

The California Tech

California Institute of Technology

Volume LX.

Pasadena, California, Thursday, October 30, 1958

Number 6

Sloan Gives \$1,167,000 Lab

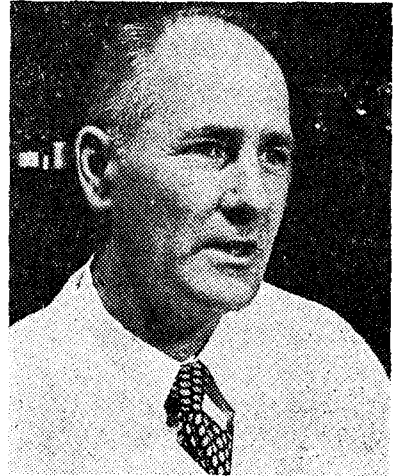
Beadle Considered For Nobel Prize

Dr. George W. Beadle, Chairman of the Division of Biology, is reported as being a possible winner of this year's Nobel Prize in medicine and physiology.

The Royal Caroline Institute of Medicine is meeting today in Stockholm to make the decision on the award which Beadle would share with Dr. Edward L. Tatum of Rockefeller Institute and Dr. Joshua Lederberg of the University of Wisconsin.

Beadle, along with Tatum and Lederberg, is one of the world's leading geneticists. All three have made significant contributions in the study of the chemical basis of heredity.

Beadle and Tatum, working together in 1940, performed the now famous experiments with



Dr. George W. Beadle

the so-called red bread mold that established chemical genetics.

Beadle first came to Caltech in 1951 after receiving his Ph.D. from Cornell. He was a professor at Stanford for nine years before returning to Pasadena in 1946 to head the new Biology Division. Beadle is presently on a year's leave of absence from the Institute to work at Oxford.

Five members of the Caltech faculty have received Nobel Prizes in the past.

Creeping Crud Creams Caltech

Approximately 85 men were sick at the height of a flu epidemic which swept through Ricketts House last weekend.

The brunt of the attack came Friday night during an exchange and continued through Saturday, virtually ending by Sunday morning. Brad Efron, Ricketts co-social chairman, moaned, "This is the first event I ever threw that threw back at me."

Mrs. Shea, head nurse of the Health Center, explained that the attack was not food poisoning, but a virus infection lasting about 24 hours. The virus seems to be prevalent in the Pasadena area at the present time, she said.

Except for isolated cases, the illness has so far been confined to Ricketts. Reports have it, however, that Blacker is starting to show symptoms of a forthcoming epidemic. The Health Center expects an upturn in cases in the near future, Mrs. Shea said.

Caltech-KRCA TV Series To Debut Sat.

Caltech will take to the air on Saturday, November 1 at 6:00 p.m. in a series of programs which for the first time will give television audiences a close look into its various research and teaching activities.

The 13-week series, entitled "The Next Hundred Years," is presented as a public service by KRCA-Channel 4 and NBC. The programs will have some of Tech's top men demonstrating and describing in plain language their current investigations of natural phenomena, all the way from the nucleus of an atom to the age and size of the universe.

Irish Potato

The first program, with an introduction to the series by Dr. DuBridgy, will feature Dr. Harrison S. Brown, professor of geochemistry and co-author with Drs. James Bonner and John Weir of the book that gives the title to the series. Saturday night he will discuss "The Story of the Irish Potato," which he describes as being analogous to the present-day situation in which we find our civilization almost completely dependent on science and technology for our daily living.

Second program of the series, "Facts for a Friendly Frankenstein," will offer Dr. Ray Owen, professor of biology, on November 8.

In "Geological Russian Roulette," scheduled for November 15, Dr. Richard Jahns will tell some of the problems and pitfalls of building and maintaining residence in southern California.

The Good Old Days

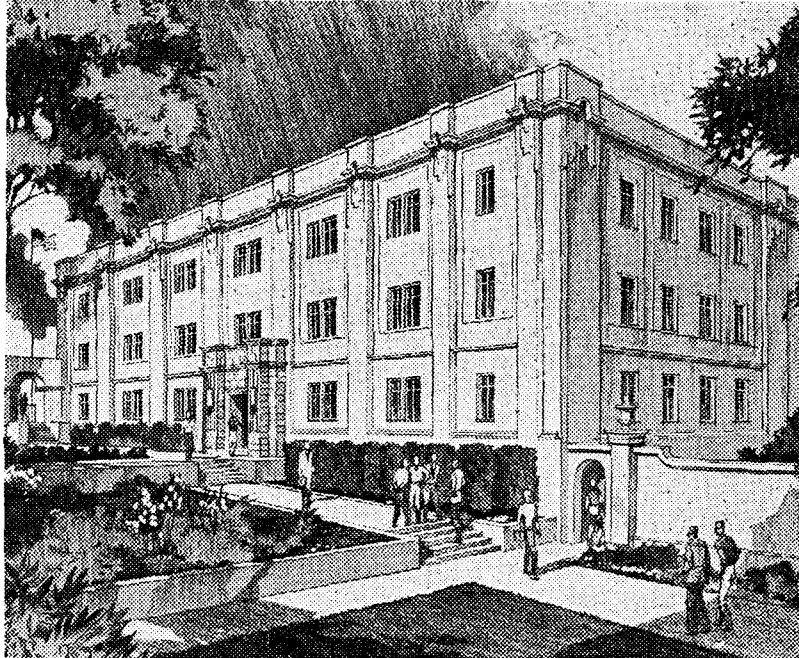
On November 22, Dr. Kent Clark, the only non-scientist to take part in the television series, will present "They'll Remember Grandma." In this he will look at our year 1958 through the eyes of a historian of 2058 and explain how our present day life will appear to the people a hundred years hence.

Frosh Plan Big Blast

"The best one yet," is what freshman class president Jim Geddis promises football rooters who come to Saturday night's after-game dance.

The affair, which may take place in Blacker lounge, is the end result of twice-revamped Frosh-Soph plans for a class activity.

Refreshments will be served.



The high voltage laboratory will become the Alfred P. Sloan Laboratory of Mathematics and Physics as a result of a \$1,167,000 gift from the Sloan Foundation.

High Voltage Lab To Become Home Of Math, Physics

A new Caltech mathematics and physics building has been assured by a grant of \$1,167,000 from the Alfred P. Sloan Foundation of New York.

