

Flemming will give address at commencement June 12

Speaker is director of defense mobilization office; on leave as president of Ohio Wesleyan University

Arthur S. Flemming, director of the Office of Defense Mobilization in Washington, D.C., will be the speaker at Caltech's 59th annual commencement this June, president DuBridge has announced. The commencement will be held Friday, June 12, near the Athenaeum on the Caltech campus. Exercises will start at 4:30 p.m., and the public is invited to attend.

Republican

Mr. Flemming is on leave as president of Ohio Wesleyan University, Delaware, Ohio. He was recently nominated to be director of the Office of Defense Mobilization by President Eisenhower. Before his nomination he served on the President's Advisory Committee on Government Organization and on the Defense Department Organization Committee. Before President Eisenhower took office, Mr. Flemming served for a time as assistant in charge of manpower problems to Charles E. Wilson, then director of the Office of Defense Mobilization.

Bureaucrat

Mr. Flemming has served on the United States Civil Service Commission, and was a member of the War Manpower Commission during World War II. After the war he was a member of the Hoover Commission to study the operation of the executive Branch of the federal government.

Journalist

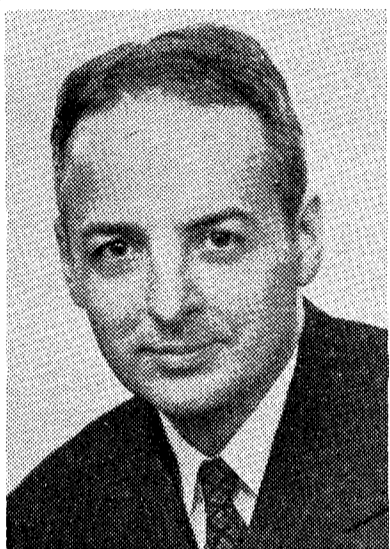
A long-time journalist, Mr. Fleming was once on the staff of the United States Daily (now U.S. News and World Report). He also served as editor of Uncle Sam's Diary, a current events publication. He has been an instructor in government at American University, Washington, and later served as director of the School of Public Affairs there and as an executive officer of the university.

Tech student shop to issue new keys

Student shop members who want new keys before next fall can obtain them on payment of next year's dues (\$1) at the shop tomorrow from 4-6 p.m. or on Thursday, June 11, from 1-4 p.m. The double lock will be on the door during this two-week period so that both new keys and old will open the lock. However, after June 11 only new keys will get a member into the shop. Keys will not be issued at times other than those mentioned above.

Members wishing to be checked out on power tools so they can use them over the summer should report to the shop on June 11 after 1 p.m. Members of the shop committee will be on hand to check out all men who demonstrate proficiency and knowledge of safety rules on any machines they wish to operate.

People on campus who have hand tools belonging to the shop are advised to return them immediately. Besides the fact that there is a fine for keeping tools out overtime, taking them out of the shop without signing for them is a violation of the honor system.



Arthur S. Flemming

ROOT MEAN SQUARE

By Haenggli

This being the last regular issue of the Tech for the school year, we decided to ask if the troops have been satisfied with the paper. We were also curious to see what the general opinion of Hunter Meade's recent article in "Engineering and Science" was. Our questions were, "Do you think the Tech has been entertaining this term?" "Do you think that the Brewins have been up to par during the term?" and "Do you think that Hunter Meade's article presented the true picture of the average Caltech student?" The results were as follows:

Has the Tech been entertaining? Yes 30%, No 48%, No opinion 22%.

Have the Brewins been up to par? Yes 27%, No 50%, Indifferent 23%.

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Tech drama club elects Ryle prexy

An election and policy meeting of the Drama Club was held last Tuesday, May 19. Bob Ryle was elected president. Others elected were Bob Smith, vice president; Bill Barlow, secretary, and Pete Lehman, treasurer.

The possibility of a summer play reading program was discussed. Such a program, carried out this summer by Drama Club members, would help greatly in choosing a play for next year. Caltech's needs limit the choice of possible plays. The play should involve a large male cast but a small female cast. It should need only a small, simple set, and it should preferably be comedy. A few plays were discussed at the meeting, including Stalag 17 and Mr. Roberts.

Next year's play will probably have Humanities Department backing, plus backing by individual faculty members.

Awards, trophies, letters presented to 130 Techmen

AFROTC to award cadets honors June 1

The Caltech Air Force ROTC unit will hold its annual awards day ceremony Monday afternoon, June 1, at 4 o'clock in Tournament Park. The program, including a full-dress parade, will feature the presentation of individual, flight, squadron, and unit awards. The public is invited to attend.

Individual Awards

Recipients of medals for individual achievement have not been announced as yet, but several will be presented. Lt. Col. Arthur Small, unit commander, will present the Professor of Air Science and Tactics medal to the outstanding over-all student. President DuBridge will award the President's medal to the student in the basic course with the highest academic record. The Dean's medal will go to the outstanding basic course cadet in the ranks. For meritorious service, medals and several commendation ribbons will also be presented.

Outstanding Groups

The outstanding squadron and the outstanding flight will be awarded trophies. The squadron commander and the flight leader will receive medals, while members of the outstanding flight will be presented with ribbons. The drill team will be awarded the Southern California Drill Team Trophy won in the competition held at UCLA May 16. The trophy was donated originally by the Occidental inter-fraternity council.

Brooks Shoes Award

Bob Brooks, an officer of the Pasadena Air Force Association, will award the Caltech ROTC unit the Brooks Shoes award. This award is given annually to the winner of the drill contest between Caltech and Occidental. The units are judged during federal inspection.

Other awards to Caltech's unit include a trophy from Consolidated Vultee and the Air Force Association Silver Medal.

