# The California Tech

Pasadena, California, Thursday, March 3, 1955

Candidates are nominated for student house offices

Four student houses and Throop Club nominated officers this week to run in house elections which will be held today and next week. Blacker, Fleming, Ricketts, and Throop held nominations for all offices, while Dabney nominated only presidential and vice presidential candidates. Dabney will complete

nominations next week.

Volume LVI

Blacker, which held its nomination meeting last Monday night, placed Fritz Benning, Myron Black, and Joe Gibbs in the running for president. Jan Arps, and Don Evans are opponents in the race for executive vice president, while George Hall, Jon Harford, and John Velman are unopposed in their bid for social chairmen.

Bruce Blackie and Reed Saunders are candidates for secretary. The office of treasurer is well contested with Mike Bleicher, Bob Deffeyes, Bill Dietrich, Al Farley, Pete Lauritzen, Ken Laws, and Jim Short running for the post. First balloting at Blacker will be held today; runoffs are slated for March 8.

Ted Johnson and Ray Orbach were nominated to run for Dabney president in the Dabney (Continued on Page 2)

## Honor point lists are due next week

Each year honor keys are awarded by the ASCIT as recognition of students' participation in extra-curricular activities. Those who intend to apply for Honor Keys, for the past year, are requested to submit their lists of points to members of the Honor Point Committee by Friday, March 11. This Committee consists of the vice-president and two Representatives-at-Large of the ASCIT.

The points which are submitted must have been earned between the beginning of third term last year and the end of this term. It should be noted that a person may claim additional points which are not included on the list appearing in the Little T. for approval by the Committee. After reviewing each case the committee will award keys to men with 100 or more points, and certificates to men with 50 or more points. Seniors are permitted to use their last four terms and earn 130 points for keys. Certificates and Honor Keys are presented at the Awards Assembly late in the third term.

# Famous novelist tells Tech about artists and scientists

by Russ Runter

Irving Fineman, famous novelist speaking in Dabney Hall Monday night, triggered critical Tech minds to a lively discussion of "The Relationship of Science and Art in the Modern World." A third of the audience was faculty, a smatering grad students and the rest various sorts of natives.

Mr. Fineman told tales of his civil engineering career, begun at MIT, and how it was gradually subverted by clandestine writing activities. He soon got into the meat of the subject by drawing a distinction between science and art:

The scientist engages you above the eyes suppressing his subjective nature while the artist appeals to your emotions put-

Y series offers

fourth picture

Next Sunday, the Y Film Se-

ries is featuring a free film, "It

Happened One Night," in Cul-

bertson Auditorium at 7:30 p.m.

This unscheduled program is be-

ing paid for by the proceeds

from the term's three scheduled

films, which were received very

"It Happened One Night" is a

romantic comedy starring Clark

Gable and Claudette Colbert.

with Frank Capra directing. This

trio brought the film and its di-

rector wide-spread fame and five

Academy Awards; best produc-

tion, direction, screenplay, actor

and actress. The plot involves

a runaway heiress and the news-

paperman she meets on a bus

travelling from Miami to New

York. While the newspapers, ra-

dios, and police are searching for

a millionaire's daughter who ran

away from the altar, she is liv-

ing it up for the first time in

Dragon" and "Destination Ma-

goo," will be featured as shorts.

"Destination Magoo," which was

presented in layout board form

at the UPA lecture here recent-

ly, is an obvious lampoon on

"Destination Moon." "The 51st

Dragon," which was contracted

for by "Omnibus" on television,

is an experimental cartoon.

Two UPA cartoons, "The 51st

favorably.

her life.

ting every emphasis on the inuence of his individual personality. He set about closing this fissure with the remark, "Beauty is connected to truth," and launched into a discussion of the abstraction, in science and in art.

He sees the abstraction and analytical approach in modern literature, say of Proust and Jocy Joycve, as a fault or a responsibility of science, with its influence on the artist. Much of this influence came about as the changing foundation of science and the products of science have produced what will be called the Age of Anxiety.

So our writers, too, become feverish experimenters trying to express states of feeling never expressed before. One difference

(Continued on Page 6)

## Bible study group meets this Friday

A series of Friday noon Bible study meetings is being initiated tomorrow by the Caltech Christian Fellowship. These meetings will be held regularly on Fridays at the training table in lower Ricketts at lunchtime.

The primary purpose of the series, as outlined by the Fellowship officers, is to help interested students get an insight into what the Bable really means and how it should be applied to daily life in present times. Occasional speakers may be brought in. Every interested Techman is urged to attend.

# **Bergeman defeats Moulton;** Workman, Ashby also win

## Bergeman breaks tie to win close race; Kalm and Perga lose in second runoff

Tom Bergeman defeated Rube Moulton in yesterday's runoff election to win the ASCIT secretarial race. The vote in this election was 221 to 207. Earlier, in Monday's runoff, the two men had tied with 195 votes apiece. Also in yesterday's election the student body chose Jim Workman for athletic manager, and Dick Ashby for second representative.

# **Couples sway** to Billy May at ICC dance

An expected 1500 students from the SCIC will be entertained by the music of Billy May and his orchestra tomorrow night at the Pasadena Civic Auditorium. All eight members of the Inter-Collegiate Conference will be represented by students at this annual ICC dance. Dancing starts at 9:00 and ends at 12:30.

### **Caltech** sings

Caltech's Glee Club Quartet, comprised of Rube Moulton, Howard Berg, Harry Griffin and Ted Johnson will present three numbers as part of the intermission entertainment. Two of the songs will be "Cruisin' Along" and New Ashmoleon Marching Society and Students Conservatory Band." Groups representing three other colleges will also add to entertainment.