The gift, to be officially announced next Monday, will finance construction of the new facilities within the building which presently houses the high voltage laboratory. The modern five-story structure (two stories below ground) will contain nearly 50,000 square feet of floor space, and will be renamed the Alfred P. Sloan Laboratory of Mathematics and Physics.

The three upper floors of the Sloan Laboratory will contain offices for faculty members and graduate students in mathematics, as well as conference and seminar rooms, a lecture hall, and a library.

The lower floors will be devoted to facilities for two experimental physics programs. To expand its research on the nuclear reactions of light elements, Caltech will install in this space a new 10 megavolt Van de Graaff accelerator, which is being supplied by the Office of Naval Research at a cost of \$1,000,000.

New facilities will also be provided for research in cryogenics, or low-temperature physics. Caltech's studies of the behavior of liquid helium at temperatures within a few thousandths of a

(Continued on page 3)

Decoration Plans Steam Ahead For Coming Interhouse Dance

Cloaked by a thick smog of secrecy, preparations for the annual Interhouse Dance have begun in Caltech's five undergraduate student associations. The dance is scheduled for Saturday, November 8.

As has been the custom, Interhouse will feature exotic decorations. Themes for decorating have been in all cases decided upon, and the results appear interesting.

Blacker House will turn back the clock to the days when knighthood was in flower, depicting St. George and the Dragon.

Decorations at Dabney, put into full swing with the acquisition of the wind-uprooted Blacker pepper tree, will depict the South Sea Islands.

A flamenco guitarist will help Fleming House carry out their theme of Spain.

With a flair for the eerie, the Ricketts House theme will be "A Night on Bald Mountain," while Throop Club has set its sights on the Land of the Pharaohs, picturing ancient Egypt in all its glory.

Faculty Panel Views USSR

By Lance Taylor

The Russian people are not really happy about their life but aren't likely to revolt either, was the conclusion reached by a panel of Caltech people who visited the USSR this summer on scientific tours.

Dr. and Mrs. Frank Press and Drs. William Fowler, Bruce Sage, Horace Gilbert and Harrison Brown appeared on the panel moderated by President L. A. DuBridgy Thursday evening in connection with the Industrial Associates meeting Thursday and Friday.

In the general question and answer period following individual statements by panel members, all were agreed that the Russian people want more and better housing and consumer goods. They felt, however, that there was no revolt in the wind, and that the people will strive to win more internal freedom and

(Continued on page 3)

Sweezy, Gray Debate Right-to-Work

By Roger Noll

The proposed amendment to the California Constitution, known as the voluntary unionism amendment, was the topic of a debate in Dabney lounge last Tuesday night, October 28. The proposal will appear as Proposition 18 on the ballots for the coming election.

Participating in the debate were Robert Gray, Director of the Industrial Relations Section, who favored voluntary unionism, and Dr. Alan Sweezy, professor of economics, who opposed the proposition. Moderator was Richard Hayden, a local attorney.

Gray, speaking first, briefly outlined his impressions of the so-called Right to Work Bill. He claimed that closed shop, where all employees must belong to a union before being hired, or union shop, where all employees must join the union immediately after being hired, is essentially forcing a man to buy a job, by paying a fee to the union.

After summarizing the history of Proposition 18, Gray continued with reasons for it.

He concluded that the results of the amendment would not be overnight, nor even hardly perceptible. It would, in the long run, improve the unions since they could be selective in their membership, and not have to include members who were opposed to their actions.

The final result in such a measure is that inflation would be curbed by slowing down the rising labor costs. Unions would, according to Gray, cease making long term, guaranteed annual

(Continued on page 3)

Oxy Raiders Grab Gus

A group of freshmen from Occidental College, incensed by the recent loss of the Oxy tiger to Caltech, attempted revenge last Thursday night by kidnaping Gus Akselrod Blacker House president.

Akselrod reports that about 2:30 a.m. a friend of his from Oxy woke him up, warning of an impending raid on Blacker by a group of Occidental students. As he arose to dress, Akselrod was grabbed and gagged, then whisked away to the Oxy campus.

According to Bob Lange, some Dabney men had been forewarned of an impending disaster by an anonymous phone call, but had disregarded the warning.

While on the Oxy campus, Gus was forced to wear a pair of black leotards and a Mickey Mouse beanie, and at noon he was made to bow down in front of the Oxy tiger.

Late Friday night Akselrod was finally released and brought back home with a group of girls on their way to an exchange at Caltech.

Although admitting the inconvenience of such an act, Gus hastened to add that he was treated with respect and at no time was in physical danger. "What's more," adds Akselrod, "I got two free meals out of the deal."

"Fineman's Shillings Scandal Sheet:" Letters From A Fulbrighter In Britain

The voyage was a good one: the sea calm, and the period of oscillation of the Queen Elizabeth about 45 seconds; I heard of no one seasick. I was in a state-room about the size of a Tech frosh double with three other Fulbrighters, one in philosophy, one in English, and one in applied physics.

We had some pretty good discussions on the philosophy of religion toward the beginning of the week, but ended up sleeping at different times of the day and amusing ourselves with different groups.

I stayed up a couple of nights drinking, singing, being snowed by discussions on the American novel and drunken arguments with neurotic members of the ship's band. The food was of good quality, quantity and variety; passengers were introduced to the British tea-drinking habit by means of the coffee.

THE WEATHER regrettably was cloudy most of the way, with some rain, but oddly we brought fine weather to Britain with us, and while waiting off Southampton for the tide to run in (one lady was heard asking a steward what the ship would do if it didn't!) we were greeted with a really beautiful view of the Isle of Wight in the sunset, the town of Ryde shining among misty green hills.

Customs gave us no trouble at all, inspected nothing and seemed bored with the possibility of our declaring anything;

we were put on a special train to London. It was different, all right—tiny, dumpy boxcars, narrow tracks, clean passenger cars in good repair; thousands of little brick houses with chimney pots, even the grubbiest with its flower garden; an occasional thatched roof.

Tories on economic policy, race relations, etc.; a panel on British education (now an uncomfortably stratified system in a democratically revolutionized society); lectures on the Commission, our finances etc.; a bus tour of London; and many hours standing around at receptions sipping Bourbon and gobbling hors d'oeuvres and speculating on where the American Ambassador might take his fine art collection if a Democrat should be elected in 1960.