15 honor keys, 84 letters, 10 special trophies given at today's assembly

Over 130 awards for activities ranging from athletics to forensics were presented to Techmen during the Awards Assembly this morning. Forty-nine varsity and thirty-five freshmen sports awards were given to Tech athletes. Fifteen men received honor keys for outstanding participation in student body activities while eighteen were presented honor certificates.

Band will give concert June 4

Sousa marches and old favorites will be featured in the coming concert of the Caltech band, to be held Thursday, June 4, in Culbertson. The concert is scheduled for assembly period, 11 a.m.

The band will open with a traditional march, "His Honor." The old blues favorite, "Deep Purple," will be heard next, and will be followed by "Malaguena." In the last part of the program John Philip Sousa's "Washington Post March" and "Stars and Stripes Forever" will be featured, together with Ferde Grofe's "Overture to the Mississippi Suite."

Tech ASCE gets national award

Tech's student chapter of the American Society of Civil Engineers was awarded a "Certificate of Commendation" last week by the national society. This is the fifth consecutive year that the Techmen have won the honor, which is given for "excellence in the effective and meritorious conduct of chapter affairs." Only two other chapters in the Western United States were given a similar recognition: the Universities of Arizona and Colorado.

Officers of the group this past year have been: Lyle Hoag, president; Jack Walker, vice-president; George Gartner, recording secretary; Paul Cramer, corresponding secretary; Bill Gardner, treasurer; and Carl Rambow, editor of the chapter magazine, the "Spillway." Dr. J. E. McKee, associate professor of sanitary engineering, is faculty advisor.

Interhouse trophies hotly contested during year

The four houses have put up some stiff battles this year to retain or wrest away from other houses the various trophies that are so eagerly sought to impress the frosh and grace the honor of a house. Dabney has certainly taken top honors in the trophy race. They cinched the coveted Interhouse Athletic Trophy a month ago, thus breaking up the Fleming monopoly. However, Fleming has retained the Alumni Athletic Award for In-

tercollegiate Competition.

Ricketts-Dabney Debate

Judging from the results of last week's "Root Mean Square," it looks like Dabney may keep the Snake Trophy. The Lincoln Debate Trophy started in Blacker this year, but moved over to Dabney's mantel. However, it is on the block again. Tonight Ricketts challenges Dabney on the question, "Should the President be elected by direct vote of the

(Continued on Page 4)

Travel service

A central clearing center for rides home at the end of the term has been announced as an ASCIT service. All men who want rides should tell Fritz Trapnell, Blacker, or Ted Johnson, Dabney, immediately. Car owners who want riders to share expenses should also contact these men and tell them how many passengers they can accommodate, where they are going and when they are leaving Tech.

Students wives given diplomas

Mrs. Doris DuBridge, wife of President L. A. DuBridge, awarded the degree of P.H.T. ("Put Husband Through") to 28 wives of Caltech senior students at the annual Junior-Senior Prom last week at the Hollywood Roosevelt Hotel.

Formal-clad wives, wearing academic caps, paraded to the strains of "Pomp and Circumstance" to receive the engraved diplomas, signed by the recommending husband and the Institute's First Lady.

The diplomas read:

"California Institute of Technology Graduating Class, upon recommendation, has conferred on (name) the degree of P.H.T.—Put Husband Through—together with all the rights and privileges thereunto appertaining, in recognition of proficiency in accredited courses of Economic Management, Household Mechanics, Culinary Engineering, plus beneficial cooperation, and guiding inspiration."

Happy vacation time

Since this is the last issue of the **California Tech** for the year we would like to clean up a lot of loose ends editorialwise; copy that never got written or was filed for want of space.

To the Tech Staff

Although we would like to do more, we can only say "Thanks, men" to the fine **Tech** staff that has been doing the dirty work this year. From the writers down to the editors goes the sincere appreciation of the four Editors that **Tech** has had during the past year, Dave Tilles, Ron Ratney, and "yourses" truly.

On the Tech itself

The year of the **Tech** can be summed up as a big nothing. There were no drastic changes. The **Tech** retained its first-place rating for a school of its size in a nationwide poll conducted by the Associated Collegiate Press. We think the quality of the writing has gone up in general. Staff organization did a big flip at the beginning of the term with elimination of the copy staff and expansion of the editorial crew.

We crusaded essentially for nothing and got nothing in return. Our policy was to entertain (we hope) and not to stimulate minds. We will let literary publications and courses on campus fulfill this latter function.

To the Drama Club

By some oversight, appreciation of the fine production the drama club put out this year never made the editorials. We regret that you only put on one production a year, but hope to be able to give you full editorial support sometime before we have faded in favor of new editors.

Future Crusades

We haven't crusaded much, and probably won't unless we know that the readers feel it is worth while. We're tempted to sound off in the future on ice water for the student houses; the need for a campus humor magazine; the elimination of the honor section (now under consideration); the adoption of the 3-2 plan (three years at a liberal arts school and two years at **Tech** with degrees from both); the revision of honor point distribution; making a college out of the Institute; improving student-faculty relations, and planting the Mt. Wilson "T" in white sage.

On Dabney

For those who might have been in doubt, it is not an editorial policy that Dabney is out of it. Quite to the contrary, considering the number of trophies the Darbs have piled up this year for themselves. However, among other organizations on this campus the **Tech** would enjoy having a few staff members from the house to the southwest, since there has been a deficiency or non-existence of willing men.

Vice President's message

Finals are fast approaching once more, and with them comes a message in the **Tech** on the subject of the Honor System. But carelessness easily creeps into test habits, so perhaps an outline of the important features of safe test behavior is worthwhile.

