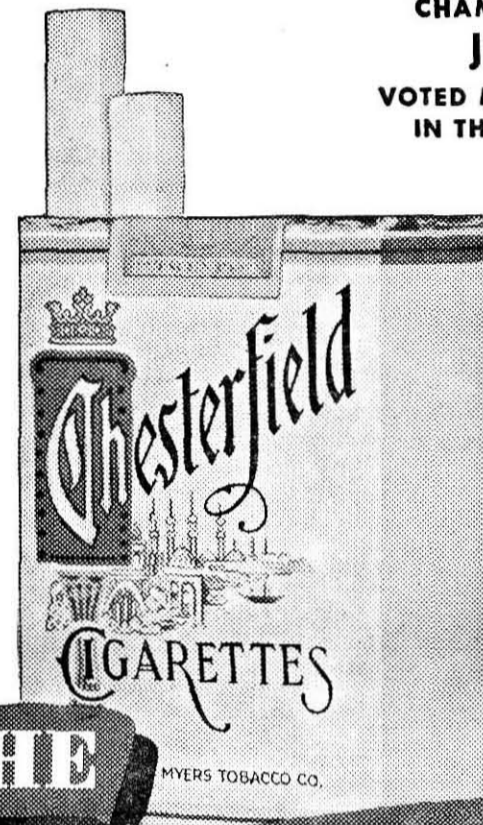
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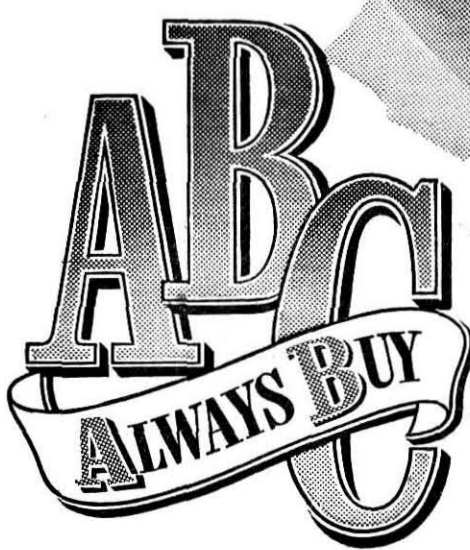
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