Volume XLIX

California Institute of Technology Thursday, May 27, 1948

New Service Organization Elects; Awards Presented at Assembly Today Herzig, Gardner New Officers

"Unlimited Manpower That Can Be Depended Upon To Do a Good Job" Promise of New Group

The Instituters, Tech's new service organization got off to a flying start last Monday afternoon at their first organizational meeting. Wayne Herzig, Dabney, was elected Chairman, Ollie Gardner, Ricketts, Vice-chairman.

Officers

The temporary executive committee was rounded out by the following men: Tony Malonoski, Fleming; Ralph Lovberg, Blacker; Bob Crichton, Ricketts; and Bob Cobb, Throop. Over forty men were present at the meeting while approximately as many more have indicated their desire to become active mem-

Hep Group

The type of spirit shown at the meeting assures the school and student body a strong, well knit organization able to provide an unlimited amount of manpower that can be depended on to do a good job on whatever projects come before the group. If you want to become an active member of the Instituters, contact any member of the executive board.

The constitution as prepared by a committee headed by Bob Crichton, was adopted in the following form:

> CONSTITUTION FOR THE INSTITUTERS

Purpose:

This organization is being formed for the purpose of assisting the California Institute of Technology and the ASCIT. It aims at providing a pool of students willing to respond to a reasonable number of requests for service, but it is not intended to be honorary, fraternal or social.

Membership:

The organization is non-profit, non-sectarian and non-political.

There are no limitations as to the number of members who may belong.

To join, an individual must declare his willingness to serve the Institute and the Associated Students.

To maintain membership, each term an individual must reaffirm his desire to belong to the organization, and must state that he will reply affirmatively to a reasonable number of requests for service.

Organization:

Organization:

There will be a chairman, who will act as presiding and coordinating officer, and a vice-chairman, to act in his absence, elected by a majority vote of the members for the term of one year.

There will be an executive committee consisting of one member from each of the six groups, (each House, Throop Club and Off-Campus), the chairman and the vice-chairman. The executive committee will function in the manner of any executive committee.

The executive representatives shall be

Tau Betes to Hold **Annual Formal**

The Caltech chapter of the Tau Beta Pi Association will present its annual spring formal dance this Saturday night at the Pasadena Athletic Club. This dance is a regular yearly event with the Tau Betes. This year, in contrast to the previous years when the dances were held on campus, an outside location has been scheduled.

Boyer's Music

The mellow music of Laverne Boyer's orchestra has been scheduled for this affair. This fine music, combined with the luxurious bar adjoining the dance floor, promise to make this a memorable dance.

Alumni Asked

The Caltech chapter has invited all of the alumni members from the local alumni chapter in order to swell the local crowd.

Campus Calendar

THURSDAY, MAY 27—
Upper Class Luncheon Club at the Training Table, 12:00.
Throop Club Meeting, 12:20 p.m.
Senior-Faculty Softball Game, 4:15.
Y Cabinet Meeting, Y Lounge, 7:12

FRIDAY, MAY 28— Award Assembly, 11:00 a.m. Caltech Bible Club, 304 Bridge, 12:20. Blacker "Drunkard Party."

SATURDAY, MAY 29— Dabney Costume Party. Dabney Costume Party.

SUNDAY, MAY 30—

Musicale in Dabney Lounge, 7:30 p.m

Beach Parties for all Houses.

MONDAY, MAY 31— Memorial Day Holiday. TUESDAY, JUNE 1— Band Practice, Culbertson Hall, 7:30

p.m. Senior Exams Begin.

Senior Exams Begin.

WEDNESDAY, JUNE 2—
Frosh Luncheon Club at the Training
Table, 12:00.
Caltech Bible Club, 304 Bridge, 12:20.
Fencing Class, Dabney House, 7:30 p.m.
Orchestra Practice Culbertson 7:30 p.m.
THURSDAY, JUNE 3—
Upper Class Luncheon Club at the
Training Table, 12:00.
Throop Club Meeting, 12:20 p.m.
Y Cabinet Meeting, Y Lounge, 7:15
p.m.

p.m. Dancing Class, Culbertson Hall, 7:30

elected by each group for the period of one term. Each group will act under the leadership of its representative.

Scope and Procedure:

This organization is not intended to conflict with any other existing on campus, and therefore it will not assume any of their duties. It will assist the Institute or Associated Students as a whole and not for any small groups.

Any service rendered will be undertaken in the name of the organization, and it shall assume the sole responsibility.

The group emblem shall be worn during (and only during) the rendering of a service.

service.

Normally all requests for service shall be made to the chairman or to the vice-

Normally all requests for service shows be made to the chairman or to the vice-chairman.

No remuneration will be accepted for any services rendered; however, in the name of the organization, payment for any legitimate expenses (such as transportation) will be requested.

Dean Thomas to Attend Swedish Dam Congress

Dean and Mrs. Franklin Thomas sailed last Saturday on the Queen Mary, bound for Stockholm, Sweden.

Dean Thomas will attend the International Congress on Large Dams in Stockholm after which he and Mrs. Thomas will visit Denmark, Holland, Belgium, France, England, Wales and Ireland. They will return to this country on the Queen Mary in August.

Dean Thomas was active in establishment of the Metropolitan Water District of Southern | vision of Glenn J. Green who re-Board of Directors. He is also a as manager of Student Houses, Board of California.

the element of compulsion.

problems of the school.

NOTICE

has announced that the date of first term registration in the fall has been advanced from Friday, September 24 to MONDAY, SEPTEMBER 27, from 8:30 to 3:30.

Students should also note that the charge for late registration has been increased

Coffee Shop Under New Management

The Institute will again resume operation of the campus Coffee Shop on Tuesday, June 1, it was announced this week by the business manager's office. The cafeteria has been operated by James Sullivan for the past with the Institute.

A general improvement in food and service, opening of the Coffee Shop during some part of the evening for coffee and some rearrangement of serving and eating facilities are included in plans under the new operation. The evening opening arrangements will not go into effect until next fall.