### **Occidental** host

Occidental will act as host to the dance this year, Caltech holding this role last year. Finances this year will be handled by Redlands University with Caltech taking charge of the decorations.

BOD members and house social chairmen report that tickets are selling fast and are expected to reach the 200 couples mark before Friday night. Price of the tickets is \$2 per couple.

### **Party dresses**

Dress for the occasion will be suits for the men and party dresses for the women. It is requested that there be no flow

Workman won in yesterday's runoff by a vote of 223 to 196, defeating Arne Kalm. In the first runoff election (Monday) Jim Mebust had been eliminated from the race. The vote in that election was Kalm, 164 votes; Workman, 121 votes; and Mebust, 99 votes.

Ashby beat Andy Perga in the second runoff by a vote of 220 to 169. In the Monday runoff for this office Clarke Rees was eliminated. The vote in the Monday election was Ashby, 135 votes; Perga, 128 votes; and Rees, 110 votes.

## **Conley delivers** first messaae

By your vote you have elected me ASCIT president for the coming year. I can only say, "Thanks for your support." In return for your confidence, I promise to put out my best effort at all times. If at any time any of you feel that I am overlooking some portion of the student body or some phase of my duties, please feel free to call it to my attention. Likewise if you have some ideas about dance themes, the honor system, or any other activity pass them along to any board member so we can be sure we're arranging activities you, the students, will enjoy and appreciate.

The Board of Directors meets every Monday night at 7:30 in lower Fleming-come down and present your gripes or problems. after all, you're kicking in \$20 of your hard-earned money to the ASCIT; you might as well have some say about how it's spent.

I'd like this coming year to be a long-remembered one, both for Caltech and for ASCIT. I hope that the board and its activities won't disappoint you no matter how you voted.

Number 19

# Gnome Club brings alumni together for good times and service to the campus

those good times with all the boys which every conscientious alumnus should hold in solemn memory, are not lost for the jolly group of fellows who call themselves the Gnome Club.

The Gnome Club is an alumni fraternity composed of men who contributed to campus activities during their four years here and who are interested in perpetuating those student friendships. The club itself has a long history which closely parallels the development of Tech. It was started in 1897 as a social fraternity of students at Throop College and continued until the coming of the student houses when

That old school spirit and fraternities left the campus. But the Gnomes were a pretwell-knit organization and tv rather than completely disband, they began life anew as an alumni fraternity, dedicated to fellowship, development of character, and service to the Institute. In the way of fulfilling these aims, the members support all alumni functions and have contributed to alumni fund raising projects.

In the way of campus service, the Gnomes have made available this year a scholarship for for a Tech senior who has actively participated in student affairs and has shown evidence of leadership. This is one of the

few prizes which does not take account of the recipient's grades. The boys who get together and talk about the times way back when that saw Tech beat Oxy on the football field try to keep in close touch with present day student thinking and problems. At least once each year they hold a joint meeting with the Beavers, where the kids and the old men meet on common ground.

Every year the Gnomes initiates a group of seniors into the club. This year's initiation banquet was held last Sunday night, when John Andelin, Louis Kilchenman, John Merrill, Ralph Miles, and Rod Supple were initiated.

ers.

An added attraction for the dance will be the traditional appearance of both the newly elected and out-going BOD members of the ASCIT, with their dates.

## **ASCIT** variety show cancelled

"Old Faces of 1955," the ASCIT variety show originally scheduled for this evening has been cancelled. According to Jim Adams, ASCIT president, and Jon Harford, rally commissioner, the revue was abandoned because of scheduling conflict, proximity of finals, and general lack of enthusiasm.

The show may be presented third term if student interest is demonstrated and scheduling can be arranged.

-Phil Conley.

## **U.S. Revenoors** here next week

The Pasadena Office of the Director of Internal Revenue will have a deputy at Caltech next Monday, March 7, and Tuesday, March 8.

The Deputy Director of Internal Revenue will be located in the lobby of Throop Hall for these four days, and will be prepared to help members of the faculty, staff and student body with the preparation of their 1954 Federal Income Tax returns.

### CALIFORNIA TECH

## California Tech

Editors-in-Chief-Tom Bergeman and Lyman Fretwell EDITORIAL STAFF

Reporters at Large-Gordon Reiter, Marty Tangora

News Editor-Dick Hundley

Assistant News Editor-Dick Kirk

Dave Cantor, Jerry News Staff. Crocker, Al Farley, Bill Hecht, Dick Kirk, Jim Mebust, Frank Albini.

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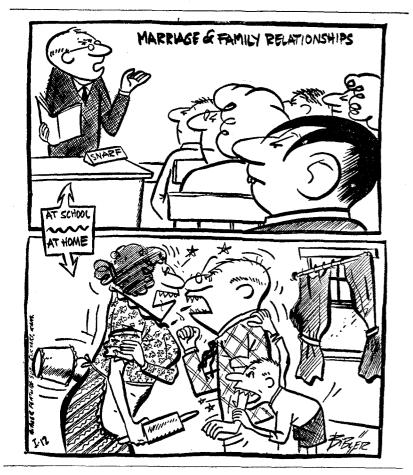
Entered as second-class matter Nov. 22, 1947, at the Post Office in Pasadena, California, under the Act of March 3, 1879.

## Summer dreams

Those idyllic weeks of sunburned ease, the summer vacation can, with planning, be just as valuable an experience for the college undergrad as the nine months in school. This week's Tech contains a couple of excellent suggestions.

We fiirst point to the interview schedule for summer jobs. Spending several months working with professional scientists or engineers, can give a much deeper insight into the opportunities in your field and a better view of how you fit into technical work on the bread and butter basis.