There has also been plenty of time for us to get around on our own, and since the USEC arranged for us to cash our first checks the day after we arrived, we have had plenty of money, too, and have not had to spend dollars.

THE LONDON underground and bus systems are indeed as excellent as their reputation. The trains are cheap (no more than 6d.—7c for an average ride in central London), fast (you seldom have to wait more than two minutes for one to come along), and comfortable (separate seats with arm rests.

Greater London extends over about 300 square miles, and the grid covers it so effectively as to leave no excuse whatever for the asinine handling of a very similar situation in Los Angeles. With efficient transportation and the Dodgers, who knows? It might become a city someday.

(To Be Continued)

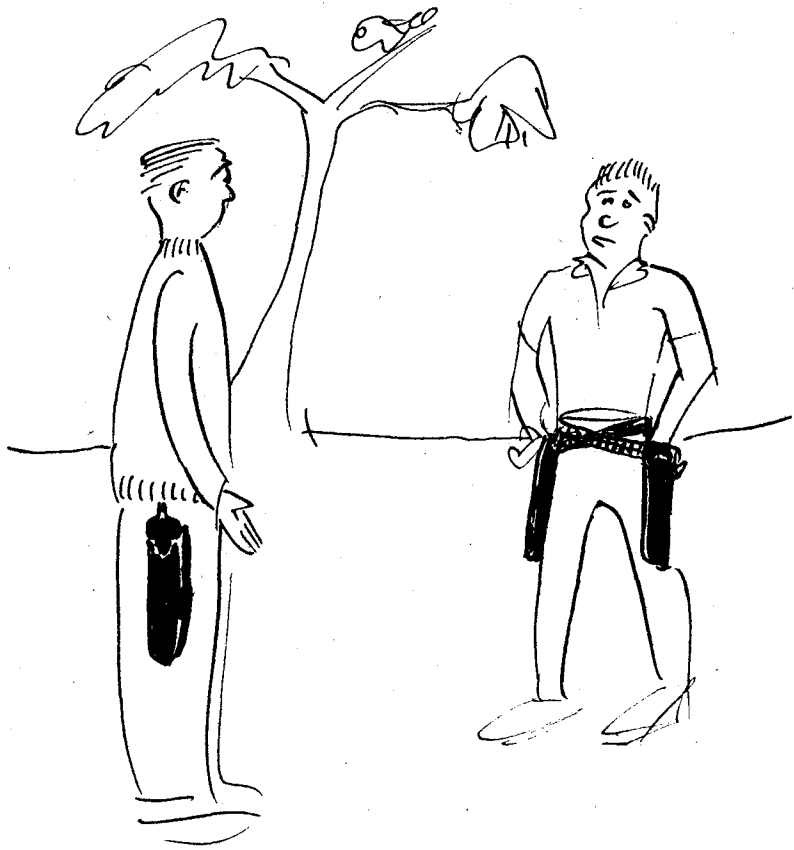
Foreign Correspondent

Joe Fineman, '58, will be remembered by Techmen as last year's popular Secretary of the Interhouse Committee. He had been Fleming House Secretary for an unprecedented three years, and had established himself as "leading undergrad consultant on philosophy, philology, dead languages, and bawdy songs."

Fineman is studying physics at Saint Andrews College in Scotland this year on a Fulbright Fellowship. With this issue begins the first in a series of letters he has promised to write for the Tech.

We (100-odd new graduate students and a few dozen senior scholars) have been put up around ceentral London for this week of "orientation"—the biggest batch here at Bedford (College of London University) whose usual female occupants are on vacation.

We have been treated to a debate between two right-wing Labourites and two left-wing



The California Tech

EDITOR: Mike Milder

EDITORIAL BOARD: Bill Bauer, Cleve Moler, John Todoroff, Howard Weisberg.

STAFF

Pete Bickel, Carl Gottschall, Gerhard Klose, Bob Koh, Sid Leibovich, Steve Langley, Roger Noll, Army Perey, Lance Taylor, Joel Tenebaum,

BUSINESS MANAGER: Howard Weisberg

Circulation: Neil Sheeley

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

THEY SAID IT COULDN'T BE DONE - BUT TODAY'S L&M GIVES YOU-



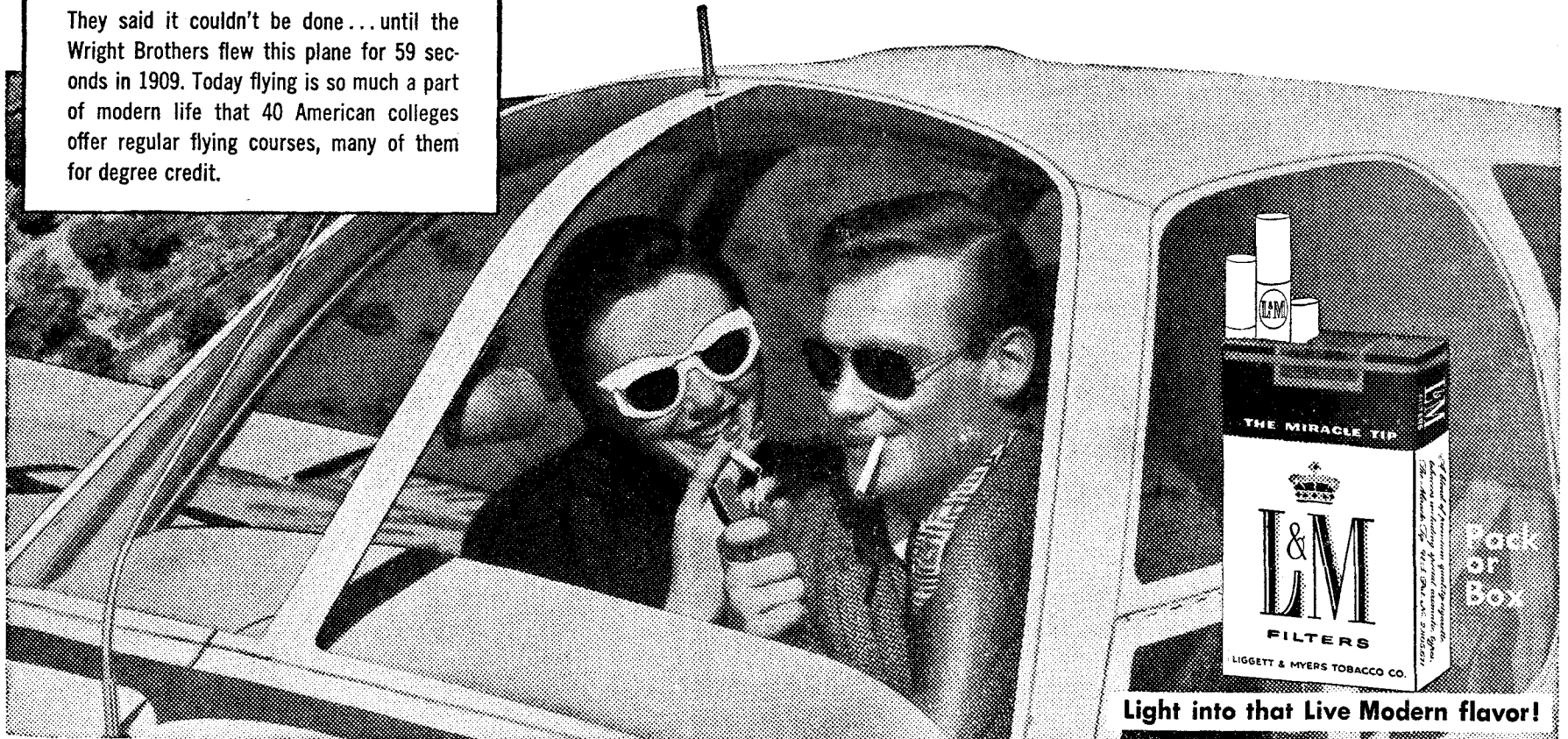
They said it couldn't be done... until the Wright Brothers flew this plane for 59 seconds in 1909. Today flying is so much a part of modern life that 40 American colleges offer regular flying courses, many of them for degree credit.