Management of the cafeteria will be under the general super-

In the columns below Tom Stix presents a program recently evolved by a group of students,

"The Fourth Hour Plan" is an admitted attempt to force such participation on present non-

Many drawbacks to the plan can be presented. It is the feeling of the men sponsoring it, how-

Regardless of whether the plan as outlined here, is accepted or not, I cannot help but feel that

In pursuing its already achieved goal of national academic leadership, it is only natural that

ltech should also assume vigorous leadership in the equally vital field of personal development.

The Caltech Attitude Should Mirror the Caltech Goal

participants by making it compulsory. Men and organizations already active would be effected only

ever, that these can be overcome. The major objection which will be no doubt raised concerns

Active Planning is a Healthy Sign

it is a step in the right direction. It shows that a large group of students are actively thinking

about the problems of the Institute and its students, striving for continual improvement. If

nothing else, I hope the presentation of the plan through the Tech will encourage discussion

along these lines and that this consideration will result in a solution to one of the most pressing

which they feel would spur student participation in non-academic activities at the Institute.

in that a more convenient time for such extra activities would be provided.

Fleming Retains Possesion of Varsity Trophy; Inter-House Trophy Still in Doubt

No Frosh Award

Say Tau Betes

Last year the Tau Beta Pi or-

ganization inaugurated an

award to the Outstanding Fresh-

man of the year. This custom

was initiated to give a suitable

honor to very exceptional men.

Award Basis

The Caltech chapter of Tau

Beta Pi chooses the man to re-

ceive this award on the basis of

outstanding scholarship coupled

with character and participation

No Winner

ner; not because there are no

outstanding scholars or no sing-

these two traits could not be

found in any one man. Those

frosh who have been most active

have apparently been so to the

average, while the frosh who are

outstanding in scholarship have

been doing only a very small

amount of extra-curricular ac-

Resolution

award this year was made at a

said in effect: "In order to keep

this award one which actually

lives up to its name, we will

The decision not to give an

tivity.

campus.

in campus activities.

Hinricks Award to Honor Outstanding **Graduating Senior**

To be awarded to the senior who, in the judgment of the undergraduate deans, has made the greatest contribution to the welfare of the student body, the Frederick W. Hinrichs award has been added to the list of honors given at commencement.

The award, established in memory of Frederick W. Hinrichs who served for more than twenty years as Dean and Profourteen months under contract | fessor at the Institute, will be awarded for the first time this year. It will be presented at commencement without prior notification, and will consist of \$100 in cash, a certificate, and a suitable memento.

At the discretion of the deans, more than one award or none may be made in any year. The award is given to the senior "who, throughout his undergraduate years at the Institute has made the greatest contribution to the welfare of the student California and is a member of its cently joined the Institute staff body and whose qualities of character, leadership, and resmember of the Colorado River the Athenaeum and the Coffee ponsibility have been outstand-

Bevorators Receive Awards; Schroeder Takes Decathalon The annual awards assembly was held this morning as mem-

bers from ten Beaver athletic teams were awarded letters and numerals, and four trophies were presented. Since the interhouse race will not be decided until this afternoon, it was not awarded today. Fleming, however, received the Varsity Rating plaque. The house of athletes has retained both these trophies since the awards were first made. Col. Goldsworthy made the presentation.

Alumni Baseball

The Alumni Baseball Trophy was presented to Chuck Norman and Milt Strauss and these players represent the most outstanding on the 1948 Beaver baseball team as voted on by squad mem-

Debate Team

Dr. John Schutz presented debating awards to Irving Sulmeyer, who played second in the Herald-American oratory contest two weeks ago, John Heath, Stan Boicourt, Tom Vrebalovich, Bernard Rudin, Leo Brieman, Bob Smith, George Brown, and Ulrich Merton. First year awards were gavels, while certificates were given to men who had previously earned a gavel.

Horsehiders

Baseball lettermen were This year the Tau Betes have decided not to announce a win-Chuck Norman, Stu Butler, Ralph Morrison, Tom Petrulas, Dick Patterson, Milt Strauss, Don Baker, Glenn Chaffee, J. ularly active frosh, but because Smith, Bob Winchester, Art Spaulding, Bruce Hedrick, Jack White, Beb Brayford, and Tom Moore, manager. Coach Ed detriment of their grade point Preisler made the presentations. Frosh baseball men who earned numerals were Chuck Bates, Duane Neverman, Walt Pfeiffer, Al Sereno, Louis Stallkamp, Fred Wood, Dean Daily, John Moss, Ed Stern, Walt Biggers, Winston Royce, Steve Pardee, and Earl Hefner, manager.

meeting last Monday night. The Athletic director Hal Mussleresolution passed at this time man presented Dwight Schroeder with first place decathalon (Continued on Page 2)

Tests, Guidance Offered by V.A.

Are you disconented? Do you feel misplaced? Do you feel that perhaps Tech isn't the place for you? Then take the Veterans Administration Guidance Tests and aptitudes.

Free To Vets

These tests are given free of charge by the veterans administration in an effort to help the veteran decide what he is best fitted for., Non veterans may take the tests and receive counselling at a cost of \$25.

There is an interview followed by four types of tests which take from three to six hours. courses three hours a week. First the interest tests; then the Eleven to twelve is obviously aptitude tests indicating the varthe best hour. These shall be lous fields in which you have ability (these may prove sur-Fourth Hour Activities. (Being prising); the performance tests the fourth school hour of the which will give the counselor an

Street.

give no award unless there ac-Tech Radio Club Elects tually is some student combining all three traits-scholarship, Officers; Plans Transmitter character, and activity on The Caltech Radio Club held

its final meeting of the year Tuesday noon and elected officers. Walt Mudgett was elected president, Ed Dolan was elected treasurer, and Roy Gould, sec-Further discussion was center-

ed around the feasibility of building a five kilowatt rig for the club.

It was decided to start immediately on the construction of the transmitter. It was also decided to place a 200 foot rhombic in the center of the quadrangle in front of Throop. Institute permission for this project has already been reached. Any further action was postponed until next year.

The meeting ended with the singing of the Hams' national theme "Ten KW and a Bottle of Scotch."

P.acement Schedule

The following additional permanent positions are available for June graduates. See placement office.