1. Try to sit as far apart from other people in the exam room as possible. If you should happen to see something on another person's paper, it might be difficult for you to know whether you would have been able to arrive at it by yourself. Under pressure of a test, this can be a disquieting experience.
2. Try not to place your test paper in a spot where it will be hard for a classmate to avoid seeing it.
3. Be sure you know the requirements of the test: for example, the books allowed on the test, if any, and the time at which work is to be stopped.
4. Try to be reasonably quiet during the exam. The man next to you may not find the test so trivial as you do. Perhaps he wants to work on it. Let him.
5. If you should see someone cheating, an effective way to stop the cheating, and at the same time to make everyone else in the room more alert, is to rise and say, "I see a violation of the Honor System."
6. Suspected violations of the Honor System can be reported to the deans or to any member of the Board of Control.

Home Tests

It has been brought to our attention that there is in some courses a widespread neglect of deadline in turning in home tests. Remember that the man who does not abide by the regulations in this regard has time that others do not have. He cheats the other men in his class.

Unless you have a good excuse, such as sickness or a traffic ticket, there is no valid reason for taking a test late. No matter how scrupulously you avoid bull sessions and classes discussing the test, it is again a matter of having extra time, which others do not have, if you take a test late without good excuse.

George Johnston.

California Tech

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

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

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

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ning, disposing of over 27 tons (long) of over-ripe watermelon. Safest bids of the evening came from Mr. Gardner, who bid 68c on every melon.

Tough Broke

Raving Rocchio, the Rowdy used car dealer, is back in business with a customized, short, fat Chevy. Seems Rocchio proved conclusively that brakes are not necessary—all you need to stop is a Pontiac in front of you, with a Chrysler backing it up. (SOB!)

Awright, what have they—

Carel Otte, expounding upon the merits and what-have-you of geologists in general and RA's in particular, boasted that the house could not throw him and RA-to-be (R-) (Geologist incidentally in the showers. Mr. "R" stood politely by as Carel disappeared into the much-traveled Vatican showers. This neatly rounded out the Blacker House program of baptizing all worthy members. (Anyone care to offer a negative?)

Noble Intentions?

P. Lindfors, casting off his year-long policy of abstention from the evil, evil women and their devious ways, succumbed, it is gleefully rumored by Buddy Benning, to a Schimpssie blind date thoughtfully supplied by date bureau Beuf. Lindfors spent some two and a half hours making the grueling trip between Blacker's Buwalda party and her home (delaying Michel, who was doubling and who was not complaining), which must have been as far as six miles away (this should prove painful to those of us who have made the more lengthy trip to the Great White Wall). The Beak, who does not wish to damage Lindfors' motoring reputation, would like to comment that this time was probably not all spent driving. (Those damn stop-lights!)

Bird (Owl)? Watchers

Driven to desperation by a whole week of dry parties, the Fleming cell group of the A.A., Budd LeTourneau, John Gee, Dirty Bob Lynam, and George Moore took off with the biggest bottle you ever saw to spend last (Continued on Page 4)



Autry on Ricketts Beach Party: It was a great party except for my girl. She wouldn't HONI SOIT QUI MAL Y PENSE!!!!

Civic Improvement Assn.

Aroused alley-mates, driven into a mad frenzy by Bob Simpson's repeated playing of that old Greek chant to Pluto, "How Much Is That Hound Dog in the Window?", have at last had their revenge. When last seen Mr. Simpson had been shaved and showered. He has not been seen since

Question of the week: Why was Vodopia seen buying bricks, mortar, and a cask of Amontillado?

Shiskebrown

Gourmet Dick Brown has finally achieved the ultimate in sali-

vary delights for the sports car enthusiast. The prime constituent of this automotive ambrosia is a pair of greasy M.G. brake shoes roasted slowly over an open hot plate. Says Brown, "Pour Triton over them and eat it!" Semi-asphyxiated residents of the alley in which this culinary abortion was precipitated are considering a new dish, "Brandied Brown ala Nero" (served flaming from a sword to the music of 20,000 bagpipes playing "Dick Brown Lies A-Smoulderin' . . .")

has anyone got a penny?

Colonel Robert Wynn, of the Virginia Wynns (not to be confused with the Trade Wynns) held a gigantic old-fashioned Southern Auction in the Ricketts Banquet Hall Monday eve-

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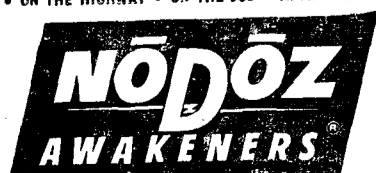
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"Men's Distinctive Fashions"

Pasadena school question

by Ted Matthes

Anyone interested in current education problems doesn't have to look far to find a good case. Dr. Ray Untereiner, professor of economics at Caltech and presently a member of Pasadena's school board, spoke here recently on the struggle taking place in this city over its schools.

Progressive?

The basic issue is to what extent teaching in the public schools shall be progressive. "Progressive" in this sense denotes the ideas on education first introduced by John Dewey, such as making grades of minor importance. Progressive education is largely experimental since Dewey believed the usefulness of any project is determined solely by how well it works in practice—a very flexible system. Critics of such education emphatically insist that progressive schools don't give a good grounding in fundamentals; they say progressive educators are attempting to socialize education and subvert the students' minds. On the other hand, the latter want to use new teaching methods which make students more eager to learn.

Conflict Deep

The conflict between the two opposing groups in Pasadena goes deep. In response to a public demand to ascertain the quality of public education here, an extensive school survey was undertaken by about 1000 of Pasadena's prominent citizens. It was hoped the facts would lead to better understanding among the people, but this has not been realized because a very conservative, anti-progressive minority objects to even publishing the report.