But while financial needs will drive most of us to work, there are other excellent opporunities that might be worth a monetary sacrifice. On page three there are outlined a number of opportunities for travel and study abroad. Travel tours of Europe, of Europe's music or art, and study programs in Austria, Britain, and Scotland are among the daydreams the article mentions. The editors of the Tech have received a number of these announcements which are available for interested people to examine further.



CONDIDATES-(Continued from Page 1) House meeting held last night.

Steve Mager for the athletic manager post. Lyman Fretwell, Jim Higgins

## The World and Tangora

### by J. Pierpont Tangora

Now that the big elections are all over (almost) I can take time out to laugh at them a little, I guess. Surely you must admit that our campaigns here have their amusing side.

For example, there seems to be something stupid and pointless about the way poster locations are selected on the Sunday night before election week. If you were on the campus between 9:30 and 10:00 that night you know what I mean. I was one of those unfortunates who were dragged ignominiously from their snakepits around 9:30 and asked politely to stand shivering in the cold for thirty minutes reserving the choice locations for posters.

Standing out there freezing my ears off I had plenty of opportunity to ponder the whole situation. How

> silly it seems to rush madly around picking out these particular places! Except in the case of overheads or such,

I don't see where it makes the least bit of difference where a poster is. Everyone sees them all sooner or later. And the thing about a poster that wins votes (at least my votes) is not the number of times I see it, but rather how cleverly its message is put across. In fact, after walking past the same dull poster in its prominent position for the fifteenth or twentieth time I'm about ready to develop a real negative attitude toward that particular candidate.

As for the election rally-

#### \* \* \*

I had my frog dissection in biology lab last Monday and I must truly say I wasn't the least bit impressed. I got to take apart one of those things in high school and I didn't get much of a kick out of it then. But at least the high school frogs were dead!

Here in our superior laboratories we get to operate on frogs which are literally alive and kicking, and I do mean literally. The frogs are anesthetized and then "pithed." Now "pithing" a frog is more than just getting him slightly disgusted. What you do is take a sharp implement, pierce his neck, and then run gaily up and down the spinal cord until you're fairly certain that that organ will never operate again. Then you turn the probe around and stick it into the frog's brain and wiggle it around until his brain is a well-stirred non-functional soup type of mess. This would be bad enough if it killed the frog, but it doesn't. I'm not trying to say that he feels the pain, for he doesn't even have a nervous system left! But two guys in my section did a bad pithing job and halfway through the dissection, with frog entrals all over the pan, the things started to kick, and actually freed themselves of the pins by which they had been secured! The part that bothers me most is that everybody thought it was pretty funny. The whole class gathered around and watched. It was reminiscent of those geology lectures where Dr. Sharp would say, "So they built this dam right over this fault (snickers) and in two months it disintegrated sending million-ton hunks of concrete down the valley at forty miles per hour (gales of laughter)."

## Campus Brewins

"Grass is for nature lovers; I'd rather taste the meat."

easily.

#### Goff goof

The few wakeful members of Tanham's frosh history secton enjoyed a few moments of hyseteria Monday. Supersnake Goff, leaning forward from his frontrow seat, was puzzled when an unfamiliar word cropped up in the discussion. Grabbing for his notebook and pencil, he exhaled for the first time in an hour and uttered three immortal words: "What's fornicaton, sir?"

The Beak would like to crown this week's champion bird dog, the Darb's own Tony Ellmore. It comes to us that at the snow party last weekend half pint Glassel was the object of this smooth critter's actions. Skiing was to be the afternoon's activity, but Jay's date preferred to stay in the lodge with Tony. While Jay cooled off on the slopes, the lodge was the center of much petting. We ask you Jay, how does it feel to be bird dogged by a cockerspaniel?

#### War again

The Darbs and the Phlegms renewed their warring with an innocent hosing of the Dabney wood pile. Tiger II Seldeen, greatly disturbed by the outrage, saw both duty and a brick, the result of which was one less window pane in Fleming. Equally tigerlike Ullmeyer, also seeing his duty and Seldeen, sprung to action in the Dabney court Tempers soon cooled but not memories.

Later that night, under a pile of some twenty-odd occupied

Weekendsocial program listed

Blacker House has selected the Pasadena Winter Garden for its ice skating party this Saturday. Blacker members will take to the ice from 8:30 to 11:00 and then return to Blacker Lounge to dance from 11:00 to 12:30.

Dabney will hold its annual Parisian party, "Ozark's Thrall," this Saturday at the home of Mr. and Mrs. L. E. Shepard. Darbs and their dates will don costumes in the Paris manner for this party. Dick Jaffe and his trio will play for the event which is slated to start at 8:30.

expects to give a damn about what the insides of a frog look like. Why not let just that ten per cent make their own dissections on their own frogs, so that the bulk of the class can keep their lunches in the stomach, and eighty more frogs a year can die in one piece.

Ronald B. Roberts.

black and green house coats,

were the same Seldeen and Ul-

lemeyer. Wiberg and Converse

were in the meantime occupying

two showers, wet and unwet re-

spectively. The tiger soon emerg-

ed with blood on his shirt but it

was our boy Jack who was heard

to comment that his nose bled

hours of double E due to un-

Love thy neighbor

dinnertime Jim Short spased the

troops with his fiery introduc-

ton of the visiting dignitaries.

He just forgot whose wife was

(Continued on Page 4)

The last regular meeting of the

Caltech Math Club will feature a

talk on probability by Dr. Frank

L. Spitzer of the Tech math

department. Officers will also be

elected at this meeting, which

will be held next Monday at

Anyone interested in math is

invited to attend; refreshments

Interview Schedule

will be served after the talk.