General Petroleum Corp., Los Angeles. ChE or Ch to work in Natural Gas Laboratory running Bureau of Mines test on gas samples.

City Engineers Huntington Beach—CE. Subject to certain supervision in design and layout and estimating of sewer, pay-ing, and other street work. Preparing

(Continued on Page 4)

This is the substance of my valedictory wish to the Institute: A continued and ever-expanding preeminence based on open-mindedness and a tradition of willingness to adjust to changing needs. In short, the application of the scientific method, and, more important, the scientific attitude to every phase of Institute development. The Caltech goal cannot be more adequately stated than it has been in the lives of the three men most responsible for its existence: Millikan, Hale and Noyes.-L. F. H. What follows below is a plan an easy one. for Institute-sponsored extra-

curricular activities. Three eleven o'clock hours a week are to be set aside for this program. These activities are to be as numerous and varied as possible, including everything from sculpture to fly-casting. Participation will be required of all undergraduate students, but hours and activities will remain flexible so as to allow for the maximum amount of student

initiative and freedom.

Background: Caltech has a reputation for being a factory fortechnological students - a workshop where bright shiny scientists and engineers are turned out like so many Chevrolets. The fact that Caltech has teams in every inter-collegiate sport, that organized social functions are held every Friday and Saturday night, that we have on campus a paper, a yearbook, a glee club, an orchestra, drama club and band, that we have a debate team of high national standingthese are invariably overlooked or omitted when the school is discussed among outsiders.

Who is guilty of spreading the half-truths and exaggerations among the populace? The students are. In our conversations abroad, we don't emphasize that liberal arts courses comprise a quarter of our program, but we say we worked until two a.m. on a lab report. And that was

Evidently there's a lot of ment of the school. smoke. Where'sthe fire? The fire is just this. The Institute takes no initiative in sponsoring activities not connected with school work. There is an element in the Institute hierarchy that completely into dormitories. Fortunately, student demand has been strong enough to keep these alive. On student initiative yearbook, a drama club, a glee member of the community. club. These activities are a they can be expanded to include all of the student body, and especially the off-campus men, it

Honor Violation Suspends Two

A trial was held recently by the Board of Control in which two men were involved.

In the process of extended questioning by the Board, both men confessed to having violated the Honor System.

One of the two was sentenced to immediate suspension from the Institute for a period of one year, and the second was sentenced to immediate and permanent suspension.

would be for the great better-

How can we expand? By seeking active help and approval from the Institute to replace the passive acceptance of the past. The Institute has mandatory and find out your capabilities humanities, mandatory physical would be immensely pleased if training, and before the war, we abolished such things as the mandatory assemblies. It takes football team, the Pajamarino, if the responsibility for producing we turned the student houses a healthy scientist or engineer with an element of cultural background. Let it add to this the responsibility of producing a happy engineer, with a variety alone do we have a paper, a of interests. A broad-minded

The Plan: The achievement of healthy stabilizing influence. If these goals is simple. Let there remain free from academic filled with what we shall call

the fourth school hour of the day.) No units will be given, but attendance must be enforced as it is for P. E. Students will register for these Fourth Hour Activities at the beginning of each term.

But hold! These activities are not just another class. They are a change of pace from the rest of the day. A new type of work. Interesting. Relaxing. You look forward to them. For the field of possibilitiesis unlimited. We can offer in addition to the (Continued on Page 2)

which will give the counselor an idea of how much you know and can off how much you know and can do; and finally the personality tests which you may choose to take.

Helpful

Many Tech students have already availed themselves of this counseling and found it very helpful and interesting. There is no red tape; an appointment will be made promptly.

Call Tucker 6123 or go in personalities.

City of Pomona—CE. City Engineer to work in streets, water dept. Very good training and broad experience. Lots of work in streets, water dept. Very good training and broad experience. Lots of work and education.

Air Research Co., Los Angeles—ME. Major emphasis on thermodynamics and heat transfer. (Superchargers, turbines, air ready availed themselves of this counseling and found it very helpful and interesting. There is no red tape; an appointment will be made promptly.

Call Tucker 6123 or go in personality tests which you may choose to take.

Which will give the counselor and other street work. Preparing grades, estimating quantities.

City of Pomona—CE. City for Pomona—CE. City of Pomona—CE. City o (Continued on Page 2)

FOURTH HOUR PLAN (Continued from Page 1)

paper, the yearbook, the gleeclub, the orchestra, band, debating, radio and chemistry clubs, the drama club—all of which we have now-in addition to these we can offer an art-room-watercolors, oils, ink sketching, sculpture and modeling, casting in plaster of parts and bronze; a woodwork shop, a machine shop, a welding shop; sports such as archery, fly-casting; special courses such as music appreciation, industrial design; a model airplane club, a photography club which might even produce movies. Above all the fields must remain flexible. Let the criterion be only that the work is productive, creative, or enjoyable. Let activities be approved by a joint student-faculty board to meet the demand.

tute needs a lawn in front of Throop, or an amphitheater behind astrophysics, let them sign on to put their time into buildhave to be kept rigidly for the individual. If he would rather work three hours in the shop on a free afternoon, let him do it. a week are put in.

As things are now, there will be many who will devote far be set and hours put aside, to show that the Institute policy is to encourage these things, that the school believes they are of significant value in an education, and merit a certain portion of time in everyone's life. There are many who would enter into such activities as we now have except that a) they have not yet learned to organize their time b) they feel schoolwork is more important c) they live off-campus and can't come back in the eve- AWARDS PRESENTED ning when most activities meet. The Fourth Hour Plan solves award, and Jack Marshall and these problems virtually by defi- Wayne Herzig second and third

the unit load will not have to be men by Andy Anderson to lessened. Schedules will need Dwight Schroeder, Jack Marsome rearrangement, but we shall, Hal Tyson, Martin Walt, now have two eleven o'clock Charles Shaller, Don Peterson, periods open for assemblies. One Elroy Chinn, Stan Barnes, Erle of these could be taken for Brown, Doug Brown, Ray Hegg-Fourth Hour activities with an land, Dick Cornelius, Bill Sylautomatic excuse on any day an vies, Herb Simons, Manuel Bass

assembly is scheduled.