Puff
by
puff

Less tars & More taste

DON'T SETTLE FOR ONE WITHOUT THE OTHER!

Change to L&M and get 'em both. Such an *improved filter* and *more taste!* Better taste than in any other cigarette. Yes, today's L&M combines these two essentials of modern smoking enjoyment—less tars and more taste—in one great cigarette.



Light into that Live Modern flavor!

Faculty Panel Reviews Russian Travels

Sloan Gift

(Continued from page 1)

better material conditions by strictly peaceful action.

Dr. Fowler, who visited Russia as a delegate to the International Astronomical Conference in Moscow, reported that he spent much of his time after the conference at Tashkent in Uzbekistan, 2100 miles from Moscow in Central Asia. Staying in Samerland, the capital of Tamerlane, gave him a chance to observe the Soviet influence in an area far from Moscow and Leningrad.

East Russia Loyal

He reported that the people in this out-of-the-way part of the world were loyal to Moscow but still kept a strong sense of local affiliation. They felt that if they wanted to, they could dissolve their association with the USSR at any time.

Mrs. Frank Press, who teaches in Southern California schools, spent much of her time visiting schools in Moscow. The Soviet educational system aims first at fostering conformity, she said, and second at creating intellectual prowess. The quest for conformity of a student often leads to pressure put on him by his fellow classmates and teachers, and on his parents by their friends, working associates, and trade union members.

Schools Competitive

The Russian schools are very competitive, with only about the top ten per cent ever being admitted to the universities. A university education is essential for any administrative, scientific or generally intellectual work, the panel felt.

The paramount aim of Russia is world domination, said Dr.

Right-to-Work

(Continued from page 1)

wage increase contracts, thus stabilizing the economy.

Sweezy, speaking next, began his speech by clarifying the objectives of this bill. He claimed that the bill is either designed to weaken unions or improve them, and that in either case it will fail.

Sweezy then pointed out that we must weigh the faults of unions with what working conditions would be like if there were no unions, such as in the 1920's. Due to the fact that conditions were so bad then, and the probability that they would again become this way, Sweezy concluded that unions are, in general, a good thing, and should not be destroyed.

In speaking of the improvement of unions, Sweezy pointed out that before unions had a closed shop, racketeers and gangsters found their way to the controls.

The debate itself was rather interesting from an observer's point of view. The participants seemed, however, to be a little reticent about actually clashing on any issue. Only one real argument, that of whether or not unions cause inflation by demanding long term contracts, actually occurred. The whole case in favor of the proposal rested on the fact that it was slightly immoral to force a man to pay union dues, while the crux of the opponent's case was that the bill would so weaken unions that employment situations of thirty years ago would reoccur. Although both cases were rather flimsy, and no actual debate, per se, occurred, the information presented was worthwhile and enjoyable.

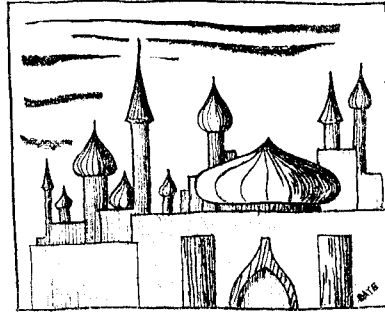
Frank Press, who was in Russia for 25 days. An immensely competitive attitude toward the U.S. is fostered by the schools, the factories and the government. Banners are seen all over the USSR urging the people to overtake America in all fields.

Favor Scientists

Dr. Press said the scientist has been very favored in Russia recently, receiving almost unlimited money for experiments and many personal favors. As example, he said that Russian scientists get higher salaries, better homes and exemption from customs inspection when they return from foreign trips.

Dr. Bruce Sage said he was confined to Moscow due to the

Lebanon crisis during his visit and had little chance to examine the people or the countryside. He made his trip to the USSR to examine Russian steam-power



equipment and found it crude but effective.

Dr. Gilbert pointed out that Russians have done a tremen-

dous job in industrialization since he visited the country in 1931, but that they have concentrated primarily on heavy, non-consumer items. The people want better domestic products. Krushchev's recent decentralization of industrial control may be to this end.

Being a party "believer" is a minor concern of the Russian scientist, observed Dr. Harrison Brown. Although being fond of jokes about the efficiency of Russian spies in America, he takes a rather stand-offish view toward the Communist party. Brown also contended that the Soviet Academy of Science wields tremendous power over individual scientists and scientific projects in general.

(Continued from page 1)

degree of absolute zero will now be expanded to embrace studies of the phenomenon of superconductivity.