Math club meets

to elect officers

The other night in Blacker at

chartered winds and rain.

Finale: Seldeen rewrites five

Bird dog special

Retaliation

MARCH Thurs., 3—BS, MS, PhD/Ch; BS, MS/ChE, E Technicolor Motion Picture Corporation. Thurs., 3—BS/CE, EE, ME, Ph (Inter-ited in electronics) Mare Island Naval ested in electronics) Mare Island Naval Shipyards. Thurs., 3.—BS, MS, PhD/EE, Ph, ME; Jrs/ME, EE for Summer Hycon Mfg. Com-pany, Pasadena. FRI., 4.—BS, MS, PhD/CE, Ae, EE, ME North American Aviation Engineering De-partment, Inglewod, California. FRI., 4.—BS, MS, PhD/Ch, ChE, BS/CE, EE, ME; BS, MS/Ph Columbia-Southern Chemical Co., Corpus Christi, Texas. Mon., 7.—BS/ME; BS, MS, PhD/EE, Ma, Ph Remington Rand Inc., Engineering Re-search Associates Division, St. Paul, Minn. Mon., 7.—BS, MS/ACh, ChE General Pe-troleum, Laboratory Department. Tues., 8.—BS, MS/ME, ChE Richfield Oil Corporation. Summer employment oppor-tunities for Jr/ME's & ACh's interested in petroleum production. Tues., 8.—BS, MS/ME, ChE Combustion Engineering, Inc. Wed., 9.—BS, MS/ME, EE, Ph Radio Cor-poration of America. Wed., 9.—BS, MS/ME, PhD/Ae, CE, EE, Shipyards.

7:30 p.m. in 155 Arms.

Engineering, inc. Wed., 9-BS, MS/ME, EE, Ph Radio Cor-poration of America. Wed., 9-BS, MS, PhD/Ae, CE, EE, ME, Ph, Ma Northrup Aircraft Inc. Wed. 9-BS, MS/Ge, Geoph, EE West-ern Geophysical Co. Thurs., 10-BS, MS, PhD/Ch, ChE The

Wed. ern Geophysical Co. Thurs., 10—BS, MS, PhD/Ch, Chi Dow Chemical Company. Most positions are in Midland, Michigan however, there are a limited number of openings at Pittsburg, California and Freeport, Texas. Thurs., 10—BS/ME, Ph Detroit Controls Redwood City, Calif. Scientific Scientific

Pittsburg, California and Freeport, Tours, 10—BS/ME, Ph Detroit Controls
Corp., Redwood City, Calif.
Thurs., Fri., 10, 11—BS, MS, PhD/Ph, Ch, EE, ME, Ma Los Alamos Scientific
Laboratory, Los Alamos, New Mexico.
Fri., 11—BS, MS, PhD/Ph, Ch, Ma, ME, EE, Ae, ChE, CE Board of Civil Service
Examiners. Interviews for positions with the following Laboratories: N.O.T.S., Pasadena, Inyokern; Pt. Mugu; Port Hueneme; Naval Electronics' Laboratory.

### RIDE WANTED . . .

To and from Monterey Park daily. Will arrange hours. Phone Miss Scott, SY. 5-5151 from 8-5. CU. 3-6347 evenings. 

Other nominations included Perk Eislen, Louis Fletcher, Don Lewis, and Pete Stair for vice president; Ed Berry and Hal Dale will face Ralph Kehle and Dan Mack for the social chairman post. Elections and the remainder of Dabney nominations will be held March 9.

In the nomination meeting held Monday night, Fleming nominated Riley Jashke, John Meyers, and Jim Snyder to run for president in the elections scheduled for March 6. Warren Furumoto is an uncontested candidate for vice president, as is Bill Davis who is running unopposed for the office of social chairman. The secretarial position drew two candidates, Louis Soux and Dave Yount. Treasurer proved a popular office, drawing five candidates—Dick Fiddler, Bob Herzog, Dick Kaufman, Herb Rauch, and Jim Weaver, Hunt Holladay and Larry Whitlow will oppose Jim Koontz and

and Dick Johnson drew presidential nominations in the Ricketts meeting Tuesday night; elections are planned for March 8. Executive vice presidential candidates are Ross Brown, Chuck Helsey, and Dave Tansey; Gene Cordes and Bob Mitchell are unopposed for the office of social vice president. Marty Tangora is unopposed as a secretarial candidate, as are Chuck Bonwell and Bob Walsh, athletic manager candidates. Howard Bloomberg, Bob Gelber, and Byron Johnson will vie for treasurer.

Throop club nominated John Moser and Chuck Sargent for president and Stuart Bowen and Jim Lloyd for vice president. Dennis Peters, Bob Polansky, Jim Rode, and Ray Virzi are running for secretary, and Dick Copper, Hubert Dubb, and Mike Gray are running for treasurer. Mike Duke and Gene Nelson are unopposed for co-social chairmen.

Only one sophomore in ten of those enrolled in Biology ever

# **ENGINEERING SENIORS**

NORTH AMERICAN AVIATION LOS ANGELES

will interview here

March 4, 1955



Several weeks ago I had the pleasure of attending a rehearsal of the L. A. Philharmonic Orchestra. Alfred Wallenstein, perched atop a high chair, presided over the festivities. The orchestra was rehearsing Stravinsky's "Le Sacre du Printemps" (The Rite of Spring). The music is unbelievably complicated and it is no mean task merely to get the orchestra to sound the correct notes in unison. Wallenstein constantly admonished the orchestra, "count your measures, count your measures!" Actually there were few faulty entrances or wrong notes.

