Those Who

Care Enough

CaliforniaTech

Associated Students of the California Institute of Technology

Condemn The

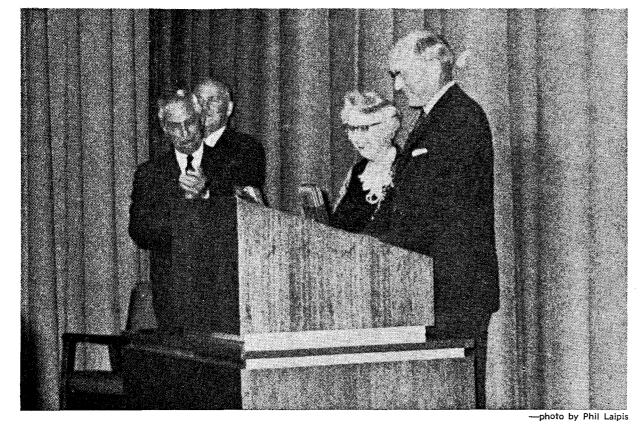
Very Best

Number 19

Volume LXV.

Pasadena, California, Thursday, February 27, 1964

Beckman, Beadle Dedicate New Auditorium



Drs. Beckman, Beadle, and DuBridge receive standing ovation from capacity audience at dedication of Beckman Auditorium. Introduced later were Edward Durrell Stone, the architect, and M. J. Brock, the contractor.

Houses Elect Officers This Week

House Elections traditionally following on the heels of ASCIT have been scheduled by all of the Houses, except Lloyd, for this week and next. Most of the nominations close later this week, and most elections come this week.

No Contest

Fleming holds their election first on Wednesday, the same night nominations close. Jim Eder is unopposed for President, as is Don Green for Vice President. Manolo Huerta is running against George Sharman for Secretary, and Bob Gillon is opposing Mike Scott for Treasurer.

Jim Simpson and Dave Jarvis are running as a team for Athletic Manager against John Nady and Chuck McQuillan. For Librarian there is three cornered race between Richard Juster, Charles Marshall, and Luther Perry. A threeheaded team is unopposed for Social Chairman, Bob Firmage,

Pete Wyatt. and Gordon Myers. Three Headed Coin

Ruddock's nominations close today when they have their elections. Nominated as of Monday were Grant Blackington, Ken Brown, and Murray Sherman for President. For Veep, Tom Greenfield is opposing Bob Levin. A three-man team for Social Chairman is Phil Laipis, Doug Gage, and Gred Shuptine. There is a three-way race for Secretary including Gary Bornzin, Shelby Chapman, and Gerry Steiner.

Two candidates are nominated for Treasurer, Bill Broste and John Turechek. A twoheaded unopposed team of Rob Dickinson and Martin Smith is running for Athletic Manager. Norton Greenfeld is opposing Fred Lamb for Librarian.

Someone Run

Blacker, as of Monday, had several offices with no candidates. Running for President were Guy Jackson and Ed Bauer. For Secretary were Arin Peters and Gary Little. The only other office with candidates was Athletic Manager with a team of Bill Zame and Larry Anderson. Nominations for President, Vice President, Secretary, and Treasurer close today and elections

are tonight. Vote Landis!

Ricketts elections also are today. For president there is a three man race between Bob Landis, Bill Satterthwaite, and Mark Gingold. Niles Puckett is unopposed for Veep, and Jay Adams and Roy Woolsey are running for Treasurer. Jim Hall is unopposed for Secretary, and Martin Dowd is in the clear for Athletic Manager. Dave Jackson, Mike Costellox, Chris Shelton, and Doug Eaton are running as a team against Larry Nagel, Roger Drake, and Paul Kochendorfer.

Fill the Slate

Page house follows suit with their elections and nominations today also. Dennis McCreary and Thomas Resney are candidates for President. Bill Colglazier and John Harkness are running for Veep. Leonard Gordy is opposed (Continued on page 6)

Hot Throbbing Larynxes

DuBridge Welcomes Honored **Guests At Glorious Ceremony**

With its pristine white walls. glittering gold ceiling, spanking new crimson carpeting, and a capacity audience plus some, the Arnold O. Beckman Auditorium was dedicated Tuesday night at 8:30.

President Lee A. DuBridge presided over the one-and-a-halfhour proceedings, which he called the "most important event in Caltech history," and which included Dr. Beckman himself, Chairman of the Board of Trustees of Caltech, and President of Beckman Instruments; Dr. George W. Beadle, President of

Director Of Oak Ridge To Visit Campus

Dr. William G. Pollard, Executive Director of the Oak Ridge Institute of Nuclear Studies, is scheduled to make three appearances at Caltech on Tues., March 3. His visit is being made possible by the Episcopal Diocese of Los Angeles and is sponsored by the Caltech Y.

Dr. Pollard's distinction is that he is both a physicist and a minister. He graduated from the University of Tennessee, received his Ph.D. from Rice, and was awarded that school's Semi-centennial Medal of Honor for distinction in physics in 1962. He was professor of physics at Tennessee from 1936 to 1947 except for two years' work on the Manhattan Project during WWII, and became director of the Oak Ridge Institute in 1947.

Events open to all at which Dr. Pollard will speak will be at 4 p.m. in Winnett Lounge when he will discuss "Truth in the Space Age: The Problem of Faith and Knowledge," and at 8 p.m. in Winnett Lounge when his topic will be "A Christian View of the Nuclear Dilemma."

the University of Chicago, and former Chairman of the Division of Biology at Caltech; Robert C. Liebermann, former ASCIT President; and the Caltech Glee Club.

Glee Club Starts

The Glee Club, led as always by Olaf Frodsham, started off the ceremony with Viadana's "Exultate Justi," Thompson's "The Pasture," and Vaughan-Williams' "Sine Nomine." Dr. DuBridge then introduced Bob Liebermann, who thanked Dr. and Mrs. Beckman on behalf of the students, saying that the auditorium is "appreciated and will be put to good use."

Next to speak was Dr. Beckman, who received his PhD in chemistry from Caltech in 1928, became a Trustee in 1953 and Chairman of the Board of Trustees on January 1 of this year. He was also the chairman of the development program which fostered his auditorium. Dr. Du-Bridge announced that Pasadena's Arthur Noble award for 1963 had just been awarded Tuesday morning to Dr. Beckman for his contributions to Pasadena and to Caltech.