Zoning, Negro Problems

One point of much disagreement is the zoning of school district. A Negro problem is involved, plus real estate interests. At present the zones are exceedingly irregular and the white schools are seriously overcrowded while other essentially Negro schools are partly empty. The anti-progressives say that they want to preserve property values, while the progressives want to eliminate segregation.

Another issue concerns school tax appropriations. The city is by no means united on how many new school buildings it should construct, partly because there are varying numbers of children in different districts who would benefit by more schools. Dr. Untereiner thinks the overcrowding is no worse in Pasadena than elsewhere; this is no excuse, however, judging by a recent federal report which said a new building thirty feet wide from New York to Seattle would be needed to alleviate the present school room shortage throughout the country.

Two Solutions

In Pasadena most moves taken by the more liberal, progressive-thinking educators in the school administration are labeled subversive by the anti-progressives, although no accusations of subversion have been substantiated with evidence. Dr. Untereiner, being hopeful, sees two ways to bring together the opposing groups. First, by stressing a little more of such fundamental subjects as penmanship, parents who complain that their children can't read or write will be quelled. Second, by electing

members to the school board and administration whose reputations are beyond reproach, indiscriminate attacks will not hold up. Perhaps there is encouragement in the fact that half of the candidates in the coming board election are known to be outstanding citizens in Pasadena who can be relied upon to work toward conciliating those who are fighting for, and those fighting against progressive education.

Things to come on Caltech's campus

What will the Caltech campus look like 20 years from now? While, ultimately, the answer to this will depend upon the philanthropy of Caltech's patrons, steps are being taken now to guide and coordinate construction and to plan for the school's future. A committee of faculty men has been set up by President DuBridge so that those who are closest to the needs of the Institute may take part in long-range planning. This group will advise the Building and Grounds committee which actually administers campus construction. Dr. Lindvall, chairman of the Division of Engineering, has been appointed head of the new faculty committee.

Space and money

Lindvall's group has been considering building needs and evaluating them in terms of those two crucial factors: space and money. An architectural firm has been called in as consultant.

Recently funds have been made available for two buildings to be built soon; the gym and swimming pool, and the Church biochemistry laboratory. Progress on Church has been deterred at the present for lack of funds.

The Crystal Ball

There are other visions in the crystal ball. Perhaps a new central library will sprout from the center of campus, replacing Caltech's crowded library facilities. This has long been under consideration. However, there is something to be said for our present departmental library system, and the committee is considering other aspects and other solutions.

The new look

Those archaic frame buildings housing Building and Grounds equipment and the Old Dorm, "temporary" constructions after the First World War, have been sore sights for years. Their obvious replacement is a student union, with cafeteria facilities and a Throop Club center. Also, a new dorm for graduate students would be required, built possibly along the lines of the student houses. Perhaps another student house could be included, but unless out-of-state enrollment jumps, the committee does not look for this soon.

"Temporary" buildings seem to last a long time, but eventually T1, T2, T3 and the Health Center will be replaced by a "professional building," placed tentatively on the old dorm site.

J. S. Campbell on 'Pendulum'

By John Scott Campbell

John Campbell's specialty is mechanical engineering. During the war he was project administrator for Lockheed Aircraft. He has written *Empirical Design* used in ME1 and this summer he will tour the country getting more information for his forthcoming McGraw Hill book, *Engineering Design*, which will be a survey of 1953 engineering design practice in the United States.

Mr. Campbell also has been writing science fiction since 1929. His articles have recently appeared in *Science Fiction Plus*.

Here is what he has to say:

In reviewing a publication like the spring 1953 *Pendulum*, fairness to the readers and to the contributors to the magazine require that the reviewer first make plain his own viewpoint and prejudices. These may be summed up in the following way:

Think!

Caltech is an institution which, among other things, trains scientists and engineers. Their value to the world, and hence Caltech's value, is measured to a large degree by their ability to think creatively. This is not easy. A mental review of courses here or in any college will show that almost all teach analysis—the examination and dissection of things already in existence. Courses which attempt to develop invention and creative thought are exceedingly rare, and for reason; this is a subtle and tricky thing, difficult and frustrating alike for student and teacher. M.E.-1, M.E.-5, and some humanities courses stick out their necks and profess to try it here; M. I. T.'s recent experiment in extra-terrestrial industrial design was so unusual as to gain nation-wide publicity. All study, of course, stimulates creativeness, but there are few problems which start: "Invent something . . ."

Urge

But the creative urge is present, and when there is no other way, it must satisfy itself in extracurricular activities. Like "Pendulum." So here is the basis for this reviewer's comments: *Pendulum* is a forum for the air-

ing of creative thought. Some of the ideas are brilliantly original, others are plain cockeyed, but none of them exhibit slavish conformity to any custom. And that, in the opinion of this reviewer, is good.

Opening

In opening this magazine, this reviewer tried to forget any critical function, and just read it through for amusement and enjoyment. The high point in amusement came on page 34, in the form of a little poem which expertly and completely deflates pompous scholarship. There's a lot to ponder over in the three spaces between the four lines of this pint-sized ode especially for one engaged in the esoteric pastime of textbook writing. Maybe the moral is to do a little more thinking and less quoting. At least it's worth a try.

Slanted

Pendulum starts off with a bit of science fiction which interested me as a new slant, but caused some annoyance from a technical standpoint. A short story is a highly compact form of literature, and must be severely pruned of excess ideas. "Not Logical" has some dead wood at the very start: the personal situation and thoughts of the narrator which have no bearing on what follows. The first three pages of this story are just a frame, a setting to make more convincing the real story which starts on page 4. But I like the writing style. The words flow easily with a smooth tempo, creating images without themselves intruding. I'll be watching for Walt Lee in *Astounding*.