The Sloan gift brings to more than \$7,000,000 the total contributions so far secured toward the \$16,100,000 goal of the Institute's current development program.

Mr. Sloan is President of the Alfred P. Sloan Foundation, which carries on extensive programs for assisting basic scientific research in universities throughout the United States, an undergraduate scholarship program operating in some 32 colleges and universities, including Caltech, and other major research and educational programs in various fields.

LOW TEMPERATURE SOLID STATE MASER RESEARCH

WITH YOUR MASTER OR DOCTORATE...

You, too, can PIONEER on such new frontiers

AT TEXAS INSTRUMENTS, YOU CAN APPLY your graduate specialty under conditions of substantial freedom. Explore scientific horizons with outstanding associates... using facilities that permit work of highest technical caliber. Expand your professional potential in free exchange of ideas... in an atmosphere where you and your work are recognized as vital.

Favorable research climate is a major factor in the swift growth of this 28-year-old company whose sales rate has increased 20-fold over the last decade. Recognition of individual talent and achievement has helped Texas Instruments grow to be one of the 500 largest industrial companies in the country. To pace TI's leadership, the Central Research Laboratory will soon move its expanding scientific community into a new building designed to establish an even finer creative environment.

Avail yourself of this opportunity for self-expression in creative research. In addition, enjoy TI's generous personnel benefits as well as encouragement and assistance in personal development. TI labs are in the city yet away from downtown traffic... within minutes of fine residential areas, cultural activities, churches, highly rated schools and, of course, year-round outdoor recreation in the pleasant climate of the Southwest.

*While commercial application in the low temperature field is only a possibility, it is so closely related to TI's activities that we are engaged in a broad, basic approach to the problems involved. This activity is only one of some 20 subjects now under study at Texas Instruments — covering basic and applied research in data systems and earth sciences, solid state physics, materials, and devices; concentrating on semiconductors, electroluminescence, ferromagnetics, magnetic resonance, superconductivity, dielectrics, infrared, geophysics, computers, memories, and transistors plus physico-chemical studies of diffusion, alloying, crystal growth, and crystalline perfection.

choose your future

BASIC AND APPLIED RESEARCH — CENTRAL RESEARCH LABORATORY. MS and PhD level concentrating on semiconductors, electronic components and systems, military apparatus, data handling, geophysics.

RESEARCH AND ENGINEERING — SEMICONDUCTOR-COMPONENTS DIVISION. Transistors, diodes, rectifiers, capacitors, transistor circuit applications, test equipment, mechanization.

RESEARCH AND ENGINEERING — APPARATUS DIVISION. Radar, sonar, infrared, magnetic detection; computers, timers, telemetering, intercom, optics, microwave systems; transformers, lenses.

come and grow with us

A Texas Instruments representative will be on the campus in a few days to give you more details. Please contact your placement office before — **October 00.**



TEXAS INSTRUMENTS
INCORPORATED

6000 LEMMON AVENUE • DALLAS 9, TEXAS

Dining Out
Tonight?
enjoy
Budweiser
with food

KING OF BEERS

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



Play It Cool: Dazzle Your Date, Beat Bird Dog

by Boris and Griffen

"By love, that first did prompt me to inquire.

He lent me counsel, and I lent him eyes.

I am no pilot, yet wert thou as far

As that Vast shore washed with the farthest sea,

I would adventure for such merchandise.

You, the suave, debonaire, intelligent man of the world have crossed from the private world of the automobile to the hustle and bustle of the party-party. Here you must snow your date despite the competition of other couples, and worst of all, perhaps even by the BIRD DOG!

As you enter the mixing room of the party, full of people you know, assume an air of complete complacency. Do not go around introducing yourself or your date to anybody. Instead, find a quiet corner and start a conversation with your date. Let her do all the talking while you stare directly at her EYES, occasionally nodding or muttering. Be fascinated by what she says. Then, suddenly, without warning, turn and snap your fingers at a passing waiter, using some foreign phrase such as garcon or "mesanero". "We'll have two of the usual, Max," (Of course, waiter must be aware what the "usual" is).

When the drinks have arrived start to mix. Mumble all introductions. Remember all other good-looking girls' names. After a few introductions, and the accompanying worthless chatter, during which you frequently yawn and look around superciliously, you should ask your date to dance (make the first one slow, unless you're very good). When you start to dance, pull your date as close to you as she'll get, even if you must use BRUTE FORCE. (Ask her if she knows karate before attempting this). Whisk her away, singing appropriate words to the song.

If, perchance, someone asks her to dance, naturally assent, unusually graciously. Then disappear for three dances. This is a good time to write down those girls' names before you forget them. On returning, walk up to the bird dog and your date and disdainfully say, with a debonaire smile, "Say, I thought you had to transfer to Long Beach J.C." Before he has a chance to answer, you have mingled with a large crowd playing "pass the shoes" or "choo-choo train."

When it is time to leave, get the nearest girl to find your date's coat. Do not say good-bye to anyone, as you want to draw the least attention to yourself, and, especially your date. As soon as you get behind the wheel of your car, instantly change back into the straight-faced one. Start planning the ultimate nightcap. Next week: After the party.

GET SATISFYING FLAVOR...
So friendly to your taste!

No flat "filtered-out" flavor!
No dry "smoked-out" taste!

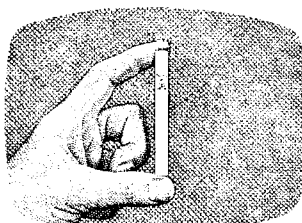


You can light either end!

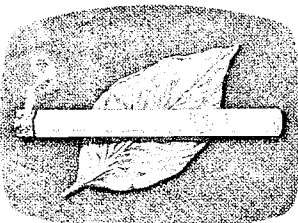
© A. T. Co.

See how Pall Mall's famous length of fine tobacco travels and gentles the smoke —makes it mild— but does not filter out that satisfying flavor!

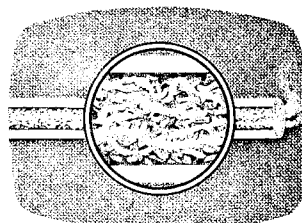
HERE'S WHY SMOKE 'TRAVELED' THROUGH FINE TOBACCO TASTES BEST



1 You get Pall Mall's famous length of the finest tobaccos money can buy.



2 Pall Mall's famous length travels and gentles the smoke naturally.



3 Travels it over, under, around and through Pall Mall's fine tobaccos!

Outstanding...and they are Mild!