Beckman Conflicts

Dr. Beckman said that he and his wife through all their "adult life have been associated with Caltech," and that they "wanted to say thank you to Caltech in a way" that represented proper

(Continued on page 2)

Notices

WINNETT GAME ROOM LOCKED

Starting Feb. 28, 1964, the Winnett Game room will be locked at all times. Graduate students may pick up keys at the Winnett Center Office between 12:30 and 5:30 p.m. Undergraduates may obtain keys from the following in their Houses. Blacker-Bill Zane, Dabney-Andy Kampe, Fleming-Larry Sherman, Lloyd-George Scott, Page-Rodger Whitlock, Ricketts-Roger Drake, and Ruddock-Gerry Steiner.

PHYSICS CLUB

Is parity conserved in nuclear states? Dr. Felix Boehm will desibe an experiment on which working at the Physics Club meetting on Friday, 4 p.m. at his office in West Bridge.

Economist Talks **On Foreign Aid**

A special address by Dr. Paul Rosenstein-Rodan will be given in Room 208 Dabney today on the Carnegie Program. His topic will be "How Much Foreign Aid Is Enough?"

Dr. Rosenstein-Rodan will give another talk tomorrow at 2 p.m. in room 208 Dabney on the Alliance for Progress. He is at present a special economic advisor to the governments of India. Italy, and the United States and is one of the "nine wise men" who determine the eligibility of Latin American countries for U.S. aid.

He is professor of economics at M.I.T.'s Center for International Studies, and was a special advisor to the International Bank of Reconstruction and Development. He is the only non-Latin member of the special Latin America Committee which regulates the destination of U.S. aid dollars.

Josephson, Young Win In Runoffs

With the unprecedented number of candidates this year for ASCIT elective offices, it is not surprising that runoffs were reguired to decide the final winner of two of the positions. On the first day of runoff voting, last Thursday, Doug Josephson defeated Andy Kampe for the office of Athletic Manager.

But that savage Thursday did not decide who should be Representative-at-Large. Pete Cross, Dave Goodmanson, and Eric Young had to try again last Monday. Young was the victor with a plurality in the second runoff.

Six Houses Enter IH Sing; **Dabney Still A Possibility**

Interhouse Sing on March 5 will have at least its six usual entries as Dabney House remains undecided. The other Houses are busy getting ready, and the program will have a great variety of songs.

The music runs the gamut from Negro spirituals to the classical. Several houses are still undecided whether they will enter a quartet or not, and others seemed unsure of what their quartet will be singing.

Hallelujah, I'm a Bum!

Ricketts director, Ed Bloomberg, when asked what Ricketts was doing for the sing, said, "I will not have a thing to do with that paper (the California Tech)." Other people in Ricketts did have, and it was learned that they will sing two numbers, "Emitte Spiritum Tuum", by Schuetky, and "Hallelujah" from "Mount of Olives" by Beethoven.

The House will also enter a quartet.

Fleming once again will have a special song by J. Kent Clark in French and English, called "Chez Les Flamands." They will also sing Rodgers and Hammerstein's "There is Nothing Like a Dame." This group is directed by Larry Gowen and the accompanist is Bob Burkett.

More Songs

Ruddock, directed by Don Terwilliger, will present two numbers, "Little Innocent Lamb", a Negro spiritual, and "Sanctus" from the "Mesa Du Requiem" by Verdi. They will also enter a quartet.

Lloyd is taking a relaxed approach to the sing, and will sing "Joshua Fit the Battle of Jericho", "The Naval Hymn", and "The Lloyd House Song." They (Continued on page 3)

EVERYBODY ACT

There will be a meeting of the Drama Club next Tuesday, March 3, 7:30 at the home of Dr. Ricardo Gomez, 3191 Glenrose Ave., Altadena. The topic of discussion will be the selection of this year's ASCIT play. Any one interested is encouraged to attend. Refreshments will be served.

RECORDER CONSORT

The CIT Recorder Consort will hold a trial meeting this Sunday at 2 p.m. in Clubroom 2, Winnett. If you know what a recorder consort is, come or leave a note with the YMCA.

Y ELECTIONS NEXT TUESDAY

Y elections will be held in Chandler at a dinner meeting next Tuesday, March 3, at 6 p.m. Nominess will be announced by mail to Y members, and further nominations may be made from the floor. House meals will be exchanged for the meeting.

Editorials

Gasp

In its final gasp the ASCIT Board decided Monday to "strongly condemn" the California Tech editors for their "irresponsibility" in taking a stand on the ASCIT elections. Though we would not disagree with the Board's right to express their feelings on this subject, there are several facts that definitely tend to cast some doubt upon the intentions, if not the wisdom, behind their decision.

First, in order to assure a better discussion of the matter, the Board declared a closed meeting and invited only one guest, a House president who is probably the most outspoken opponent of our action. At no time did any Board member ask either editor for his reasons, and the editors were neither informed of nor invited to the meeting to defend their stand, despite the fact that they were both available (we're always available) and one twice entered the Board room, only to be told it was a closed meeting.

Second, the Board condemned the editors for endorsing candidates, which is exactly what the Activities Manager did for one of the candidates for his office. This would seem a mite hypocritical.

Third, it has not been unusual in past years, when there were sufficient candidates, for the Tech to endorse candidates. Often the editors went quite for in their endorsement or denouncement of candidates, but were never condemned by the BOD. This year's Board has obviously decided conditions are now sufficiently different that they should go on record as condemning the editors as their last act.

Finally, the phrasing of the condemnation implies that the statements in the paper did not indicate clearly whose opinions were being presented. The only official weight that statements of opinion in the Tech may carry is the personal feelings and policy of the editors, nothing more. One of the duties of the editorial board of a newspaper is to present opinion, a duty, we might add, not shared by the Activities Manager.

It is our sincere regret that the Board has left office of a rather sour note after what we considered a constructive year in office. Well, we do hope that this will be a lesson to other Boards sometime in the distant future.

> -J. C. Simpson **Don Green**

Damn, We're Neat!

Happiness is a last issue.

Now that the year is gone, and impeachment is no longer a possibility we would like to fire one last barrage from this worn-out cannon. The editors of the California Tech are leaving (Gott Ist Tot). Though there have been those who would claim that we accomplished nothing in office, we cannot agree. After all, in one single fiscal year we have attacked both the Beavers and the Beaver.