Prose

Of all literary forms, poetry is surely the most compact, and commentary in prose on a poem is difficult because prose is a less efficient medium of expression. It's a little trying to describe the images evoked by Bach's G-Minor Fugue. Al Haber's "Song of the Lonely Young Man-Animal" gives expression to some very basic and complex ideas. How well he succeeds neither I, nor anyone else, can ever say, because there is just no form of calibration, to compare what was in his mind when he wrote it, and in my mind when I read it. But the ideas which I got were interesting and significant.

It's a good idea to meditate on these problems, readers of this newspaper; they combine technology and philosophy, and they're going to be right in your laps.

Microcosms
"Fear and Valor" is a compact and well planned short story, and a compelling look into the mind of a man on the battlefield. It is grimly logical to the end, a blown-up sample of the microcosms of agony which are the consequences of mistakes at the "policy-making level."

The pictures are good; excellent composition, thoughtful selection of themes. But no female forms! What is Tech coming to?

Steel

"Flint and Steel" is subtle and well done. It points out in a way that is offensively obvious, an important moral, namely that Boy Scout medals and PhD degrees are of little worth in themselves—it's what goes with them, inside the man, that counts. Good writing and thinking both, on this.

And so we come to Leon Vickman.

I have been entangled in at least one of Leon's enterprises, and I will testify that he is a dynamic force to be reckoned with. Although I cannot qualify as a technical expert in the field explored in "Music Red and Grey," I was entertained by this bit of "stream-of-consciousness," which also contains some very good psychology and a moral: the things which seem most desirable at the moment become ashes in the mouth when seen in retrospect. Let that be a lesson to you, Leon, when you go over to France on that Fulbright scholarship.

Spring!!

Altogether, I come to a most optimistic conclusion about the spring issue of *Pendulum*. The impression is twofold. First, that it shows a vigorous and creative balance between artistic concepts and the technological means to realize them, and secondly that the contributors possess a balanced and down to earth view of man and his problems on earth a real philosophy free alike from blind adherence to custom, and the equally blind chasing after passing fads. It's a good issue and bespeaks a crop of engineer and scientists behind it. Maybe the situation isn't completely hopeless after all.

John Scott Campbell
22 May, 1953

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BREWINS

(Continued from Page 2)
 Sunday night atop Mount Wilson for the ostensible purpose of watching the atomic artillery test. They arrived up on the mountain at about one in the morning and immediately started to enjoy its privacy and soli-

tude. "Solitary drinking makes a drunkard." They managed to wait around until six in the morning when, disgruntled by the absence of any nuclear phenomenon, they departed for Tech. When they got back here they found out the bitter truth—the test was to be performed

at eight instead of five-thirty. News item: Bill Davis has quieted down so much in the past few weeks that we'll have to start calling him "Lippy" too.

Sunshine and Health

Now we know why Howard Berg spends his Sunday morn-etry . . ." Well, to save an in-

ings without fail at Sunday school. The Beak proudly presents this transcription from a tape recorder planted in one of Uncle Howie's notebooks: "Man! ex last Sunday simple harmonic motion I was at f(x) a real Cool Mein Kamp beach Modern Po-finite amount of time, we shall

cull the meaningful phrases from the constantly recurring refer-ences to notes, homework, notes, assignments, notes, etc. To make a sickening and disillusion-ing story short, it seems that this immoral Sunday school has sponsored a (oh, horror) Beach Party at Long Beach, at which various males (among them our Hero) were seen to disappear in the company of equally various females. Is nothing sacred?

Ted Johnson must be glad that summer is a'comin' in. He was overheard during Dabney house room drawing, with its reliance upon cards as the ideal agents of Chance, saying "Man, that's the most queens I've seen all term!"

INTERHOUSE TROPHIES

(Continued from Page 1)

people?"
Crew and Chess
 Other trophies, like the Ski Trophy in Dabney and the Bridge Trophy in Fleming, have lain dormant. But the Rowdies have drunk themselves into the Crew Race Trophy, while intel-lectual Blacker, led by George Epstein, won the Chess Tourna-ment.

Water Fights, Too?

All in all, the trophies have enjoyed widespread circulation as the War of the Student Houses rages on. Wonder why they don't give a trophy for the house winning the most water fights?

AWARDS ASSEMBLY

(Continued from Page 1)

Eric Ward won the Scott Tennis Tournament Trophy, while the Novice Tennis Tournament Tro-phy went to Alan Joncich. As usual, Fleming romped off with the Varsity Rating Trophy.

Receiving honor keys were S. W. Autrey, J. C. Behnke Jr., P. J. Fazio Jr., E. L. Gehle, A. H. Haber, L. A. Henderson, G. L. Johnson, K. D. Lunan, R. W. Lynam, J. J. Merrill, J. J. Muehlberger, J. M. Ogilvie, B. P. Schweitzer, J. D. Walker, and J. H. Wyman.

Honor certificates went to D. F. Barnes, C. E. Benjamin, L. A. Decker, F. D. Dryden, W. D. Gardner, A. L. Halgesson, D. L. Hook, E. D. Jacobs, B. A. Kaiser, J. F. Lloyd, R. H. Miles, R. L. Orbach, R. S. Ratney, S. J. Sims, R. W. Supple, F. M. Trapnell Jr., P. H. Vartanian, and V. I. Walkley.

Varsity track awards went to J. S. Tyler, J. R. Kliegel, G. B. Munn, V. I. Walkley, R. R. Hodges, D. J. Taylor, E. A. Kaiser, L. O. Gardner, R. W. Supple, J. T. Lloyd, L. J. Sims, L. A. Decker, E. B. Ward, D. L. Crowther, and manager J. D. Rogers.