Wallenstein seemed to be thinking largely in terms of the broadcast which the orchestra was to give over the N.B.C. network the following Sunday. Frequently he called to the sound engineers to find out if they could take all of the sound the orchestra was putting out. He yelled at the players, "If we sound like this on Sunday, we might as well pack up and go home."

One fact immediately impressed me. As one who loves music in the passive sense (as a nonperformer) it has always seemed that the final product one hears in the concert hall or on a recording comes simply from the efforts of a few talented musicians playing together. One sees the fallacy of this oversimplification at a rehearsal. Wallenstein was obviously taking great pains to achieve the effects he desired. The opening bassoon solo and a scant few bars of the introduction were repeated a half-dozen times.

The final result which one hears represents the expenditure of a great many man hours of painstaking work, both in solo and group practice. I believe that the process can be compared to that of a football team. The team, although composed of many outstanding athletes, would be a failure if not for its practice sessions and such practices would in turn be failures if not for the guidance of a competent coach. The same concepts hold equally well in the molding of a hundred musicians into a successful symphony orchestra.

The following evening at the Pasadena Civic I had the opportunity to hear the finished product. I felt that Wallenstein did a fine job on the difficult "Rite." Although Wallenstein may not be a great conductor, it continually irks me when people bitterly criticize whatever he performs no matter how good or bad the results may be.

We should know that a performance should not be prejudiced as good merely because Toscanini is the conductor or as bad because Wallenstein is conducting but should stand or fall on the merits of the musical result that is achieved.

# Students offered European summer trips; scholarships

### by Al Farley

Scholarships for summer study in Europe and tours of the music festivals are two of the opportunities okered to college students by the National Student Association and the Institute of International Education this year.

The first of these is a tour of

Europe's major music festivals. In addition to the regular tour, the student may attend theaters, ballets, operas, and do some general sightseeing in Europe. The first musical event is the Holland Festival, during which the group will stay in Amsterdam. In Austria, the music tourists will attend the Salzburg Festival, high point of the summer season in Europe.

In Germany, the group will attend the famed Wagner Festival of Bayreuth. They will then spend several days at the Lucerne Festival in Switzerland. The season will end with a week at the world-renowned Edinburgh Festival in Scotland.

The NSA also offers a painting and sculpture tour through France, Italy, Holland, Belgium, Switzerland and Austria. They will visit such places as the Rembrandt House in Amsterdam and Sacre-Coeur de Montmarte and the Louvre in France. Each of these tours lasts 75 days and costs \$875 from New York. Closing date for application is March 20th.

The University of Vienna Summer School at Schloss Traunee, Gmunden, Austria, will offer a limited number of scholarships to American students for its courses from July 25 to September 4. The curriculum will feature courses in German, Austrian art and music, the history of Middle Europe, psychology, political science and law. American applicants must have completed at least two years of college work by June. Deadline for admission is June 15; closing date for scholarship applications is April 18. The school will be held in the nineteenth century castle of Traunsee on the shore of a lake in Austria's Salskammergut district. In addition to the course work, the school's \$200 tuition will include trips to the Salzburg Festival and nearby places of interest.

Several scholarships are also available for study at British universities this summer. Sixweek courses will be offered at Oxford, Stratford-on-Avon, and the capital cities of London and Edinburgh.

The courses at the Edinburgh school will have a historical theme, tracing the development of modern western civilization. In London, the galleries, museums, records, and buildings serve as special source material for the study of the seventeenth and eighteenth centuries. The course at Stratford-on-Avon focuses on the literary and theatrical aspects of Shakespearean and Elizbethan drama. Contemporary politics and literature are studried under widely known lecturers and tutors at Oxford. (Continued on Page 5)

## DuBridges plan Pellam to speak on Australian visit

The world "down under" will host Dr. and Mrs. DuBridge this summer. Plans have recently been announced for a two-month combined business and vacation trip in Australia and New Zealand.

In connection with a program for the international exchange of scholars sponsored by the Carnegie Corporation, Dr. Du-Bridge will visit the major universities in these countries, as well as the government scientific laboratories.

Among the topics of interest during the trip will be technical education in Australia. Educators and scientists there are currently debating the best way to train engineers and scientistswhether to build technical schools like Caltech or to educate technical men in large, diversified universities. Dr. Du-Bridge will confer with university officials on this problem, perhaps helping them plan a southern version of Caltech.

Radio astronomy will also be of interest in the tour, as Caltech's new research fellow in this new field, Mr. John Bolton, hails from Australia.

Dr. and Mrs. DuBridge will leave this country in mid-July, stopping at Honolulu en route. They plan to return in September.



# low temperatures

Low temperature physics will be the subject of this week's Friday evening lecture. Dr. John R. Pellam, professor of physics at Caltech, will present the lecture, which will be given at 7:30 p.m. in 201 Bridge.

In his discussion of the conditions of matter at temperatures near absolute zero, Dr. Pellam will perform experiments illustrating the properites of liquid helium. He will also show a magnet apparently floating in space in a demonstration of superconductivity in certain metals at extremely low temperatures. Motion pictures of laboratory experiments at temperatures near absolute zero, including a demonstration of superfluidity in liquid helium, will also be shown.

Professor Pellam came to Caltech last year from the National Bureau of Standards where he was chief of the Cyrogenic Physics Division. His research has earned him awards from the government and the Washington Academy of Sciences He received both the BS and PhD degrees at the Massachusetts Institute of Technology.