To show that we are not limited in scope, we have also attacked such subversive organizations as the YMCA, B&G, and Beckman Auditorium. We have also impartially praised many things --- such as the splendid editors of the California Tech and the fine work they have done ... Nice work, boys!

Although we don't claim to deserve full credit for all the advances made on campus under our guidance, we do point with pride to several major acocmplishments: the revival of Freshman Visitation (Rotation, for everyone but Dr. Clark), removal of Upperclass PE, the radical changes in the Ch41 and Ch46 uniting, the raising of the California Tech editor's salary, a reappraisal of the Feynman Physics Course, and the election of Rodger Whitlock as ASCIT Activities Chairman. At this point, in order to make up for the four unendorsed candidates for ASCIT office from Scurveland, and to fulfill a request from Bob Landis, we would like to impartially endorse our sports editor to be the next president of Ricketts. On the other hand, there is one person we have perhaps overlooked during our year in office. This is a man who has been unceasing in its efforts to aid us in improving the California Tech and whose constant suggestion has been that we resign lest we be impeached. Well, we are finally going to comply with his wish. For his fine work, we are awarding to this man, Art Johnson, our most coveted award, "Mother of the Year." We have not limited our service to mere distortion of news or the spreading of editorial slander. No, no — we have even brought to our spirited readers important and libelous features. , These are things every young American should know: the vital statistics of a windtunnel, the glories of the Junior Class Officers, a psychologists' review of Caltech idiosyncracies, and the many intriguing contests involving our beloved Tham Handriksohnx.

ophy of journalism. In the scant six pages of that immortal issue lies the exact essence of the California Tech.

In conclusion, we would like to thank our staff who have been so loyal in the past year. In fact, one member, Ratchet Choudry, was so loyal he wouldn't even desert the ship when fired. He stands with former editor Lee Molho as the only two staff members of the California Tech who were ever fired. And we would especially like to thank our successors, the two suckers who have so foolhardily but with good intentions taken over our burden. And, of course, we cannot forget the unswerving support we have received from the ASCIT Board of Directors, and that final tribute which they paid us as their final task.

From Other Campuses

And now to end as we began:

For those of you who still

have some doubts as to the trou-

ble and complexity of (shudder)

rotation, it may be of interest

to examine the Rensselaer Poly-

technic's description of (shud-

"Under the new rushing sys-

tem, freshmen are required to

visit all thirty houses. Fresh-

men interested in rushing were

divided into alphabetical groups,

and each group was taken on a

tour of houses within a design-

ated geographic location. A half

hour was allotted to each frater-

nity and each group visited all

the houses." Using this system,

however we could cut rotation

Moving south for a little com-

edy we find that "the south's

liviliest college newspaper," the

George Tech Technique, has an

interesting letter column called

"Bullwinkle," which resembles

the joke colmns in many city

papers but usually lacks the

quality. They do get a gem once

in a while though, as the fol-

down to 31/2 hours.

der, shudder) rush at RPI.

By Jace

Burn the Tech and Fight Communism!

-Don Green J. C. Simpson

I believe very firmly in evolu-

tion. I think man has evolved

in intelligence and is getting

smarter all the time. Why back

in Egypt in 500 B.C. trigronome-

try was known only by the

smartest of men. Today all us

freshmen know it. Some of us

even get it in high school. I

think math is going to save the

Coming back to California, we

discover that the Beadles had

quite an effect at Redlands (as

the Election Rally shows they

had here). The **Bulldog** reports

that Ringo Starn "by far made

the biggest smash. AGN fra-

ternity has offered him an hon-

orary membership," and "Band

director Jorgenson is jealously

guarding a small chip of wood

that he claims he cut from Rin-

go's left drum stick. Redlands

seems yet to come up with an

equivalent of Lloyd's "Beatles",

Lonnie Lobachevsky"

lowing letter indicates:

"Dear Bullwinkle,

world.

however.

Pings Studies Fluid Behavior

The behavior of liquids is a poorly-understood area of science; the theories to explain it all break down eventually. Dr. Cornelius J. Pings, associate professor of chemical engineering at Caltech, is trying to learn more about liquids. The research has been in progress for eight years, and is now being expanded under a new contract with the Air Force Office of Scientific Research. The Office of Naval Research and the National Science Foundation provide additional support.

Burble, Burble

"Although the molecules of solids are arranged in orderly rows and those in gases in perfect disorder, the molecules in liquids comprise a completely interlocked mess-a sort of ordered chaos," Dr. Pings explained. "In liquids, each atom is affected by thousands of surrounding atoms whose positions in relation to each other are constantly changing."

Gazeep, Gazeep

The team is enlarging its laboratory space to make observations of molecules and their forces in liquids with four techniques: x-ray diffraction, study of the refractive index of the fluids, ultrasonic absorption, and magnetic measurements of interactions at the molecular level. The data obtained are analyzed in Booth.

Two Faculty Win Medals

Two Caltech engineers were co-recipients last week of the Champion H. Mathewson Gold Medal of the American Institute of Mining, Metallurgical and Petroleum Engineers.

Dr. Pol Duwez, professor of materials science, and his former graduate student, Dr. Ronald H. Willens, assistant professor of materials science, received the award for a paper they published on their development of entirely new metal alloys by a unique rapid cooling process.

The medals were presented to the engineers at the 93rd annual meeting of the Metallurgical Society of the Institute at the Astor Hotel. The medal is given each year for an outstanding paper describing original re-

Beckman Dedicated

(Continued from page 1) appreciation for all the Institute has done for them. However, "the planning and construction of the auditorium did not proceed without conflict." The present location was finally decided upon because it "led to the creation of a beautiful mall," and it allowed "a high degree of architectural independence," since the design of the auditorium did not depend much on the surroundings of the chosen spot.