Product of The American Tobacco Company — "Tobacco is our middle name"

Heard From The Wings

Communication Called Key To Music

by Joel Yellin

In talking to many people, I find that the greatest difficulty in appreciating music is an inability to tie the whole musical structure into a concrete unit. This is a very difficult thing to do, especially for a person who has not been musically trained from childhood. The symptoms of this inability are quite easily discovered. How many times have you met people who liked jazz but not classical music, or who could not stand modern music but doted on Brahms, Beethoven, and Bach?

Mode of Communication

Just as in the other arts, the essential problem in music is one of communication. The artist uses light, the composer uses sound. Essentially, the method of communication is repetition. To understand any music we look for some repetitive pattern. The simplest example is of course thematic repetition as in Beethoven or Mozart. The fact that such a pattern exists prompted some overly enthusiastic "experts" to build up the theory of a stable "sonata form," in reality non-existent in any of the works of the great composers.

More abstract are the rhythmic and harmonic patterns of the modern schools: the atonalists, the neo-classicists, and the twelve-tone adherents. A composer like Stravinsky or Bartok

uses many patterns simultaneously. (See the former's *Chant du Rossignol* or the latter's *Music for Percussion, Strings, and Celesta*.) The difficulty in seeing these patterns lies mainly in the fact that one is unwilling to accept the stability of any forms other than the ordinary harmonic. Once this idea is accepted, the "leap in faith" is quite justifiable and makes perfect sense.

Jazz Hard to Judge

Since modern jazz is so rich in improvisation, we can expect it in a great part to be uncommunicative. This makes it very difficult to evaluate. When a group of musicians improvise together it takes a little time to discover a common pattern, to get "in the groove." Even for a group which has been together

for a great length of time, a slight period is necessary for adjustment each night; and sometimes the group doesn't hit it off at all.

It would prove interesting for each individual to sit down and listen to the music he insists he cannot stand, trying to find the patterns which make the work communicative. Choose music designated as great by most critics and you will be pleasantly surprised at your sudden ability to understand.

Philharmonic Director

Leonard Bernstein is making a wonderful director of the New York Philharmonic. He is, I believe, the first American director in a long while. Last Sunday's concert included a magnificent performance of Debussy's third *Image*.

Curtain Call

Student Playwrights Wanted

by L. McCombs

Due to someone's last-minute change in plans, the performance of *Skin of Our Teeth* in the Playhouse West Balcony Theatre was open to the public on Tuesday, Wednesday, and Thursday of this week instead of the dates I gave last week. This means that the last performance is tonight, and after seeing the show, I'll reinforce my previous recommendation.

This is a good spot to point out that "Curtain Call" goes to press Wednesday, so there is always the possibility that changes may have been made by the following weekend. It is always a good idea to ring up the box office and confirm things before heading for any of these shows.

While at the Playhouse last Friday night, I ran into George Stephens, director of the Caltech Arena Theatre's productions of *Remains to be Seen*, *All My Sons*, and the evening of one-acters this fall. George mentioned that he was interested in seeing the Arena Theatre Players do an evening of original one-acters, written by Tech students. "Tech people seem to have a lot of good ideas which could be well expressed in dramatic form," George pointed out.

If you've written a play or are interested in doing so, you might get in touch with George or one

of the persons who have worked with the Arena Theatre. There has also been some talk of doing a short play called *Hope Is the Thing With Feathers* sometime during second term, if enough persons are interested.

This weekend the Playhouse student theatres offer *The Shrike*, a play about which I know no more than the name. This will be directed by Barney Brown in the Patio Theatre on November 2, 4 and 5.

Opening in Hollywood Tuesday was Tennessee Williams' latest, *Garden District*, which delves into a form of depravity new even to Williams: cannibalism!

Visit to a *Small Planet* will play on the Playhouse main stage until November 13, when it will be replaced by a Life-With-Father type comedy, *The Happiest Millionaire*. Likewise, *White Sheep of the Family* continues at the Town Hall until the 13th, when it will move

(Continued on page 8)

Jazz Beat

by Lloyd Kamins



- The Modern Jazz Quartet -

Atlantic 1265 featuring: John Lewis, piano; Milt Jackson, vibes; Percy Heath, bass; Connie Kay, drums.

The Modern Jazz Quartet is one of the most unique groups in jazz. Although probably the most academic and scholarly in their approach, the quartet plays significantly more jazz than any other "chamber group."

Delicate Style

The music of the quartet is primarily a reflection of the personality of John Lewis, the musical director. Perhaps a description of Lewis' peculiar style would best serve as a description of the group as a whole. Lewis plays few notes, but the definite impression given is that the notes have been chosen with extreme care.

Although Lewis possesses an astounding amount of knowledge of harmony and chordal structure and is familiar with the most complex of structural theories, he restrains himself to playing simple, basic ideas. The aura surrounding the sparse, delicate lines is that of intense concentration, as if Lewis had managed to distill all of jazz into just a few aptly picked notes. This, of course, is not the case, it is only the impression given. Lewis does not, by the usual standards, swing. There is, however, a hidden pulse to his playing.

Milt Emotional

Milt, now, is another personality entirely. His playing is frank, open, and emotional. I believe that he is severely limited by his horn and would sound even better on a tenor. There is no call for this idle speculation, however, as I certainly have no quarrel with the work of Milt Jackson. On his solos, it is Milt that supplies the rhythm, in direct contrast to Lewis. Bags is one of the very few jazzmen who could easily produce an entire album by himself and have it swing. There is an inner fire in Milt that needs no rhythm section for bolstering.

Bags, Night Outstanding

On this particular album, the outstanding tracks are the jazz standard *Night in Tunisia* and the compelling *Bags Groove*. In both, the group demonstrates its high degree of rapport. The lines of Lewis and Jackson mesh perfectly to produce a typical MJQ head.

(Continued on page 8)



by Henry and McClure

Let's make a bet. All right? Here you are, then. Having eaten a fine dinner, I'll bet you'd like a little extra something with which to finish. You know, just a final touch of flavor, clean and refreshing, to leave you with a good taste in your mouth and a general fine feeling.

What to use? Ah, try cafe espresso, a steam distilled essence of finely ground strong Italian coffee. This after dinner drink can hardly be beaten. Serve it hot, and better have seconds.