—there is no man on campus that couldn't remove one hour Holds Varied Loot from the middle of his day to do something he enjoyed, and still get his assignment done. These activities are just the things everyone "wants to do, but can't find the time." The Fourth Hour Plan offers the time, the place, the facilities.

The actual cost of the plan would be small. Most of the activities proposed need only a room to work in. The most ambitious is the machine-shop, but this is an item that Tech has always needed, and should have had years ago.

One final point. This plan in no way does away with student initiative. If students de of it lies around the closet from morning. sire to work on their ownfine, excellent. But in certain If fifty men think the Insti- cases, such as art work or machine shop, trained personnel are necessary for guidance and instruction where the need arises, bring in qualiing these. The hours do not fied men or women from the outside - men of high professional calibre who can mold thirty voices into a harmonious singing group, who can paint Palmer, Jay Montgomery, Joe Providing only that three hours and sculp themselves, or who Curray, Bill Harris, Al Eschner, know where to place the pipes for a lawn sprinkler system.

plan for Caltech students to also a sweater winner, passed more than the minimum time to develop wider interests, latent out the awards. Frosh making abilities, hobbies, a chance to learn to work with their hands. Noel Reed, Jack Dyer, and Ul-It is an opportunity to make rich Merten. Caltech unique among technological schools - it will be a feature attraction to bring new and better men to the school, and to turn out more complete graduates.

Bill Boutelle Bob Crichton Ralph Louberg Tom Stix

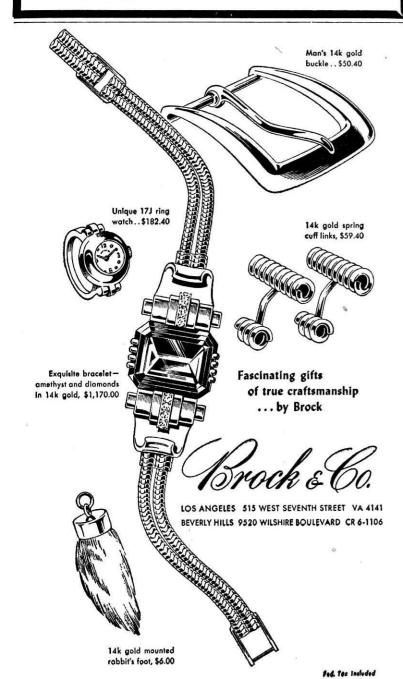
(Continued from Page 1) place respectively. Varsity track In introducing this program awards were given Tech spike-

HAROLD O. GRONDAHL

Representing

NEW YORK LIFE INSURANCE COMPANY

234 E. Colorado St., Pasadena Phone SY 2-7141



As to cutting into study time Y Lost and Found

Fibber McGee has nothing on Wes Hershey.

The former may possess a closet which holds everything but the kitchen sink, but the "Y" director has a closet in the 'Y" office which has more articles than McGee's sound man has noises for.

Come An' Get It

ever lost anything in the general area of Caltech to come in and look over the stock. The "Y" makes every attempt to get in turned into the office, but most year to year.

George Brown, and Bob Funk. Art Miller, Bob Cobb. Walt Edwards, Ken Berg, Chuck Paulson, Charlie Steese, and Hiroshi

Kamel were Frosh number

Mermen

Tech swimmers to earn their letters were Bill Dixon, Bill Ed Mitchell, Mike Hall, Chuck Murphy, Dick Shoen and Bob Summary: Here is presented a Waters. Manager Stan Harrison, numerals were Dick Libbey,

Tennis Awards

Dr. Swift presented Ed Alexander with the Scott Trophy, an Butler, Don Schmid, Berk annual award given the best undergraduate tennis player. The novice tournament award was given Milt Carus. Those men rating letters were Alexander. Bill Shivar, Charlie Vadhana-

CAMPUS BARBER SHOP In Coffee Shop Building (OLD DORM)

house events. It looks as though Thorpe and Glover have shown where the beer drinking ability lies. They tied in the 24 ounce contest. We need more athletes with endurance of this caliber.

Blacker Stag

As part of the weekends activities, Blacker had a quiet gen-Wes urges anyone who has tlemanly stag which somehow turned into a riot at about 3 a.m. Don Rolph, feeling a bit gay, was convinced he was a prune touch with the owners of items through a keyhole. Things gradually subsided on Saturday

> A lot of seniors got sunburned on Ditch Day at Laguna but Bob by taking off the previous evemoon at Laguna at 3 a.m. There is something inspiring about beer and hot dogs in the moon-

> > Surplus Females

We're still trying to figure out why Ross Mehl showed up with three women and two kids. Were they his? If so, he was a perfect cad to stare through his

panich, Larry Nobles, Phil Lamson, Jack Poindexter, John Bear, and D. B. Duncan. The regular Frosh racket team of Jack Martin, Dean Blanchard, Thorne Welch, Bob Munro, Lynn Croswhite, and Dick Marsh won numerals.

Golfers making letters were Benton, Virgil Sims, Jack Mof- phy.

This has been a rough week-|octant at the red bathing suit end for a lot of people, particu- down the beach. Worcester was larly the seniors with an ASCIT another one who couldn't tear dance, Ditch Day Dance plus himself away from women for the afternoon. Oh, well these Scripps operators are off their stick anyway.

Also in line for this week's honors is Dick Alexander who kept the "Queen" at the ASCIT dance down in the bar so long (45 minutes) that the Grand March and ceremony had to be postponed twice. The dance was really fine except for that. People seemed to be divided into two groups, besides those dancseed and tried to stuff himself ing, namely, people like Carl Price who spend their time in the bar and people like Fullerton who spend their time crashing around in the weeds.

Davis, Winchester, Marshall and has been left out of this column, was able to concentrate on hap-Mittenthal avoided a little of it a howl is set up about decency, pier matters. After many morality, and other lofty conning with one keg and drinking cepts; so now we would like to scended to strum a few chords beer by the light of the romantic say that we think DEAN on the guitar, whereupon Alex-EATON is real keen.