Another conflict was the circular shape, which presented problems in building and acoustical design. Edward Durell Stone, the architect, who dethe US Pavilion at the signed Brussels World's Fair and the National Center for the Performing Arts, was introduced, as were Dr. and Mrs. Milton Brock, of M. J. Brock and Sons, the contractor, which donated its contracting fee to the development fund. Dr. Beckman ended by saying "Thank you, Caltech, for developing the need which has given us so much pleasure in fulfilling." Meet the Beadles Dr. Beadle chose to speak on "From Spanish Tile to Modern Stone: Some Recollections." being mostly a collection of nostalgic stories about the Institute and its inhabitants, going back to the time he began here as an instructor with a \$1,500 annual salary. That was the time when Dr. Millikan had to approve all book purchases for the library, and when Dr. Beadle taught Bi 1, with Tommy Lauritsen in the course. He also recalled how Dr. Beckman's original instruments, such as a pH meter and a spectrophotometer, received such a demand that he had to quit the faculty in 1940 to produce them, starting the company which has become Beckman Instruments, Inc.

Finally, Dr. DuBridge also reviewed the history both of Dr. Beckman and of the Institute, demonstrating in the process the auditorium's facilities for showing slides and movies and for playing recorded music. The Glee Club closed the evening with the Alma Mater and Da Silva's "The Blessing of St. Francis."

The auditorium, which contains 1171 seats, cost \$1.45 million, and took 18 months to complete, It is 60 feet high and 120 feet in diameter. It is topped by

Page Two

But, we humbly feel that the greatest accomplishment of all year and perhaps all time was the stirring and influential Hot Rivet Issue which so eloquently expressed our entire philos-

(Continued on page 6)

search work.

CaliforniaTech

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Editors-in-Chief J. C. Simpson, Don Green

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table of the elements. With min-

or modifications, this same pe-

riodic table is used today to de-

monstrate and explain similari-

ties between different elements.

In a like manner, Murray Gell-

Mann and Col. Yuval Ne'eman

have in the last several years

produced an explanatory, classi-

ficatory scheme of fundamental

nuclear partcles. More, precisely,

the particles considered are those

Gell-Mann and Ne'eman, work-

ing independently, arrived at the

same scheme three years ago.

Often termed the "eightfold way"

in reference to the eightfold

precepts of Buddhism, the

scheme is based on eight quan-

tum numbers assignable to any

strongly interacting particle. At

the same time, various proper-

ties of a particle can be pre-

dicted from just the knowledge

which "strongly interact."

Buddhist Fundamentalism

Omega-Minus Found

IH Sing

(Continued from page 1) will have no quartet. **Polylingual Page**

Page House will sing two numbers, in two different languages. In German they will present the chorus from Beethoven's "Fidelio", "O Welche Lust"; in Latin, they will sing a selection from Berlioz' "Requiem", "Hostias." They will be directed by Roger Hendrix.

Blacker's group will present the "Soldiers' Chorus" from "Faust", "Amo, Amas, I Love a Lass", and "Erhore Mich." Their quartet will sing "The Whiffenpoof Song", "Little Innocent Lamb", and "September Song," The Blacker choral group is directed by Bob Sweet.

Gell-Mann-Ne'eman Theory Vindicated of the values for these quantum BY RODGER WHITLOCK Almost a century ago, Mennumbers.

deleef proposed his periodic From Forest to Forest

Just as the periodic scheme of Mendeleef brought some order into the system of elements then known, so does the eightfold way bring order and symmetry into the arrangement of at least some of the nearly 100 "fundamental" particles now known. At the same time, it brings the unexpected dividend of a naming system not based on colloqualisms for the fundamental particles. Now, instead of wandering in a forest of neutrons, protons, xi particles, sigma particles, lambda particles, kaons, and pions, the nuclear physicist can rest quietly in a maze of not only xis, sigmas, lambdas, and pis, but also N's, deltas, omegas (large and small), etas, kappas, anti-kappas, phis, and rhos. At least they mean more now.

Predicted Particle Well, this is all very good, but what does it prove? The first thing that was realized through the eightfold way was the predicted existence of a new particle, the omega-minus, and its anti-particle, the anti-omegaminus. If these particles were to be discovered and found to possess the predicted qualities, it would be the supreme vindication of the Gell-Mann-Ne'eman theory.

It was felt, moreover, that this vindication would be certain, since the properties called for in the omega-minus are rather unusual, and not to be expected by random guesswork. **Omega-Minus Found**

Thus, when Brookhaven National Lab and CERN recently announced the discovery of the omega-minus, the eightfold way assumed its place among the certainties of science, just as the periodic arrangement of the elements was accepted when Mendeleef's eka-elements were discovered.

Production and Properties

FRENCH **SPANISH** GERMAN RUSSIAN ITALIAN JAPANESE THE BERLITZ SCHOOL OF LANGUAGES PASADENA, 170 SOUTH LAKE AVE., SYcamore 5-5888 PRIVATE INSTRUCTION SMALL CLASSES STARTING NOW Native Teachers Day or Evening Free Trial Lessons

The omega-minus was discov-

ered using the 33 BEV alternat-

ing gradient synchrotron at

Brookhaven to accelerate pro-

tons for the production of K-

minus mesons. These were sep-

arated and allowed to interact,

resulting in the production of

at least one omega-minus in the

80 inch bubble chamber. This

event was detected on photog-

raphs of the particle paths in

The omega-minus has a rest

mass of 1676 million electron

volts; a spin angular momentum

of 3/2; and a positive parity.

the chamber.

Caltech Engineers Study Water; Stratification To Be Harnessed BY TIM HENDRICKSON

A pioneering study in water stratification made at Caltech twenty years ago revealed that water in a large reservoir is not homogenous, but is layered according to mineral content and

temperature. Building upon this study, two Caltech engineers — Dr. Timothy W. Kao, research fellow, and Robert C. Y. Koh — recently demonstrated that water of a particular quality may be removed from a reservoir by tapping the appropriate stratum.

As Dr. Norman H. Brooks, professor of civil engineering, explained, engineers are now enabled to predict the behavior of reservoir flow and thus to design outlet systems taking advantage of the stratifications. **Quality Over Quantity**

"Now, on water systems such as the Colorado River that have no surpluses," stated Dr. Brooks, "control of quality has become important."

"Storage in reservoirs soon will not be listed just for the quantity of water in them, but rather the inventory will show different amounts of water of different qualities. And each kind of water can be removed at will from the reservoir."