# **Graduating Engineers:** REMEMBER

Campus inteviews will be conducted by Mr. D. J. Colvin, Engineering Personnel Representative of Northrup Aircraft, Inc.,

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PLEASE MAKE APPOINTMENT IN ADVANCE SO YOUR INTERVIEW MAY BE SCHEDULED FOR YOUR CONVENIENCE.

# NORTHRUP AIRCRAFT, Inc.

Hawthorne, California

### Page Four

### CAMPUS BREWINS

(Continued from Page 2) whose. The Beak wishes to defend Jim and point out that he will eventually learn that it makes a difference and that switching wives is frowned on in some circles. Al Barrios thought up a new twist in making excuses. To demonstrate why he was late for a test he decided to bring the flat tire along to verify his story. What's the matter Al, won't people believe you any more?

### CALIFORNIA TECH

Eric Josnson had a little difficulty extracting his date from the fake fight which developed at Blacker's Casino Party. It appeared as though she liked to mix it up in such things but the Beak has it straight from the horse's mouth that she was dressed that way when she arrived.

Science marches on Chronic wall-beater Girard is making less noise these days, since electron expert Lovelady has devised a potent weapon for retaliation. Further details when the smoke clears and the bodies have been dragged away.

Thursday, March 3, 1955

Recently the Beak heard much foreboding concerning an Apache Dance at Ricketts. However, since then no news has come through. One wonders what has happened to the Rowdies.



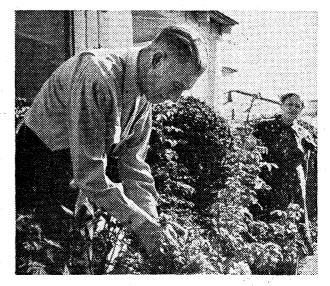
FORD PYLE, JUST BEFORE HE RETIRED FROM UNION OIL, AFTER 36 YEARS ON THE JOB.

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Because America's free competitive economy forces better tools and new techniques every



### HE'S HAPPY THE WAY THINGS HAPPENED

Ford

Pyle

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"Me, I don't think I'll make it. I retired last December after 36 years on the job. Started with Union Oil as a roustabout back in 1918. Had no real training, mind you. Just a feeling for machinery I'd picked up on my Dad's ranch. So I shoveled—9 hours a day, for 6 days a week. Made \$24.



"I ended up a Senior Mechanic in charge of Union Oil's Rosecrans Plant—working 8 hours a day, 5 days a week, and getting lots more done. Making over 5 times more, too.



"President? Nope, not Ford Pyle. But that's not important. The big thing is I'm plenty happy just the way things happened. After all, where else but in this country could I get so much back just for doing the job well?"

Ford Pyle's hard work is the first reason for his success, obviously. But better tools did help.

year, people like Ford Pyle—people like you enjoy a constantly improving standard of living. YOUR COMMENTS ARE INVITED. Write: The President, Union Oil Company, Union Oil Bldg., Los Angeles 17, Calif.

# Union Oil Company of California

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# Trackmen win first meet, go to Relays Saturday

### Three independents bow as Caltech Trackmen take nine first places

Caltech's varsity track team swept to an easy win in last Saturday's four-way track meet. The Beavers chalked up 95 points to Pasadena Nazarene's 50¼, Cal Poly's 42¾, and La Verne's 32. The meet was a tune-up for this Saturday's Relays at Pomona.

A cold, blustery day combined with a soggy track to keep the tracksters from turning in any remarkable performances last Saturday. Best time all day was John Lukesh's winning 22.4 in the 220 yard dash. Lukesh also took second place in the 100 yard dash, behind Williams of Pasadena.

### Beavers one-two in 440

Roger Wileman copped the 440 yard dash for Tech, running it in 52.5. Marty Tangora came through with a strong second behind Wileman. Don Taylor. after getting fourth in the high hurdles, came back to win the lows in 26.7.

The adverse weather conditions especially bothered the distance men. Rod Supple won the 880 yard run, but his 2:02.8 time was considerably slower than the 1:59.0 he ran a week ago. Bruce Webb of Pasadena won both the mile and the two mile, in the relatively slow times of 4:35.8 and 10:30.4. Fred Witteborn and Don Lewis both doubled for Tech. Witteborn copping second in the two-mile and third in the mile and Lewis taking second in the mile and fourth in the 880.

### Tyler scores

Jim Tyler won the high jump at 5'91/2", and also took fourth in both sprints and fifth in the broad jump. Jim Lloyd tied for first in the pole vault, and Phil Conley came through with his usual first in the javelin. Ted Lang got off a fine discus heave of 133'2" to win the event.

The Beaver mile relay team of Supple, Lukesh, Tangora, and Wileman ran to an easy victory with more than fifty yards to spare, over second place Pasadena. Lukesh's relay lap made him Tech's high point man for the meet with 10¼ points. The frosh did not compete.

This Saturday afternoon the Tech varsity and frosh teams travel to Pomona for the All-Conference Relays. Only one individual race, the 100 yard dash, is run, but there is a full slate of relays and field events. We are just one man short of having a really good 880 relay team and the mile and distance medley (440-880-1320-mile) teams are stronger than they have been for some years. Oxy will be the heavy favorite in almost every event, but the competition for second place should be fierce.

# **Caltech** golfers start season

The Caltech golf team opened its season last Friday with a practice match against L. A. State at Lakewood Country Club in Hollywood. The Beavers were handicapped because several of their players were unable to make it to the match for various reasons and Tech had to forfeit two matches. This allowed the Staters to win the match rather handily.

Gosnell of L. A. was medalist with a 78, beating out Tech's Paul Farley by one stroke on the eighteenth hole. Other Tech scores were Pete Abbey's 90 and Jon Robinson's 99.