Varsity baseball awards were presented to G. E. Madsen, R. E. Pechacek, E. G. Sauer, J. D. Walker, J. S. Winslow, F. W. Garrison, R. D. Inglis, R. H. Williams, W. A. Peterson, S. W. Autrey, J. D. Gae, and manager A. R. Pitton.

Receiving varsity swimming awards were F. B. Wallace, N. T. Ellett, H. G. Perdigao, A. H. Haire, D. B. Roberts, D. J. Barnes, E. J. Stofel, J. H. Wyman, and manager R. R. Cochran.

Varsity tennis awards were presented to A. F. Yano, F. R. Hanvey, T. Emery, G. L. Beebower, R. G. Moody, D. A. Borad, and E. B. Ward.

Receiving varsity golf awards were D. L. Turcotte, P. Farnley, E. A. Davies, E. H. Daw, G. W. Patraw, and B. J. Watkins.

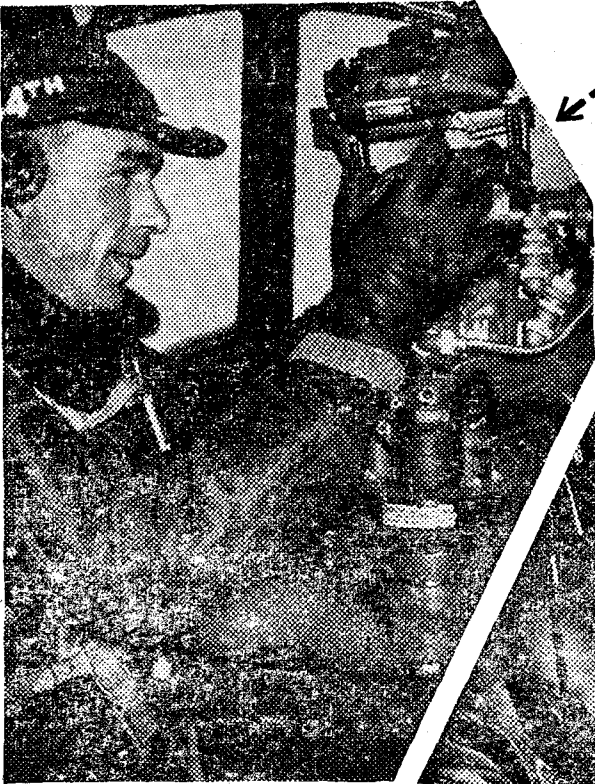
The following awards for debate were presented. Second-year jewels: Bill Dibble, Jim Enright, Bill Lindley, and Miles Nes-man. First-year gavels: Tom Bergeman, Myron Black, Gary Boyd, Ray Orbach, Mar-tin Roth, Bob Ryle, Jim Short, and Howard Berg. Certificates: John Young, Ray Price, Kim Malville, Leon Heer, and Alan Joncich.

Freshmen receiving athletic awards were the following: Track—F. M. Peters, P. R. Conley, D. W. Lewis, E. Ophuls, R. A. Wille-man, J. R. Lloyd, L. R. Linstrom, E. F. Lehman, R. L. Chapkiss, and manager S. N. Porter.

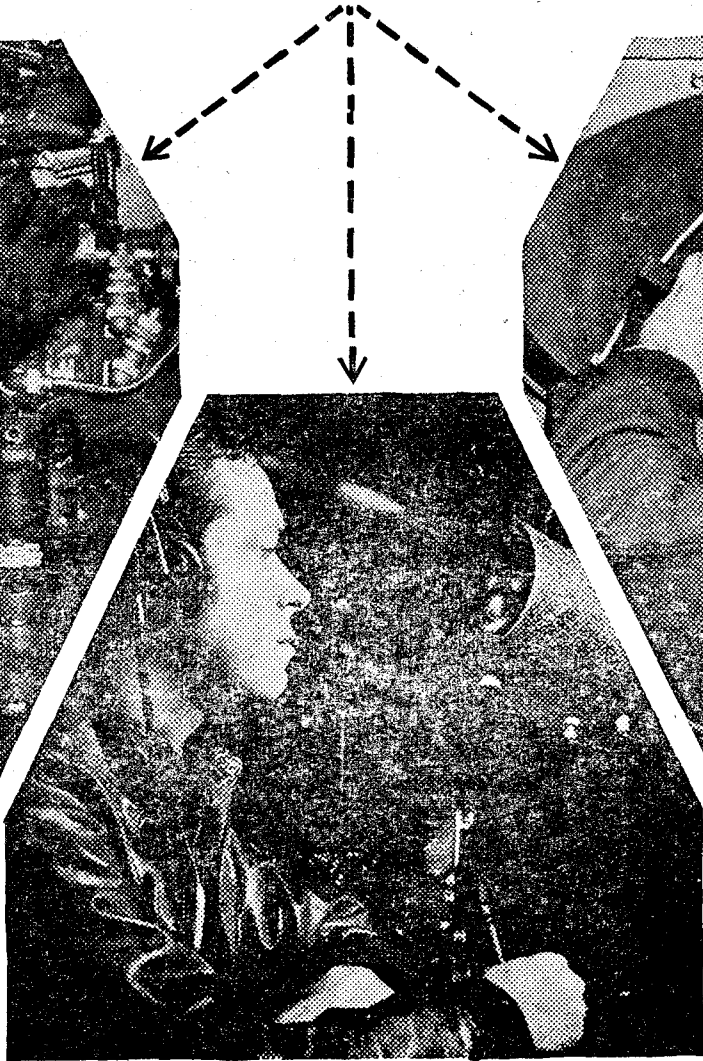
Baseball—D. C. Pitton, P. R. Conley, J. H. Koontz, E. A. Nelson, J. H. Snyder, R. J. Weymann, J. L. Cowan, C. H. Holla-day, K. L. Laws, C. B. Raleigh, H. E. Dubb, E. Ophuls, D. A. Tansey, and C. A. Mead. Swimming—J. S. Ball, W. E. Sundblad, W. H. Davis, R. A. Johnson, and R. M. Brown.