Engineers Kao and Koh are currently pursuing their research under the supervision of Dr. Vito Vanoni, professor of hydraulics, and Dr. Brooks, with

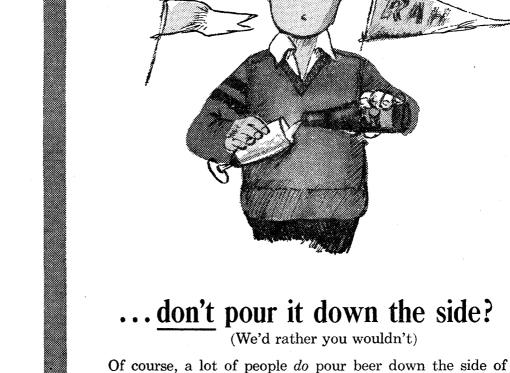
having water of varying density, thirteen levels of solutions of decreasing salinity were placed in the model reservoir, forming a thirteen-layer liquid cake.

Kao and Koh were able to tap the tank at any level and remove water from that level only. The water movement was traced by placing dye simultaneously at several points along the tank. Hydraulic Communalism

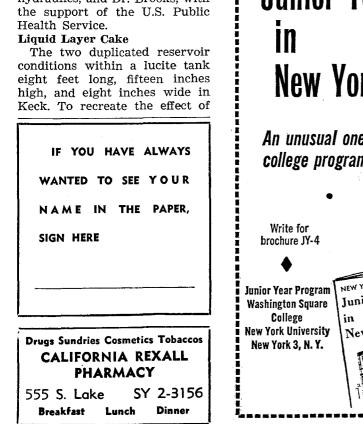
The researchers found that the layers immediately above and below the tapped layer were affected by the water flow but did not enter the outlet. The parts of these unwanted lavers that bordered the wanted water flowed in the same direction, but at a lower velocity.

When the unwanted water reached the end of the tank from which the wanted water was being withdrawn, the unwanted parts curled up or down away from the spout, and reversed their directions, always remaining within their own density layers. These observations justified the two researchers' theories explaining why water can be selectively removed from reservoirs.

*-----



the glass. They say it keeps the head down.



Junior Year **New York** An unusual one-year college program. NEW YORK UNIVERSIT Junior Year New York

It sure does. And we think that's a shame.

Maybe it sounds silly, but we spend more dollars on just the bubbles than any other brewery in America. Instead of pumping them in mechanically, we let Budweiser create its own bubbles with our exclusive Beechwood Ageing and natural carbonation. It takes a lot longer to do it this way. But it's worth it.

When those bubbles get together at the top of your glass you've got a better head, a cleaner taste, a smoother, more drinkable beer. Budweiser even smells better (really ... just take a sniff next time you pour).

So let that Budweiser fall right down the center of your glass. Let it splash around and froth and foam. We went to a whale of a lot of trouble brewing the finest beer on earth, and we'd hate to think you'd missed even one little bubble.

Budweiser that Budthat's beer!

ANHEUSER-BUSCH, INC. • ST. LOUIS • NEWARK • LOS ANGELES • TAMPA

Swimmers Lose

The Caltech swimming team was in a generous mood again last weekend. In a rare snow of compassion for the underdog, the squad donated victories to Santa Monica C. C., 59-56, and to Giendale C.C., 61-34, on Friday; and to UCLA, 60-54, and L. A. State, 62-33, on Saturday. The squad as a whole looked unprepared for any amount of effort involving more than one swim, and was characterized by a lack of endurance.

Larry Anderson hit the best times of the year at UCLA, swimming the 50 free in 23.1 and the 100 free in 52.5, giving Caltech two first places. Mc-Bean's consistent efforts of 23.5 and 53.3 in the same events give Caltech a good edge in the sprints.

Distance Events

However, the distance events are pure murder, as Jenkins, Walter, and Ryan desperately try to keep up with swimmers who are much faster. Jenkins is close to his peak performance, but his 6:09.5 500 free needs improvement compared to the 5:13.4 of a meek little gut from UCLA named Ashleigh, who incidently, double-lapped Ryan and Crocker. Crocker is Caltech's dark horse in the freestyle events.

In the backstroke, Owens is slowly dropping his times, and should be good enough for a conference first place with lots more practice. McCammon put forth a good performance, equaling his best times, and Turner is gradually getting in shape.

Breaststroke is one event that Caltech excels in, in numbers, that is. Miller, Nelson, Crocker, and Lambert alternate for the official entries. This doesn't really make any difference however, as all swim about the same times anyway. Miller shows promise, especially if his present rate of improvement continues.

Butterfly Sick

The butterfly is suffering from two obvious defects: Nielson and DD, Nielson will improve his times once he gets in shape. The terrible Turk of old seems to have grown mild and senile. He was last seen praying with his face turned to Mecca for intervention of Aphrodite to save him from Emery's terrible clutches.

The individual medley is another event where Walter and Turner are swimming acceptable times, Anderson could develop into a very strong choice for this event, but it is doubtful that he can be spared from the sprints.

This gloomy picture does not exactly promise a first-rate performance against Oxy, Redlands, and CHM at the conference Relays this Saturday. This meet, which Caltech has dominated for the past five years, looks like a tough one to win this year. The swimmers are prepared for an all-out effort, but it is doubtful that their noble and valiant efforts to upset all predictions will be enough to top the power and depth of Oxy.

Hoopsters Blow Halftime Lead; Riverside Rallies, Wins, 83-78

Last Saturday night the Beaver roundball squad closed out a rather disappointing season by bowing to the Riverside team in a close struggle. At first, the game resembled a Beaver rout, as the team dashed off the blocks and held as much as a fifteen point lead over Riverside, 29-14. Riverside then regained their

poise and closed to 41-32 at the halftime marker.

At the start of the second half, Riverside closed the gap, but the Beavers managed to maintain a precarious four point lead for several minutes. With eight minutes left, the score was finally knotted at 61-all. The teams traded the lead for several minutes until the score was tied for the last time at 76-76 with about two minutes left, A Riverside basket and free throw gave them a 79-76 lead which they held the remaining minute. The final score was 83-78.

The team closed the season with a 3-19 record, and will graduate the top six players.

Grapplers Drop Two; Finish Season, 5-5-2

The Tech grappiers finished their season last Tuesday night with a tough loss to Chaffey Jumor Conege. This loss made the final record for the season live wins, five losses and two ues. This record is not a bad one for a sport which is merely on propation. It seems that wrestling will soon be a varsity sport just like all of the others.