YMCA Fracas

The YMCA mob composed themselves in a dignified man-tion, I understand, is handwritner at Mrs. Fleming's splash ing analysis. Not satisfied with party last Saturday. A few sin- putting the hex on his political ners were disturbed by solos opponents, Stan Barnes drags from the distinguished Dabney out their inmost thoughts with

fat, Sage Burrows, and Don Barrie. Andy Anderson did the presenting.

Skiiers earning awards were Bill Bradley, Harris Schurmeier, Jim Blom, Bloke Carus, John McKenny, Marvin Blair, and Sage Burrows, manager.

Senior lettermen who desired blankets were Petrulas, Butler, Winchester, Chinn, Barnes, Moore, Burrows, Schurmeier, Harry Moore, Ed Revay, Bob McKenney, Mitchell, and Mur-

The California Tech

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

California Institute of Technology
1201 East California Street, Pasadena, Cal. Subscription rates: \$1.50 per year.
Entered as second-class matter Nov. 22, 1947, at the Post Office in Pasadena, California, under the Act of March 3, 1879.
Offices: Lower Fleming
Telephone: SYcamore 6-7121 Ext. 180
Distributor of Collegiate Digest

Len Herzog, Editor

Editorial Staff

Everytime someone feels he Pepsodent ad, although Markoff threats, Vern Edwards condeander was thrown in the pool, and everyone went home.

The latest Fleming sublimaa mere glance at their scrawl. Enthusiasm has spread to Al Eschner; not satisfied with simply brute sex appeal, Al scans his girls' t-bars for signs of weak will power. Pretty dirty! Whatever happened to Ginger, Al? Lower loops too big?

Long

And then there's Dennis "Fat" Long who strides a half hour late into the Inter-Collegiate Conference last Thursday night with, "Sorry I'm late, but we had a football practice and . . ." Oh, those Pomona girls ate it up!

KNOLL

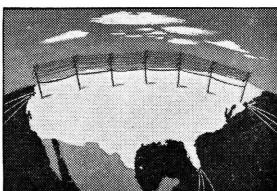
Jonker's Florists

3 Doors South of Lake and California St.

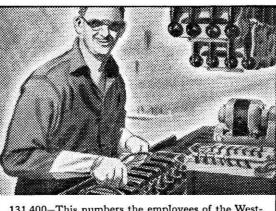
Some telephone numbers



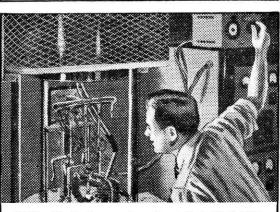
516,500-It takes this number of men and women to operate the twenty-two Bell Telephone Companies. Each operating company is responsible for furnishing telephone service within its own territory.



26,000-The number of people who are employed in the Long Lines Department of the American Telephone and Telegraph Company. It is their function to provide Long Distance and Overseas service.



131.400-This numbers the employees of the Western Electric Company who manufacture, purchase and distribute equipment and supplies for the entire Bell System.



6,000 - That's the number of people in Bell Telephone Laboratories. Through research and development they constantly improve this country's telephone service-already the finest in the world.



2,100-That's the number of people in the American Telephone and Telegraph Company. Through advice and assistance, they coordinate the activities of the entire Bell System.

In all, there are some 682,000 men and women in the Bell System. As this country's communications service is expanded and improved, opportunities will grow still greater. There's a future in telephony.

BELL TELEPHONE SYSTEM



Cleaners and Laundry

LET A VET SERVE YOU

THREE DAY LLEANING SERVICE

> **FOUR-DAY** LAUNDRY

902 East California Street (4 Doors East of Lake)

SYcamore 3-6704

Next Door to Caltech Barber Shop

Talkin' It Over with The Goon

Happened to be gathered with the stalwart few who were cheering the Varsity pigskinners on to their first victory of the Spring scrimmage session.

For those of you who didn't happen to make it out to T.P. Thursday I might add that the rough-house was with our friendly neighbors from Muir JC. And that the Engineers racked up six digits to the Muirmen's zero was no fluke. Although the line had some noticeableholes poked through it, you must remember that such iron men as Walquist and Bass were on the sidelines.

Stars

Dapper Dennis Long luckily kept his handsome face intact this time, but managed to play a brilliant defensive game as he sent many of the opposition home rubbing their battered bodies. In the guard spot Fearless Fred Dahrm, with about fifteen more pounds under his belt (and other places) looked like a small pile driver as he constantly broke through to nab the runner for big losses. There is a boy that has really improved and should be counted on to bolster our line this year. Powell and Houseman traded off in the center position and for novices did exceptionally well.

Offense

On the offense John Lewis, up from the Frosh, looked like a Bob Funk, Norm Schroeder, budding Doc Blanchard as he Manuel Bass, Chuck Norman, ceaselessly pounded Muir's line John Lewis, Bill Schuster, and

IT'S

26 East California Street

Colorado

Open Fri. &

SYcamore 6-2693

and secondary for long gains. Bill Sylvies looked good for the (Continued on Page 4) White's opponents. FOR CORSAGES

CALIFORNIA FLORISTS

(In the Middle of the Block)

SWIM TRUNK**S**

and

SWIM SUITS

\$3.50 & 15.00

Hanes Ends Final Season As Coach;

Intra-Squad Teams Play to Tie As Spring Practice Concludes

Coach Mason Anderson's 30 pigskin hopefuls turned in their uniforms this week after completing five weeks of grunt and sity and Frosh track mentor. groan with an intra-squad contest which ended in a 6-6 tie, Wednesday.

Funk Scores

The team of Orange and Black went into a one touchdown lead early in the second half on Bob Funk's drive through right few minutes later Bill Muehlberger knotted the score with a line buck from the two after the Whites had driven downfield from their own 15 yard line.

Sparkplugs

Sparking the Whites were Don Hibbard, Bill Muehlberger, Bain Dayman, Jim Wilcox, Chuz Howard, and Dennis Long, while

Such athletes as Don Tillman, Tom Carter, George Gill, Ken Shauer, Bill Frady, Tom Kelly, and Bob Grube, to say nothing of present Beaver stars as Stan Barnes, Dwight Schroeder, Martin Walt plus many others all es of an appreciative student

BICYCLE SHOP

42 North Fair Oaks Ave.

Pasadena

More people are smoking CAMELS than ever before!