Tennis—G. A. Barnes, J. S. Ball, A. M. Poisner, J. S. Davidson, H. M. Goldenberg, and D. S. Evans.

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Athletics in Review; Future looks bright

Soccer, basketball, golf, big winners

by Patraw and Turcotte

As the curtain comes down on another year of Caltech athletics, the sports editors bring you a summary of the past events. The big news was the apparent upswing of Tech athletics in general. Only one or two sports showed decline. Improvement was noted in basketball, cross-country, swimming, and golf. Those teams equal to last year were soccer, water polo, and track. Decline was noted in football, baseball, and tennis. Also encouraging was the big improvement in frosh teams. Almost without exception frosh teams were better than ever. This points to big things in next year's sports.

Football

Fall sports with football as the headliner was a very successful one in many respects. Although the gridders wound up with an unimpressive record, they did well at times. Game after game was lost to a team with less total yardage gained, poorer passing percentage, etc. Breaks and inability to take advantage of breaks offered became the squad's downfall. This was the first year the T formation was used and the boys took to it rapidly. Under the expert offensive and defensive strategy tutelage of Bert LaBrucherie, new stars appeared to honor the Orange and White. Defense men like Goetten, Kaiser, Muhlberger arose to many tough situations. Offense shone with Ward and Kidder being up-and-coming stars. Old standbys such as pepper Stephanides were always in there.

Prospects for next year are looking up as the team has revitalized their spirit and manpower. Oncoming frosh spark the replacements and the experienced soph and juniors balance and deepen the squad. Next year should offer both fans and players more wins and fewer chokes.

Soccer

Caltech's soccer team, with six victories and one loss, won for the second consecutive year the Southern California Intercollegiate Soccer Conference championship. The kickers traded wins with UCLA and downed Pomona and Cal Poly. Pomona then defeated UCLA to give us the championship. The team also won matches with Midland and Thatcher. This year joint recipients of the outstanding player award were forward Bobby Wood, halfback Swaroop Bhanj Deo, and goalie Don Emerson.

After one year's absence with the army, Mentor Bob Huttenback returned to coach the team. In his words, "It is the team spirit that counts."

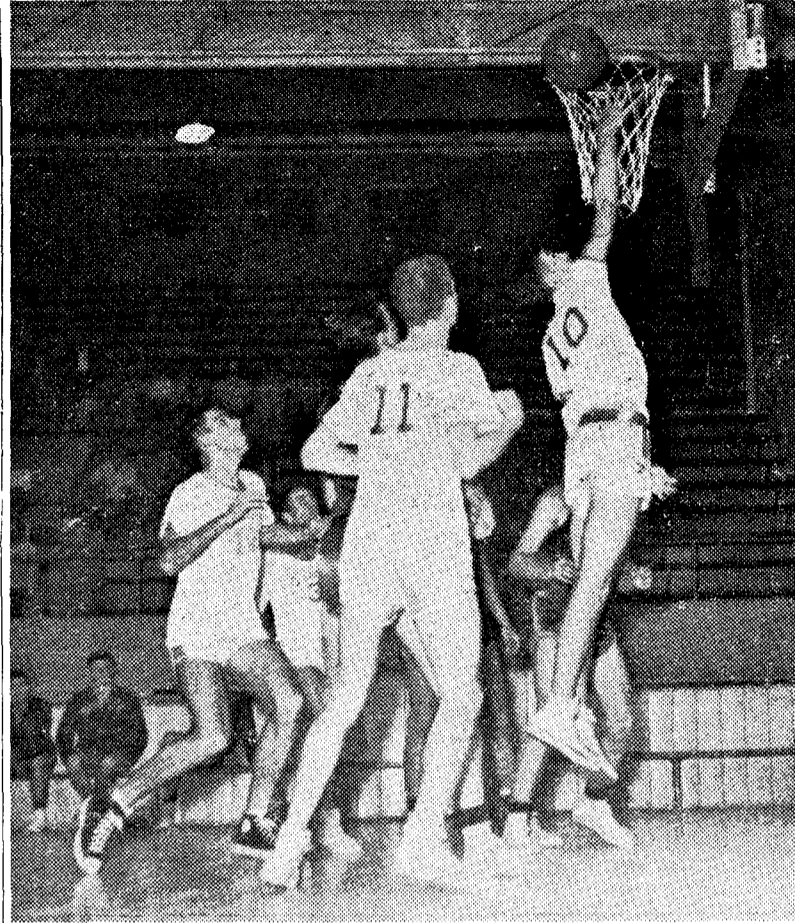
Water polo

With only two men back from last year's first team, the varsity water polo team lacked the experience to make a very good showing this last season. The best they could do was to tie Pomona in a scrimmage.

For his efforts at guarding the goal, Morgan Ogilvie received honorable mention for the All-Conference team. John Bush

led the team's scoring with 14 points for eight games.

Although the frosh played only the Oxy and Pomona



frosh, they defeated them decisively, with Bill Davis leading the way with 15 points for the two games.

Cross country

In one of the toughest leagues for distance runners, the Tech cross country team did exceptionally well. A third in both the dual and conference finals came easily to Coach Pilkington's harriers. Falling at the hands of Tech were Pomona, Redlands, Pasadena, Cal Poly, and Muir. Next year looks even better, what with everyone returning except captain LaTourette. Frosh bolster hopes considerably.