Dick McGehee gained the first victory for Tech after Tech forletted the 123 pound class. Mc-Gehee took the 130 pound class for Tech with a pin in the third minute of his event. Tech then lost the 137 and 147 pound classes when Fred Fujimara and Dave Faulconer were decisioned.

Walt Paciorek took the second match of the day for Tech as he grappled to a tough 8-5 decision in the 157 pound class. Tech ran into more trouble in the 167 and the 177 pound clas-

Volleyball Starts; Fleming Favored

The Internouse volleyball season opened this Monday with games won by Ricketts and Ruddock. The season will extend for two weeks, and the winner could have a lot to say as far as determining who wins the Interhouse trophy.

In one of those games on Monday, Ricketts defeated Page in two games. Both games were won by the same score, 15-4. Ricketts played a very deliberate game, not spiking too much but making them count when they did. They played an excellent defensive game and exhibited the same deliberate callcontrol game that they played last year. Part of the reason that Ricketts looked so good was that Page played extremely sloppily. Many times, Ricketts scored points on Page miscues.

The other game played on Monday was won by Ruddock over Dabney. Ruddock played a good game and swept the first two games. Ruddock played deliberately and took good advantage of their speed. One of the best and perhaps the best team in Interhouse volleyball this year is Fleming. If anyone is to catch Fleming in the Interhouse race, they will have a tough time in doing it in volleyball. Fleming smashed a demoralized Blacker team on Tuesday in two games, both at 15-3. Fleming was the height and the speed to win. They play well together and can murder the opponents with their beautiful spiking. They are definitely the team to watch. The other game played on Tuesday turned out to be the most exciting, Dabney slipped by Lloyd in a three game thriller. Lloyd took the first game in a close match. The second game went to Dabney. This set up the excitement. The fans veren't displeased unless they were from Lloyd, as Dabney went on to win the rubber game, 15-13.

ses. Jim Groth lost a decision to his man in the 167 pound class. Soon afterwards, Powell was pinned in 8:28.

Kampe took the final match of the day for Tech. He pinned the Chaffey man in the fourth minute of the match. This final victory enabled Tech to come close but the final score snowed close but the final score showed **Cal Poly Wins**

Last Friday night, Tech suffered a humiliating defeat at the hands of an excellent Cal Poly of Pomona team. The Cal Poly team is well balanced and strong in every event. They are probably one of the best teams in Southern California. On top of all this, Tech ran into them on one of their better nights. This bad luck resulted in a 28-8 thrashing. Tech was lucky to get eight points. McGehee won his match by forfeit. The only other Tech points came in a more legitimate way. Fred Fujimara won his 137 pound class match by a decision.

With restling now over for the present season, the athletic department is considering it for placement as a varsity sport. It is a fine thing that they brought this sport to campus. Perhaps this effort will inspire other campuses to bring in the sport. The athletic department wishes to make it clear that Tech is not the league champion in wrestling since the league doesn't recognize wrestling as a conference sport. Who cares? We still have the best wrestling team in the conference.

Red Beat Blacker In Overtime Game

The Fleming Discobolus machine added another sport and another house to its list by beating Blacker Saturday in a basketball game. This victory ran Fleming's streak to five in a row, including a victory over every house except Dabney which is reluctant to challenge. True to last week's prediction the game was close, ending in a 36-36 tie. Fleming graciously agreed to an overtime period, being confident in its team and unsure of the rules, and outscored Blacker 4-2 for a 40-38 victory. The winning basket was scored by Elgin Vinsonhaler with seconds remaining in the overtime period. Vinsonhaler put on a dazzling one-minute demonstration of dribbling, one-handed yet, to run down the clock while Blacker watched, and then pumped in the winning basket. Vinsonhaler was aided at the guard spot by Doug Holford and Ed Hsi. Pulling in the rebounds for Fleming were Jim Simpson, John Nady, Larry Gowen, Butcher McQuillan, and Ron Larsen. High scorer for Blacker was Gary Dahlman followed by Mike Aschbacher and Guthrie Miller. With house elections this week (Continued on page 5)



THE SLOW RUSH

Illustrated below is the membership pin of a brand-new national fraternity called Signa Phi Nothing. To join Signa Phi Nothing and get this hideous membership pin absolutely free, simply take a pair of scissors, cut out the illustration, and paste it on your chest.

Let me hasten to state that I do not recommend your joining Signa Phi Nothing. The only thing I recommend in this column is Marlboro Cigarettes, as any honest man would who likes good tobacco and a good filter, whose heart is quickened by a choice of soft pack or Flip-Top Box, and who gets paid every week for writing this column.

I am frankly hard put to think of any reason why you should join Signa Phi Nothing. Some people, of course, are joiners by nature; if you are one such, I am bound to tell you there are any number of better organizations for you to join—the Cosa Nostra, for example, or the Society for the Placing of Water Troughs in Front of Equestrian Statues.



But if you insist on joining Signa Phi Nothing, let me give you several warnings. First off, it is the only fraternity which admits girls. Second, there is no pledge period; each new member immediately goes active. Perhaps "inactive" is a more accurate word: there are no meetings, no drives, no campaigns, no sports, no games, no dues, no grip, and no house.

The only thing Signa Phi Nothing has in common with other fraternities is a fraternity hymn. In fact, two hymns were submitted to a recent meeting of the national board of directors (none of whom attended). The first hymn goes:

Signa Phi Nothing, Shining star, How we wonder If you are.

The second hymn, rather more poetic in content, is to be

UCR Smashes Frosh; Season Record, 4-15

The frosh ended the season on Friday by losing to the University of California at Riverside by a 99-44 score. UCR jumped off to a quick lead which they continued to increase throughout the entire game. The fact that the frosh had to work without the services of firststringer Don Blair hurt the frosh attack. Blair was out of the game because of a bad tooth.

Coach Jensen played many substitutes throughout the game in an attempt to give more players game experience. Rick Williams led the Tech scorers with the points, while Brian Stallard scored six. This was Stallard's best effort of the season and a good one at that.

The team ended up the season with a 4-15 record, not too impressive but a respectable one for Tech frosh teams who have (Continued on page 5) sung to the tune of Also Sprach Zarathustra:

A Guernsey's a cow, A road is a lane, When you're eating chow, Remember the mein.