SINCE 1909

BICYCLES

BADMINTON

TENNIS

Will Be Trainer

The successful coaching career

ed with his resignation as Var-

The man with the perpetual

which he held from 1923 until

1938 when he assumed the

Championships

all-conference meet. The follow-

ing spring Doc turned out an

The Beaver squad of '44 won

Final Tennis Matches to Decide IH Race Today

Frosh Sports Roundup By Earl Hefner

With the conclusion of the final baseball game, the last of the decathalon competition, the end of swimming, tennis, et al, the Frosh step from their underclass status into making up the of Dr. Floyd (Doc to the many Varsity teams of 1948 through who know him) Hanes has end- 1951. Mssrs. Anderson, Shy, Preisler, Lamb, Merrick, etc. should be a little more than glad to receive the numerical state Contest, 13-7 pipe in his mouth will return to who are soon to be eligible for the position of Tech trainer Varsity play.

Review

By way of a hurried review of coaching of the Varsity and the past year in Beaverbabe Frosh cross-country squads. In sports, some team records are 1943 Doc took over the track not the kind that will go down ment Park. teams and reached the height of in Tech history, but some tackle from the 10 yard line. A his coaching career with the squads have produced athletes championship teams of 1944 and whom you will be reading quite ference standings, and left the a bit about in this sheet in coming years.

Pigskin

Ed Preisler's first year as a Tech coach began rather shakily both the conference relays and when his pigskin eleven comoutfit that whipped USC, UCLA feats in four games. With the and California, and took the loop | fine help of Neville Long, Ed did meet, the Fresno relays, and the whatever he could to mold a winning team, but aided by inteam title in the Pasadena juries galore and absenteeism (which seems quite common for first term Freshmen) the Beaver Frosh team did anything but set the grid world on fire.

We could go right on down the lengthy list of Frosh football candidates for next fall's squad beginning with Noel Reed, Art Miller, Don Schmid, (Continued on Page 4)

WHEN YOU ARE HUNGRY

WHEN YOU ARE THIRSTY

WHEN YOU JUST

NEED RELAXATION

IT'S THE

SKIP INN

Beer - Plate Lunches

1352 E. WALNUT

CARL'S CALTECH BARBERS

5, GOOD BARBERS-APPOINTMENTS IF DESIRED

ON CALIFORNIA NEAR LAKE

Dabney Leads Close Interhouse Battle Over Fleming by Point

The Interhouse Sports Tro-| Fleming plays its final tennis phy's owner for next year will matches with Ricketts. Should be decided this afternoon when the athletes lose, the Trophy

Bulldogs Win Final Baseball

Coach Ed Preisler's Varsity baseball squad ended a rather disappointing Conference season Saturday with a 13 to 7 loss to Redlands' Bulldogs, at Tourna-

The win gave Redlands undisputed first place in the final Con-Techmen with but one victory against seven defeats-thus giving them full control of the loop cellar. Last year's champs, the Whittier Poets, finished second with a pair of losses to Redlands pleted their season with four de- and, surprisingly, to Occidental.

Butler, Strauss Capts.

Stu Butler and Milt Strauss were elected co-captains for the past year, and Chuck Norman was voted captain for next year's squad. The Alumni Baseball swimming championships. Dab-Trophy was awarded to Strauss and Norman in this morning's assembly.

Strauss topped Beaver batters in season play with a hefty .403, with Chaffee and Norman hitting .400 and .364 respectively. Chaffee led Tech hitters in conference play with .369.

> CALIFORNIA PHARMACY

PRESCRIPTIONS PHARMACISTS 575 S. Lake Street Pasadena, Cal. SYcamore 2-6222

YOUR COLLEGE SPORTS SHOP

Headquarters for Tennis Sportswear

WYNN MACE Tennis Shop

Phone SYcamore 6-5804 904 EAST CALIFORNIA ST. Pasadena, Calif.

T-zone'to

the first time in 15 years a house outside of Fleming would possess the Trophy. Dabney Leads

would be awarded to Dabney-

The Darbs are currently one lone point ahead of the Big Red in the I. H. race and a defeat today by the Rowdies would put Fleming, Ricketts, and Dabney into a tie for the tennis title, and Dabney would win the coveted award by a point. Should Fleming win, however, the Interhouse Trophy would remain in that house for another year by a two point margin. If this happens, Rickett's surprise basketball win over Dabney, when the Rowdies came from nine points behind at the half to edge out the Darbs, will prove the deciding contest.

Reds Win Three

In the closest race in years, Fleming has won three titles, including a co-title with Throop in softball and the track and ney has two titles, in touch football and cross country. In a replayed Dabney-Blacker basketball game this week, the Green won 53-30, to officially end the hoop season.

Nerrie Director

Sports director Jim Nerrie deserves much credit for the administration of the intramural race this year. Nine sports were conducted with baseball, cross country and volleyball played last fall, softball, track, and swimming the second term, and touch football, basketball, and tennis this term.

PASADENA BOWLING COURTS

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

Caltech Students Welcome at Neighborhood Church



A Church of Liberal Religion 225 West California Street SUNDAY WORSHIP 11 A.M. REV. CURTIS BEACH

> ALL-WOOL GABARDINE

SHIRTS

Maroon Color

\$14.95

Western Frontier style with two flap pockets and three buttons on each cuff.

Sizes 141/2 to 17

54 E. Colorado St. 921 E. Colorado St.



PLACEMENT SCHEDULE

(Continued from Page 1) Knudsen Creamery Co., Los Angeles— ME. To do layout work for new buildings, such as arrangement of equipment. Draft-ing and planning, inspection and follow-up of new construction.

Also, 2 men to act as operators in plant. Run calculations, etc. Operation of new processes and new methods in connection with phenolic plastics and resins. (ChE) J. M. Montgomery Co., Los Angeles—2 or 3 EE's as Plain Draftsmen, and 1 or 2

Two Structural Engineers, primarily Draftsmen with modest amount of design.