Tomorrow the team has a match with University of California at Riverside at Victoria Country Club in Riverside. Dick Marsh, a chemist, is unofficially coaching the team this year while Farley, Paul Lindfors, and George MacDonald will probably form the team's nucleus.

## Frosh Sports Roundup by Bob Walsh

Caltech's basketballing freshmen ended their most successful season since the origin of CIT freshman basketball by upsetting league-leading Pomona Friday, 51-49.

The victory was the ninth of the season against six losses. Final conference record was 4-4 for third place. Tech split two games with every other team in the SCIC.

Pomona stretched a 26-23 half time lead to a 36-27 advantage early in the second half and appeared to have this "easy" game in the bag. But guard Ron Marson suddenly seemed to forget how to miss. Alert defense by Marson, Sonny Nelson, and Gene Cordes resulted in thre successive stolen balls which broke

(Continued on Page 6)

Bengals lost to Loyola, 86-61.

First team

Ted Tiffany, O

Bob Henry, O

Joe Wohlmuth, W

Marlyn Davis, W

Bob Edmonson, R

All-Conference team

Phil Conley of Caltech was placed on the second all-conference

basketball team chosen by the conference coaches. Co-champions

Occidental and Whittier each placed two men on the first team and

third place Redlands placed one man. Each of the five conference

Pos.

F

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G

# **Caltech cagers end season** lose to Pomona-Claremont

Caltech's basketball team finished off its season last Friday night with a 67-58 defeat at the hands of Pomona-Claremont. The loss was Tech's eighth of the conference season and it left them in last place. Oxy and Whittier tied for the conference title with 7-1 records, while Redlands was third and Pomona fourth. The Sagehens couldn't miss

## **Baseballers** lose opener by one run

Coach Ed Preisler's 1955 baseball varsity was unveiled last Saturday in a game with Pasadena Nazarene. The team as a whole looked pretty good, but a couple of costly errors let in enough runs to let the Nazarenes squeak by with a 5-4 victory.

The visiting Nazarenes led 5-2 going into the last half of the ninth inning, but Tech made a determined rally to try to win the game. The Beavers scored two runs and loaded the bases with two out before a strikeout ended the threat and the game.

Third baseman Hal Morris got the best hit of the ball game-a long, well-hit triple, and Warren

(Continued on Page 6)

Pete Carlson, P-C

more and they were making a runaway of the game until Tech got hot near the end to close the gap and make the score respectable. **Conley** leads Phil Conley led all scorers with

from the floor as they gained

their second league win. The

game started out close with both

teams fighting for the lead. It

was all tied up at 25-25, but then

Pomona spurted to a 39-29 half-

time lead. In the second half the

Hens increased this lead even

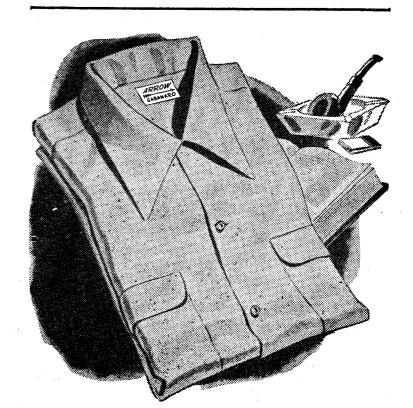
22 points to make his league total 133 or an average of 16.6 per game, fourth highest in the conference. In all games Phil scored 411 points at a rate of 19.6 points per game.

Bill Chambers and Jim Tyler each netted 13 points and Pete Carlson had 15 for Pomona.

Chambers, Tyler, and George Madsen ended their varsity basketball careers at Tech with this game. They all played excellent ball this season, Tyler after being out for half of it with an injured hand, and the team will miss them next year.

schools placed a man on the second team. Occidental was chosen to represent the SCIAC in the regional NAIA playoffs where the PASADENA BOWLING Second team LANES Phil Conley, CT 970 East Colorado Headquarters of Caltech Bowlers Open 11 a.m. to 1 a.m. SY, 3-1341 Special Student Rate before 6 P.M. except Sundays and Holidays 25c per line Al Endeman, R Dick Sovde, O Stan Hubert, W





### STUDENTS OFFERED (Continued from Page 3)

These courses are open to American students who have had at least two years of college, and application must be in March 28. Anyone who is interested in of these opportunities any should contact the California Tech editors for more detailed information.

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**Open Friday Night** 

### FAMOUS NOVELIST (Continued from Page 1)

Fineman sees between any breed of scientist and the artist is that the artist passes his experiments into the world. Our scientist doesn't.

Another prime split between the artist and the scientist is the words they work with. Although the scientist has defined most of his terms the artist is still trying to work out what he means by basic words like "abstract." As illustrations of this difficulty Fineman took a line drawing of a stone and a musical note. Neither exist in nature yet both are apt to suggest something from nature and so carry with them elements of the emotion connected to the natural thing. Is this the artist's abstraction? The scientific generalization is a far less complex abstraction to diddle with. To paraphrase his conclusion: I'm hopeful; I hope the artists and scientists will be able to help the mass of mankind to build a new tower reaching toward understanding.

This closing note tossed the ball to the audience for questions and reactions and just friendly counter - snowmanship After one comment, Fineman remarked that it is a blunder of the artist to hand his experiments to the public without labeling them as such. Floyd Humphries, grad student in chemistry, wondered how the artist can know whether he has produced an experiment or a finished work till he tries it on the public to learn their reaction to it. Fineman remarked that perhaps this is the spot for the critic to serve as a gobetween to smooth relations between the artist and lay public by sorting out the experiments. At this point, Van Wyck Brooks, noted writer and literary historian, piped up saying that he sees today's critics ignoring this old notion and setting themselves up as owners of a separate science, if you'll call it that.