If you wish to dress it up a bit, try using it as a base for capuchino.

Capuchino:

- 2 cups hot cocoa
- 2 to 3 oz. brandy
- 2 cups hot espresso

Make the cocoa from about two teaspoons of chocolate to about two cups of milk and heat until steaming. Add the brandy, then the espresso. Serve in a large sour glass or cups, with a liberal covering of whipped cream sprinkled with nutmeg. The balance between chocolate, coffee, and brandy is rather delicate and can be varied to favor one of the other at will. Again—better have seconds.

Plug of the week: J and P Scotch. Hard to find, but for a light, smooth Scotch you'll find it hard to beat.

STATE

A Fox West Coast Theatre
770 E. Colorado SY 2-7139
• 2 GREAT HITS •

Richard Burton
Jean Simmons
Victor Mature
"THE ROBE"

Victor Mature — Susan Hayward
"Demetrius and the Gladiator"

COLORADO
2588 E. COLORADO BLVD. ★ PH. SY. 6-9704

Box Office Opens Mon. thru Thu. 6:45, Fri. 6:00, Sat. 12:30, Sun. 12:45
Student Body Cards Accepted Smoking Permitted

EXCLUSIVE ENGAGEMENT

RELUCTANT DEBUTANTE

REX HARRISON, KAY KENDALL, John Saxson, Sandra Dee

PLUS

THE MATCHMAKER

SHIRLEY BOOTH, ANTHONY PERKINS, Shirley MacLaine

Top men go to Texaco

a leader in the constantly expanding field of petroleum

BUILD A REWARDING CAREER for yourself with The Texas Company.

FIND OUT FIRST HAND the broad range of opportunities and benefits in the fields of your particular studies, made possible through TEXACO's nation-wide and world-wide scope of operations.

TEXACO'S REPRESENTATIVE will be interviewing on your campus soon, on the dates posted. *Sign up now.*

YOU WILL find it informative to see the booklet: "Opportunities with Texaco." This booklet is available in your placement office.

Your opportunity:

Research and Technical

- Chem Eng M PhD
- Elec Eng M PhD
- Mech Eng M PhD
- Petro Eng M PhD

Chemistry

- Physics M PhD
- Geophysics M PhD
- Mathematics M PhD
- Geology Ph.D

M PhD

- M PhD
- M PhD
- M PhD
- PhD

The Texas Company



Beavers Tackle Rough Whittier

Down Riverside 26-7 as Gustafson Paces Impressive Ground Attack

Fresh from their first victory of the season, the Beaver eleven will attempt to slow the rampaging Whittier Poets' march toward the SCIAC title this Saturday night at Whittier.

The Poets are riding an impressive three-game winning streak, with victories over Pepperine 36-19, the Seal Beach Navy team 96-0, and Oxy 40-14 last weekend in the opening conference game. Earlier, the Poets edged the Cal Aggies 9-6, downed a tough Santa Barbara team 7-6, and lost by two points to Sacramento State, 20-18 for the only blemish on their record to date.

Chief Beaver problem promises to be ace Whittier back Gary Cambell whose flashy running and passing have him leading in a three-way duel with Bob Ingram of Pomona and Tim Bur-

roughs of Redlands in the individual-statistic department.

Offensive Impressive

In downing Riverside, 26-7, last Saturday, the Beavers rolled up their most impressive offensive display of the year, making 21 first downs and a net gain of 423 yards. Gustafson lead the way, averaging eight per carry in 21 cracks at the Riverside line including one smash of 70 yards off guard.

The Beavers, paced by a tough middle line, held control all of the way and in general were bigger and faster, although pass defense was once again spotty. Remember, however, that Riverside had beaten only Cal-Western in three previous starts.

Score Nullified

Play opened unimpressively, with Tech moving 60 yards after taking the kick-off, Gustafson netting the remaining inches for a first inside the opposition 15. However, a fumble three plays later on a confusion of signals stalled the drive and a similar march died inside the Riverside 25 later in the period when a Holland-Newman completed pass into the end zone was nullified, the passer having crossed the line of scrimmage.

CIT scored early in the second quarter after knocking down a fourth-down UCR pass on the Tech 32. A Holland to Newman aerial gained 42 yards to the 18 and Gustafson went over four plays later from the 8. An illegal procedure penalty wiped out Holland's run for two points and his attempted pass to Hood from the eight was incomplete.

Riverside Tallies

Three plays after the ensuing kick-off, UCR tallied their lone touchdown on a 73-yard (Continued on page 8)

Injuries, Illnesses Crippling; Frosh Lose To Sagehens

Crippled by a wave of injuries and various ills, the Tech freshmen gridders dropped a 42-12 verdict to Pomona on the TP turf Saturday.

Four starters plus key reserves were not able to suit up for the contest.

Inability to pass successfully against an eight-man Pomona defensive line which completely smothered the Tech running attack spelled doom for the losers. Pomona had held the frosh scoreless until the final period when Tech pushed over two tallies against the Pomona reserves.

The victors hit paydirt in the first quarter for a 7-0 lead which was increased to 20-0 at intermission. For Tech, Dave Grimes and Evan Hughes scored.

(Continued on page 7)