International Derrick and Equipment ompany, Torrance, Calif., CE as Draftsnan then into design. Chief product ortable derricks and equipment. Design of steel radio towers, radio masts, radar owers, television towers, etc. Kelite Products, Inc., Los Angeles—ChE for Laboratory work in manufacture of detergents and soaps. Executive type of work, supervisory, get along with people.

Mr. Ewald Lemke, Annaheim, Calif.— CE, to work up portions of plans for com-prehensive sewerage project for Orange County.

Signal Oil & Gas Co., Los Angeles, Calif.

—ME for Mechanical Drafting. Piping and access roadway layout. Plans for tank farms and treater systems and to make facility maps. Part out in field later. Also a Geology Draftsman. Make Ge charts, graphs, layout and crossectional views. Must do fine hand lettering.

W. C. Hardesty Co., Los Angeles—Chemist to assist in research work. Major in organic Chemistry (Fats & Oils). Western Geophysical Co., Los Angeles— othematician interested in seismology eveloping equations for seismic prospect-

U. S. Gypsum Company, South Gate, Calif.—ME or EE to fill 2 or 3 positions in paper industry. Trainee to learn the business. Could lead to almost anything—executive positions, etc. Men should be interested in starting at bottom in operations or engineering dept. (Training at least 6 months). (Interview May 28).

Stran Steel Division, Los Angeles—CE for combination office and construction work in connection with the light steel buildings.

Hughes Aircraft Company, Culver City, Calif.—EE in Plant Engineering Dept. Electrical record drawings have to be brought up to date and changes noted. Opportunity for man of right type to progress in organization. Ability to get along with people as work will carry him into all departments of the plant.

Pioneer Flintkote, Los Angeles—2 or 3 men who would like to make their life work in the paper board conversion business. Start in plant with idea of going into sales. Technical end into management, supervisory.

Johnston Pump Company, Los Angeles—ME to do straight design and Laboratory work. Deep-well pump industry.

Classified Ads

CAR FOR SALE! Oldsmobile 1936 well pre-served. Call Peter K. at Sy. 2-9737 served. Cal after 6 p.m.

FOR BARGAIN SALE this week only, I dark brown tweed suit; I tux double-breasted; I dark brown overcoat. All size 38-40, All offers considered. Boutelle, Fleming 71.

Associated Oil Sta. Lake & San Pasqual

Not a classy layout, but Best Products & Service

ANNOUNCING Famous British

M G SPORTS CAR and

JAMES MOTORCYCLE See It - Try It - Buy It

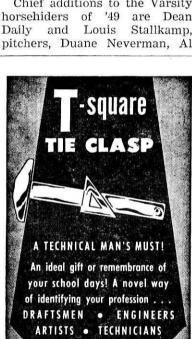
Immediate Delivery FOREIGN CARS IMPORT

15 North 3rd St., Alhambra Phone ATlantic 10103

Caltech Pharmacy

COURTESY . . SERVICE SATISFACTION

Dependable Registered Pharmacists Prompt Free Motor Delivery 882 East California Street SYcamore 2-2101 Pasadena, California



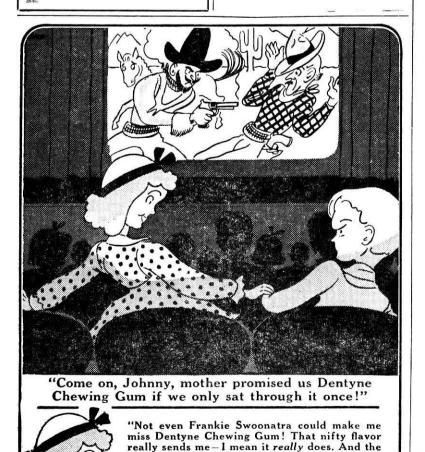
Hand Made Rhodium Plated

Gold Plated

S60 OLINVILLE AVE., BRONX 67,

WEINSTEIN

C.O.D



way Dentyne helps keep my teeth white, I wanta turn on the old smile all the time."

Dentyne Gum - Made Only By Adams

FROSH SPORTS ROUNDUP

(Continued from Page 3) Roland Berner, Dallas Peck, George Suman, John Lewis, etc. etc., but space limitation keeps us from giving well-deserved

Melon Manglers

With hardly a night's rest E. V. began the task of forming a hoop team to win glory for ye old Tech. By season end there was little doubt in opponents' blers came through a fourteen game season by winning six games while losing eight. Three of those losses were to Loyola and Pepperdine, teams just a little out of our class.

Hoop Record

The Frosh basketball team suffered some narrow defeats, and possessed the quality of looking like a million bucks one night, and being completely out of it another night. The climax of the season was their surprise win over Oxy's Tigercubs who went on to win the conference title. That game was Oxy's only conference loss.

Ball Handlers

The regular starting five should make a considerable addition to Coach Shy's five next winter. High-scoring Thorne Butler will be looking toward some playing in the pivot spot. Forwards Al Sereno and Bud Freise are both speedy and good ball-handlers, and guards Ray Greutert and Dick Brewer are steady, consistent players. Add to these five reserves such as Dick Libbey, Hiroshi Kamei, and Ed Stern and you have a group that should make any coach happy.

Bevo Hickory Stickmen

The baseball nine went through a losing season somewhat similar to that of the pigskin squad. Under the guidance of ex-Beaver pitcher Norm Macdonald the young Beavers struggled to overcome lack of manpower and experience and win ball games.