Pending the next meeting of the national board of directors (which will never be held) members are authorized to sing either hymn. Or, for that matter, *Frenesi*.

Perhaps you are wondering why there should be such a fraternity as Signa Phi Nothing. I can give you an answer—an answer with which you cannot possibly disagree: Signa Phi Nothing fills a well-needed gap.

Are you suffering from mental health? Is logic distorting your thinking? Is ambition encroaching on your native sloth? Is your long-cherished misinformation retreating before a sea of facts? In short, has education caught up with you?

If so, congratulations. But spring is upon us and the sap is rising, and the mind looks back with poignant longing to the days when it was a puddle of unreason.

If—just for a moment—you want to recapture those careless vaporings, that warm, squishy confusion, then join Signa Phi Nothing and renew your acquaintance with fecklessness. We promise nothing, and, by George, we deliver it!

@ 1964 Max Shulman

* * * -

We the makers of Marlboro Cigarettes, promise smoking enjoyment, and we think you'll think we deliver it—in all fifty states of this Union. Marlboro Country is where you are.



BY J. K. EVANS

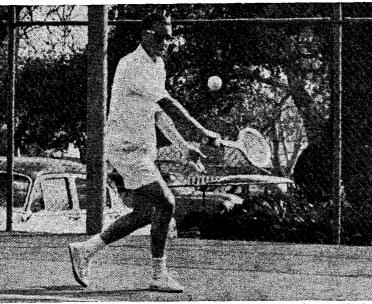
Today we will pay tribute to that great Negro athlete, Jack Chock-Full-o'-Nuts. Chockie, as he was affectionately called, was the first man to break the color line in major league tiddlywinks. Chockie was one of those un-

fortunates who are red-green color blind. While he was in the minor leagues, this was no handicap, for at least one team's tiddlers were of some other color than red or green, and he had no trouble distinguishing them. But when he broke into the majors with the Brooklyn Forders, he discovered that in the majors, only red and green tiddlers and winks were used, depending on whether one was the home or visiting team. Chockie was worried for a while, but he soon discovered that if he wore infrared glasses, he could distinguish the red tiddlers and winks because of their superior heat absorption qualities,

From that day on, Chockie never entered a playing field without his infra-red glasses. Ignoring cries of "Hey, Hollywood!", "Whassa matta, ya blind?", and "Your mutha wears combat boots!", Chockie proceeded to set several records for major league tiddlywinks. His records include farthest tiddle in regular season play, most consecutive scoring tiddles, and most winks broken in one game.

But even though he had overcome his handicap, Chockie never ceased looking for a way to make it easier for others with his problem to break into the majors. Every year when the rules and equipment committee met, Chockie introduced a resolution to allow the use of some different color than red or green for official tiddlers. Every year he was defeated. After seventeen years of defeats, he became slightly bitter and began searching for another way to solve the problem. Finally he found it.

One day he was invited to tour the Paramount Tiddlywinks Factory, where all regulation tiddlywinks were made for the major leagues. They were just about to begin production on the season's supply of winks and tiddlers. Chockie listened carefully to the guide's spiel, and as they passed the huge vat where the dye was stored that colored the tiddlers, Chockie whipped out a tiny electric saw and cut the hose that supplied dye to the pressing machines. Quickly concealing his handiwork, he left the vat open to drain into the sewer, knowing full well that it would be impossible to find enough green dye to refill the vat, which would drain before the leak was discovered. Another color would have to be used. As Chockie sat in the plant manager's office after his tour, he smiled to himself. Suddenly in ran a mechanic. "Sabotage!" he cried. "Someone has cut the dye hose! Someone has broken the color line!" Chockie just smiled.



---photo by Phil Laipis

Tech's Butch Niell strokes backhand in Oxy Match.

Oxy Wins In Tennis

The whole varsity tennis team was off form last Saturday as they lost very badly to Occidental. Oxy can be considered to have a strong team, but our team was expected to do better than the 9-0 score by which they lost. They managed to win one set out of nineteen played. For a pleasant change, the frosh did better against Oxy than the varsity. John Hoshor, who is an excellent hope for next year's varsity, played a very strong game and won 7-5, 6-2. Even with this strong play in the first position, the frosh managed to lose 8-1.



Frosh Ball

(Continued from page 4)

been known to finish the season without a victory to their credit despite the scheduling aid of the athletic department. This year's victories came over Upland, Biola and Rio Hondo with Rio Hondo having the misfortune of running into the hot frosh team twice this season.

At the end of the season, Gray Jennings was chosen captain by his teammates while Ed Hsi was chosen alternate captain. Although this years team didn't win many, they show promise for adding a lot of talent to next year's varsity. Jennings, Hsi, and Herb Jubin have the shots and the spirit which the varsity will need next year. Ed Blair also looks like a good prospect to make the varsity next year.

Discobolus

(Continued from page 4) the incompetent athletic manager team of Nady and Card goes out of office with Fleming leading in the races for the Interhouse, Discobolus, and Varsity Rating trophies. This week's Discobolus competition will be in volleyball with Ricketts.

DISCOBOLUS	STANDINGS
Fleming	18
Ricketts	10
Blacker	9
Lloyd	5
Page	5
Ruddock	5
Dabney	3

The most obscene thing in the whole world------RODGER WHITLOCK.

THE BELL TELEPHONE COMPANIES SALUTE: DICK PACK

Dick Pack (B.S., Business Technology, 1961) has made a significant contribution to every job Mountain States Telephone has assigned him.

He was directed to study the effectiveness of new policies on inventory control. So sound were his recommendations that they were passed up the line and considered for use throughout the State of Idaho.

Five months after joining the company, Dick was named Manager of the Weiser, Idaho, exchange. He ran his own shop well and, as a result, was promoted to Unit Manager in Twin Falls. Then, a special honor: enrollment in the company's course at Northwestern University.

Dick's ability and reputation for quick starting will take him far with Mountain States Telephone.

Dick Pack, like many young men, is impatient to make things happen for his company and himself. There are few places where such restlessness is more welcomed or rewarded than in the fast-growing telephone business.