Basketball

Perhaps the best sport for Caltech this past year was basketball. Carl Shy built up a team which had taken last year before and had only won three games to a powerful contender among the teams of the Southwest. A second to Whittier in the SCIC and largest scorer against Pasadena Nazarene were some of the honors accorded to Tech. Highlights of the season included two stunning upsets of pre-season favorite Oxy, new scoring record of 98 points against LaVerne, a second league scoring championship by Fred Anson, and an extra-quarter defeat of Redlands to take second place.

Anson did not break last year's scoring record but he was one of the most improved players on the team. All-league second stringer, Bill Changers, became key man in the new Shy innovation, the double post. Jim Tyler consistently out-jumped and out-rebounded every opponent. Seniors Art Britt, Dave Stevens,



Football practice praised

Coach Bert LaBrucherie praises this year's spring football practice as the best he has seen since he has been at Caltech. Singled out for particular praise is the great improvement in blocking, the first prerequisite to a good football team.

More Players

Tackling and ball-handling have also shown improvement. About the only discouraging sign in this year's practice is the small number of players out. While one-platoon football is re-turing, it still takes more than eleven players to make a team.

New Fullback

The biggest surprise of the season is the fine showing George Mac Donald is making at fullback. Mac played guard last year but his fast starting and hard running will make him hard to beat in the battle for the fullback position. In the line the hard blocking of John Goetten

(Continued on Page 6)

Pomona wins golf meet

Pomona came through as expected to cop individual honors in the annual conference medal play golf tournament. Tom Wallace and Bob Gustafson grabbed first and third spots for the Sagehens while Oxy's John Gaines gained second.

Farley Low

The best Tech could do were the seventh and eighth-place finishes made by Paul Farley and Don Turcotte. The day's saddest story was Ed Daw's thirteen on the second hole but Ed came fighting back to card a respectable 90 for the 18 holes.

Scores

The Beaver scores for the 36-hole grind were: Farley 160, Turcotte 161, Watkins 176, Davies 177, Patraw 181, and Daw 183.

Athlete of the Year

This rating was selected by a committee made up of, among others, sports editors Patraw and Turcotte and Director of Athletics H. Z. Musselman. Ratings are based on team spirit, ability, and leadership:

Freshman

1. Phil Conley
2. Ray Weymann
3. Jim Ball
4. Bill Davis
5. Fred Peters

Varsity

1. Fred Anson
2. Neal Stefanides
3. Jim Tyler
4. Eric Ward
5. Bob Wood-Swaroop Bhanj Deo



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ATHLETICS IN REVIEW

(Continued from Page 5)

base runner, Winslow accomplished the difficult feat of winning his own ball game at Pomona by making a three-base hit, bringing home the winning run.

Prospects for next year look better, and those of you who remember Norm Gray will see much of his ability in Ray Weymann, the sensational frosh pitcher who averages 14.5 strikeouts per game. Conley and Sny-

der with their hitting ability will be mighty welcome, for this is the main thing the team needs. Let's hope Dick Wagen-seller will be back, which will give the team at least four good hitters.

and a third in the conference meet. The frosh were better in dual meets, taking a second to the powerful Oxy squad, but they slipped to fourth in the finals. Big man for Tech was Tyler, who tied the broad jump record and also competed in the high jump, relay, discus and sprints. Two star weight men were Hodges and Kaiser. Sprinter Munn and hurdler Kleigle were always among the first to finish. Big men on the frosh were Conley, Lewis, Ophuls, and Lloyd. Most of the men are back next year, so things should improve.

a failure. Bright days and gloomy days varied like sunspots. Eric Ward was the big gun. Following him up were Yano, Hanvey, Moody and Emery. Frosh Ball and Barnes carried the banner in the manner in which frosh teams did all year.

Track

Tech track showed a lot of improvement among many runners and field events men. The varsity took a fourth in league

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Tennis

Tennis was both a success and

Golf

Although they got off to a slow start, the golf team was unbeatable at the end of the season, winning four out of their last five matches. Probably the biggest upset of the year occurred when the team came through to beat Oxy just as the Tigers were confident that they were not only going to win the conference title but also gain recognition as the second team in Southern California.

The team's second-place finish in the league cannot be credited to any individual stars but must go to the hard work and the fighting spirit of the team as a whole. With four of the six lettermen returning and several outstanding frosh prospects, hopes for next year look bright.

Swimming

The mermen fared little better in varsity swimming than in water polo, taking fourth place in the league while defeating only Whittier. The highlight of the season was when they nearly upset Oxy, losing finally by only four points.

In the conference meet the Beavers again came in fourth with Norm Ellett placing second in the breaststroke.

The frosh lost to the Redlands and Pomona frosh in dual meets but came through in the conference meet to place second behind Pomona. Bill Davis won the breaststroke with a new frosh school record.

With the frosh and varsity water polo and swimming teams of this year pooling their talents next year, very successful seasons are expected.

FOOTBALL PRACTICE

(Continued from Page 5)
at tackle has been outstanding.

Line Good

Also outstanding in the line are Ron Saliba and Lynn Abbott while Bob Wynn, Bob Christian, Pat Carey, and Art Takito look like good backfield prospects.

ROOT MEAN SQUARE

(Continued from Page 1)
ent 23%.

Did Hunter Meade give the true clue? Yes 23%, No 29%, No comment 48%.

More Brewins

By the theory of Root Mean Square it is derived that there is room for improvement in the Tech. We don't know if it is only a coincidence but the percentages on the first two questions are very similar. This might be construed to mean that the entertainment in the paper is in the brewins and the troops are not happy. One general comment was that the same people are mentioned over and over again. This was meant as a gripe. Martter commented, "the Tech stinks, Hunter Meade is (censored) and Brewins is out of it!" This might be said to reflect the general opinion of the troops.

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