Chief additions to the Varsity horsehiders of '49 are Dean Daily and Louis Stallkamp,

Sereno, Fred Wood, Ed Stern | records in the 220 and 440. infielders, John Moss, Walt Biggers, Chuck Bates, Steve Pardee, Winston Royce, Bill Whitney, in the breaststroke and he and Mully and John, our fullback outfielders. Oh yes, almost forgot Libbey will be welcome addi- spot looks stronger than ever. a certain Walt Pfeiffer who was tions to Merrick's mermen of Hal Tyson displayed his usual the catcher and hitter of the next year. Ulrich Merton, Jack fine "form" in the aerial departmention to the Frosh prospects. team, and who did a little pitching in the ninth inning now and the remainder of team. Inci- pass to Hibbard late in the sec-

Cross Country

In cross-country and track the Frosh produced some able men unanimously. minds as well as ours that Ed for Varsity competition. Bob had done just that. The drib- | Cobb, Art Miller, John Lewis, Walt Edwards, Dick Smith, Ray won the conference meet as well as both dual meets with Pomona and Redlands. The mighty midget, Bob Cobb, placed first in the

Cinder Path Men

junior spikemen did not fare so ahead of Whittier in the Confer- tory next year. ence meet, and were nosed out for third by a mere third of a

Swimming

Merrick's waterbabes proved their worth as the squad of five did themselves proud in competition. Paced by Dick Libbey the young mermen came in third in the loop meet, and would have done a notch better had they had enough men to enter a relay team in the final event. Libbey set a new Frosh conference record in the 220-free style, and now holds a pair of Frosh school

Voget & Cathey MEN'S CLOTHING **FURNISHINGS** Fridays till 9:30 p.m.

459 East Colorado Street Sy. 2-3871 - Pasadena 1

dentally, Libbey was given a ond half. vote of confidence by his teammates by being chosen captain

Netmen

Last but not least on this resume is the tennis team. After Bowerman, are merely a few. a slow start the racket boys won The fall cross-country squad their last four matches. Jack Martin and Dean Blanchard were the spark plugs in Lamb's finals in the doubles at the loop loop meet at Tournament park. meet before dropping a match. Don Schmid, Thorne Butler, In the cinder season the Berk Welch, Bob Munro, Lynn Croswhite, and Dick Marsh will well. The team placed fourth aid Coach Lamb's hopes for vic-

And so the aforementioned men plus many more will go into making the Beaver teams of the next three years. With apology to those who were overlooked, we hope that the deeds and records of the '47-'48 Freshman class will not be soon forgotten.

IF THE OCCASION REQUIRES FLOWERS

See the

LAKE FLORISTS

104 South Lake Avenue

Call SYcamore 3-6803

OPEN EVENINGS

TALKIN' IT OVER

(Continued from Page 3) Noel Reed took a few seconds With the combined hulks of Dyer, and Jim Enslow made up ment as he pitched the scoring

Compliment

And just as a side light I'd like to repeat a compliment that was paid to Tech teams by one of the Pepperdine pros. I happened to get into a conversation with some anthropoid type lineman who was visiting with the Waves baseball squad last Tuesday in which he said that of all lambs. The pair went to the the teams that Pepperdine had come up against last season, the Beavers had the most fight and the most guts right up to the final gun. Let's hope that win or lose we can keep the fine repul mural program was that the Inplaying clean hard ball all of the time.

I. H. Competition

vs. intercollegiate it was interesting to read Dink Templeton's column in one of the Palo Alto papers the other day. And I quote in part from his column: 'From time immemorial star athletes have been getting knocked off upholding the honor of the old frat on the touch football or softball field, but this year is the first time I ever heard of volley ball wrecking a guy. I guess it must be that they don't belong out there and the little men take the opportunity of slipping invisible banana peels under their feet . . . Varsity athletes don't have any business competing in the intramural sports . . ." Maybe this problem is not only confined to Tech but has even worked its way up to Stanford.

In fact the reason for Dink coming out so against the intratation that we have won for dians lost the big meet with Cal because two of their top men had been seriously injured competing in various sports in the On the matter of inter-house inter-frat league.

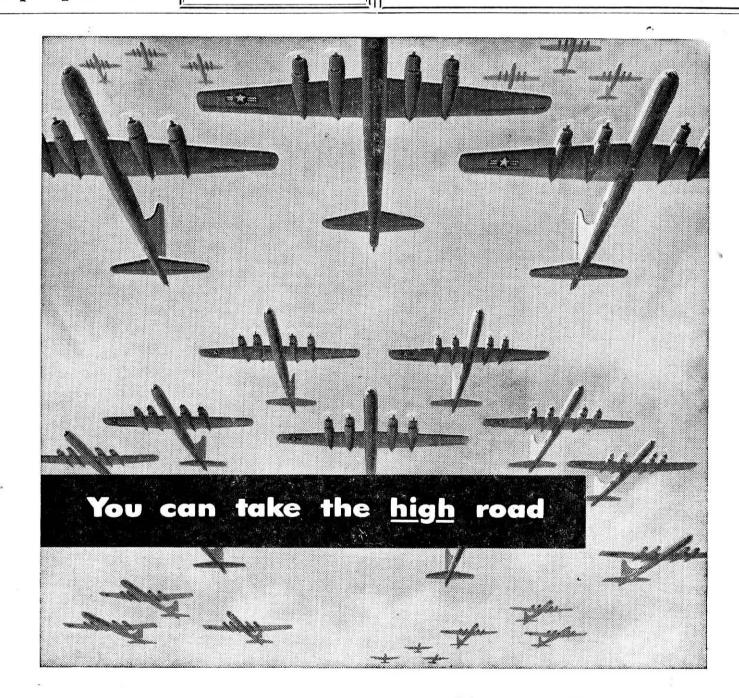
129 N. RAYMOND SY. 6-5100

PASADENA DOORS OPEN 12 M.

There's Not Much Time Left to See . . .



PORT SAID



Have you made up your mind on what you'll do when you graduate this June? If not, consider the opportunity available to you in the Aviation Cadets.

Few jobs anywhere can match this offer. When you win your wings and a Second Lieutenant's commission, you're paid as high as \$336 per month to start. The training you get before and after you're commissioned is recognized as the world's finest - and it equips you for a well-paid lifetime career in military or commercial aviation.

You're eligible for appointment to the Cadets if you're single, between 20 and 261/2 years old, and have completed at least one-half the requirements for a degree from an accredited college or university (or pass an equivalent examination).

Talk the program over with men in your class who have been Aviation Cadets. And for full details, ask at your nearest U.S. Army and U.S. Air Force Recruiting Station. Why not drop in today and discuss it?

U. S. Army and U. S. Air Force Recruiting Service