BELL TELEPHONE COMPANIES



welcome to the Campus Barber Shop in Winnett Center all haircuts \$1.75 Three Barbers to Serve You 8 to 5:30 Monday - Friday Paul A. Harmon

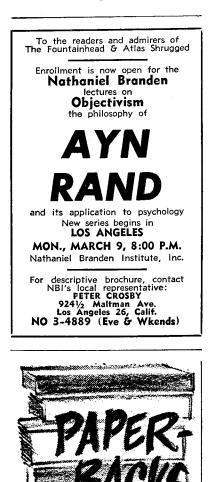


Beak currently sees visions of events concerning five residents of Plumbing House who made a trip last Saturnsday week to our glorious Neighbor to the South, specifically, to visit Aunt Jane. But scarcely had the fourwheeled roach found a resting place on a small, dark side street and disgorged its occupants, than did two Guardians of the Piece come perambulating by in their fuzzmobile. Quickly sizing up the obviously beneath-board intentions of the phlegms nosing around the roach, one fuzz deautos and orders lineup of participants.

Sterility Pays

After inspecting shoes and noting presence of liquidin street, the fuzz adeptly frisks one named Odor and throws him into the fuzzmobile's screened-in and locked back seat, accusing him of depositing nephral products upon the sacred cobblestones of his majesty's sterile thoroughfares, said offensive offense being worth a 200-bit fine or a frigid fortnight in the pokey.

Odor's frail companions vainly try to explain the impossibility of paying such a fine, but Guardian remains steadfast to his noble purpose of protecting



the local citizenry, until the passing-by of a car with an impressive number of seven-foot UCLA studs, shouting random greetings and waving and gesticulating madly, gives Guardian the impression that said studs are bosom freunts of our protagonists, with the laughable idea reinforced by some adroitlyplaced comments by The Five Minus One.

Influence

Finally, as member-of-thegroup Gallon slowly produces **two** U.S. monetary units, and as various ideas filter down through the labyrinth in the Guardian's head, the latter suddenly decides that one dozenth of the fine is probably sufficient, and Odor is disgorged. Thus ends the chilling saga.

P.S.: Later on in the evening, and also numerous imbibings

later, Odor is again accused of selfsame offense, this time by a local scarcely-encloaked performer, with reference to a pool of liquid on the runway. No disastrous results.

Fame & Fortune

A new episode has been added to the never-ending story of Laypuss, master of the art of feeling good. Longtimeago, while catching up on nocturnal hibernation in pre-sunrise Chemmy fifty class, Laypuss was suddenly disturbed by event in his space-time neighborhood: to wit, the earnest desiring of his mental presence, by the prof. To compress a short story: PROF: Aren't you the Laypuss I read about all the time in Brewins? LAYPUSS: (Affirmative reply). P. Maybe you'd better cut out those activities at night, and get some sleep. L: (Muffled, stuttering silence).

House Nominations

(Continued from page 1)

by Jim Brooks for treasurer. Jim Aries, Bob Weatherwax, and Gary Schnuelle are running for athletic manager, and Peter Balint is running against Randy Dickinson for Librarian.

In Dabney elections are today and running for President is Bob Scott and for Executive Veep Chris Dalton. Andy Kampe and Chris Elms are vying for Secretary. There is a three cornered race for Treasurer between Mark Satterthwaite, Stan Christman and Max Bartlett. There are two teams running for athletic manager, Randy Hanslem, Don Blair. and John Vitz against John Eyler and Dennis White. For Historian is Mike Ehrick and Kim Gleason, and for comptroller is Les Powers and Hank Suzukawa.

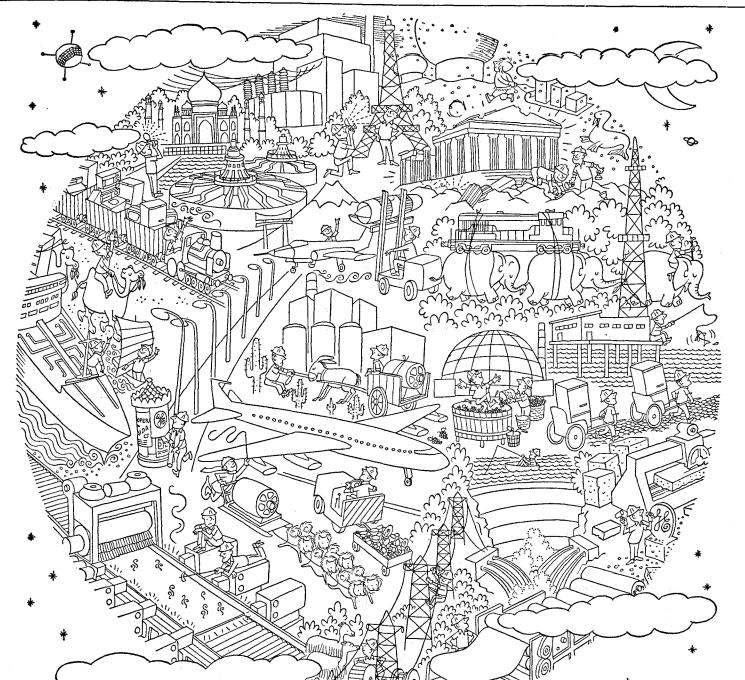
Once is Enough

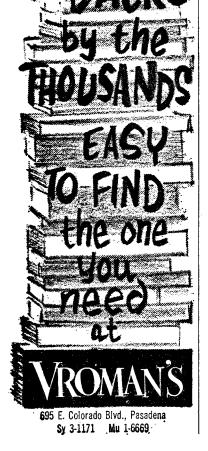
Lloyd has already had its elections, about three weeks ago. Bill Pence is President; Ted Jenkins, Veep; Dave Reddell, Secretary; Lenny Fisher, Treasurer; Bob Piccioni, Comptroller. Steve Card, John Walter, and Steve Deichelman are Social Chairmen. Bob Howenstine, Chuck Palmer, Gary Berman, and Mike Beeson were elected Librarian. A team of three, Marshall Hall, Gregg Guthrie and Jim Crabtree has captured the office of Athletic Manager.

Dedication

(Continued from page 2)

a conical roof of concrete, with 32 gracefully tapered columns which splay out to support the exterior overhang. The roof is decorated with gold-colored circles, and will be topped by an 11-foot-high finial mounting two clusters of perforated brass spheres 14 inches in diameter. Clusters of six spheres are suspended from the colonnade ceiling to provide outside illumination.





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