Mr. Jacob Chaitkin, Russian instructor, wondered if art could be significant without an audience, in contract to the scientist's fulfilling himself if only his fellow scientist hears him. This caused Fineman to neatly conclude that artists probing new areas of expression must do their experimenting among themselves, presenting only a finished product to the public. Beach Langston proposed that





the artist is something of both the scientist and the engineer, a man with an idea trying to plug it into reality.

Joe Fineman, Fineman's son, launched into a discussion of the problems of nuclear physics at their fringes where they begin to border on the subjective. The snow flew thick and fast. Someone suggested that maybe Ward Whaling, a real boy physicist, was a little qualified to shovel the drifts. Ward, who had been smirking throughout Joe's lecture, got up to say, "This is all metaphysics." 'This line drew applause.

Throughout the discussion all the local swearwords were used: mysticism, metaphysics, and subjective feelings. These words are as much fun as using 'damn' the first time knowing it is terribly filthy and not to be used in polite company. At the close, the last remark we heard in this discussion of the relationship of science and art was, "But, I think there IS some beauty in the equations." There was more applause and Ward Whaling bent forward wincing with glee at a technical student's retort to the novelist's notions.

### **FROSH SHORTS**

(Continued from Page 5)

the back of the Pomona team. Tech surged ahead with only a few minutes left and two missed foul shots for Pomona with 5 seconds remaining ended the game.

Tech won six of their last seven games and undoubtedly had the best team in the conference at the end of the season. The cause of this sudden surge may perhaps be traced back to Gene Cordes. In the middle of the season Don Wiberg sustained a foot injury and Cordes was moved into the starting spot. Although lacking the natural ability of the rest of the team, he infected them with a drive and a spirit of winning. Credit also of course goes to the coaching of ler for the tremendous ment in the individual squad. Marson, Nelson, Glen Converse and D Kirk should be valuable varsity next year.

Where Everyone is W

## Freshman netters defeat Redlands

The freshman tennis team won its first match as they defeated Redlands Saturday, 5-4. Winners for Tech were Roger Wallihan, Jim Weaver, and Jim Rode-Wallihan in doubles. Two matches were forfeited to Tech, but this was balanced by the absence of Tech's first man.

Results were as follows: Gillett (R) d. Phil Reynolds, 6-1, 6-0. Harmon (R) d. Paul Calaway, 3-6, 6-0, 6-2. Wallihan (T) d. Mitchell, 6-2, 6-1. Weaver (T) d. Wilson, 8-6, 6-3. Giddons (R) d. Dick Lewis, 6-2, 6-0, Gillett-Harmon d. Reynolds-Calaway, 6-0, 6-2. Walliman-Rode d. Wilson-Mitchell, 6-3, 3-6, 6-3,

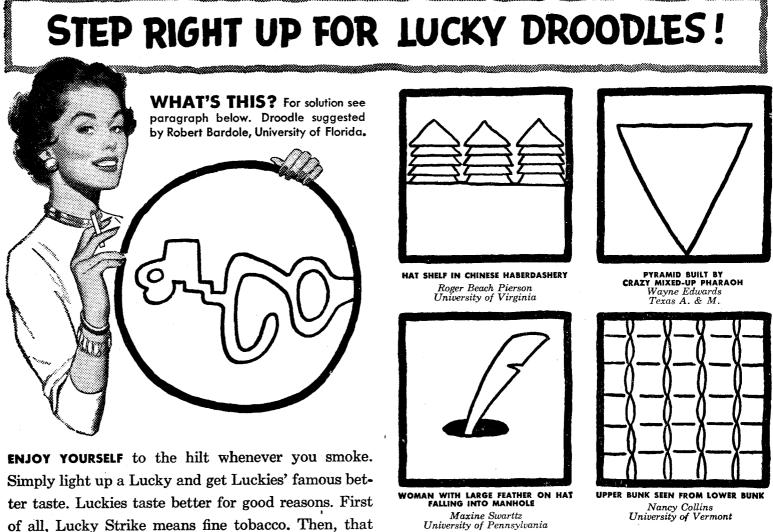
### BASEBALLERS

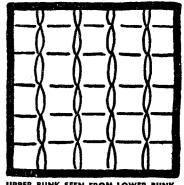
(Continued from page 5) Furumoto smashed out two solid basehits.

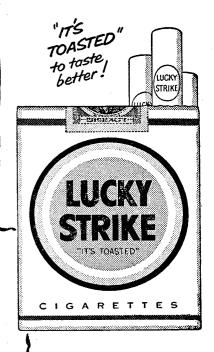
Ray Weyman started on the mound for Tech and he gave up one run before retiring in the fourth inning. Hunt Holladay finished up and drew the loss.

Saturday the team plays La-Verne at LaVerne in another practice game. The men show good potential this year with good power at the plate. If the fielding holds up Tech will do well in league. The infield will be made up of Mebust, Furumomoto, Nelson, Koontz, Morris, and Madsen (if his arm gets well). Duke will handle the catching with Wagenseller, Conley, and Berry outstanding in the outfield.

the coaching of Ed Preis-	son-mitchen, 0-5, 5-6, 0-5.	
the tremendous improve- in the individuals on the Marson, Nelson, Wiberg, Converse and Dick Van should be valuable to the next year.	KRAUS MOTOR COMPANY Volkswagen — Porsche Authorized Dealer Service on All Foreign Cars Special to All Caltech Students	Your Nearest Laundry SUDS-KISSED, Inc. Authorized Westinghouse Laundromat Near corner of Lake and California
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