Emerymen Will Journey To Oxy

Defeat Claremont In Close Finish, Lose To Pomona

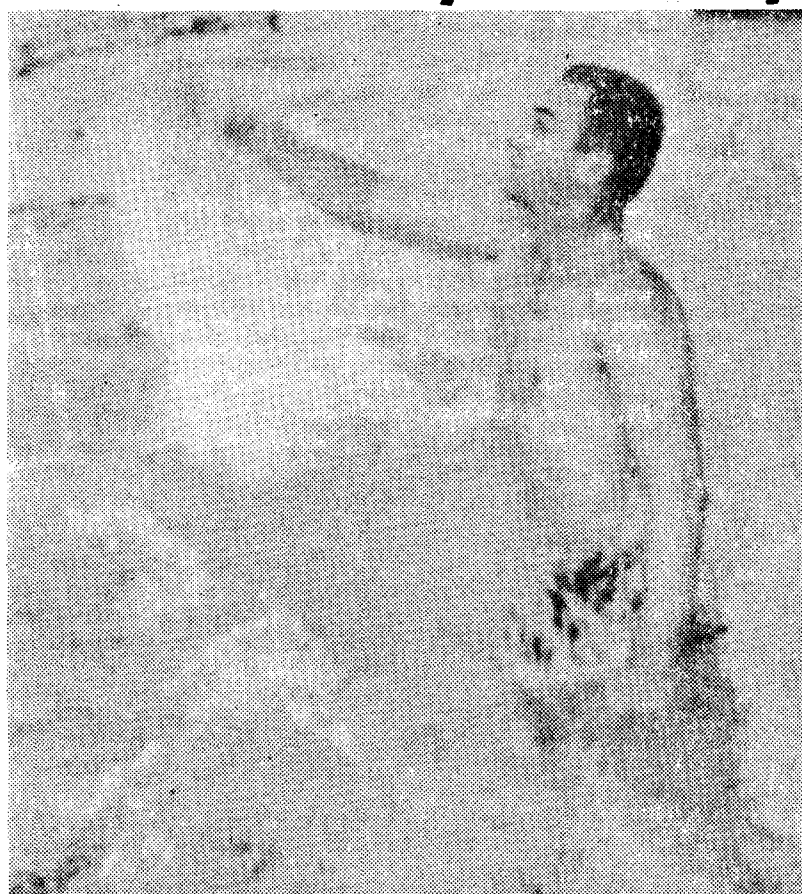
Tomorrow the Caltech water polo team plays Occidental at Oxy in what promises to be a tough contest.

Tuesday, the Beavers edged the Claremont - Harvey Medd team by a close 6-5 margin at the Alumni pool. The game was deadlocked 4-4 after the regular time had elapsed, so two overtime periods were played. The first overtime period went scoreless, but Tech tallied twice in the second before Claremont managed to add their fifth and final goal.

The game was indeed a see-saw thriller throughout. Caltech scored shortly after the game started, but Claremont knotted the count at 1-1 before the first quarter ended. Tech again forged ahead 2-1, but two goals by Claremont ace Nieman, who scored all of their points, put them in front 3-2. In the last quarter, with the score tied at 3-3, a Claremont player proceeded to give the Beavers the lead on a pass to his own goalie that went into the back of the cage for a Caltech score.

Dave Tucker proved his offensive skill by scoring twice, as did Bob Pailthorp who also netted two, to pace the Caltech scorers.

Last Friday, Pomona's league leading mermen easily downed the varsity 23-1. The Pomona team was, to be sure, in a different league with such outstanding stars as Larry Hill who tallied nine times and Tim Barnett who garnered eight scores.



ASCIT Photo
Caltech goalie Don Wiberg comes out of the water to deflect a goalward shot. Wiberg has been doing outstanding work in the the cage for the Beaver Emerymen.

INTERHOUSE

Dabney Captures Softball Crown, Discobolus Lead

● Softball

Behind the left arm of pitcher John Lohman, Dabney's softball team led the Darbs to the top of the two interhouse athletic trophy races this week.

On Thursday, a victory over archrival Fleming clinched the interhouse softball title and on Tuesday they breezed past Ricketts 14-1 to take the Discobolus challenge trophy away from the Rowdies. Both victories were the result of wildness of the opposing pitcher, Engleberg of Fleming and Morris of Ricketts, the Darbs needing to supply little offense of their own.

Morris issue eleven free passes in the Discobolus game, forcing in seven runs, but for good measure Kuli socked a home run down the left field line with the bases loaded.

Meanwhile Lohman walked only one, and few balls were hit hard, those right at somebody.

● Cross Country

Dick Tuft and Bob Juola again led Ricketts to victory in the 2½ mile cross-country test to clinch the crown for the Rowdies. Tuft, victor in all three races this season, was timed in 12:37 in leading a field of 14 home.

Neal De Gaston, Dennis Paull, both of Dabney, and Blacker's Al Whittlesey rounded out the top five.

Total scoring was: Ricketts 30, Dabney 49½, Blacker 63 and Fleming 106½.

● Scoreboard

Softball:
Blacker 6, Throop 4
Dabney 16, Fleming 3
Throop 3, Ricketts 3
Trophy Standing:
Dabney 45 Fleming 27½
Blacker 32½ Throop 10
Ricketts 30

Scoreboard

FOOTBALL

	W
Whittier	5
Redlands	5
Pomona	2
Caltech	1
Oxy	1

Soccer:

Caltech 3, Redlands 1
(JV) Cate 10, Caltech 0

Games this weekend:

L Santa Barbara at Oxy
1 Claremont-Harvey Mudd
1 at Redlands
3 Sacramento State at Pomona
3 Caltech at Whittier

4 Water Polo

Caltech 6, Claremont 5
(overtime)
Pomona 23, Caltech 1
(Frosh) Pomona 8, Caltech 6

Arrow cotton
Wash-and-Wears
earn their way
through college

Why spend date money sending shirts home? Just wash and drip-dry these Arrow cotton wash-and-wears and you're ready to go.

Only Arrow offers so wide a range: your favorite styles of collars and cuffs in oxford and broadcloth, in white, solids and patterns.

And every shirt features exclusive Arrow Mitoga®-tailoring. \$4.00 up.

Cluett, Peabody & Co., Inc.



Shirts for any date
... while you wait



We've a storeful of Arrow wash-and wear shirts. All the newest collar styles in oxfords and broadcloths, white, solid colors and patterns, French and regular cuffs. Look in soon and see them for yourself.

HOTALING'S Open Monday Eves.
Phone SY 3-5202
921 E. Colorado — Near Lake

We Recommend

Carl's Caltech Barbers

Price is a Poor Substitute for Quality

CALIFORNIA AT LAKE
JUST OFF THE CAMPUS

AS I SEE IT

La Brucherie Defensive Expert; Devises 'Sputnik' For Whittier

by Russ Pitzer

I think that perhaps one of Coach Bert La Brucherie's greatest skills is his ability to design effective defensive formations to meet any opponent's offense. Every week he comes up with a new set of defenses designed especially for the next opponent.

Sometimes he can arrange it so that it is impossible for the offense to get a good blocking angle on all of the linemen and linebackers necessary for any play no matter how the blocking assignments are arranged. Many times these defenses have features that no one else on the team has ever seen before.

THE BEST example of this was the Whittier game last year in which the "Sputnik" defense almost led the way to an upset win over the league champion Poets. This year the defense used against La Verne, an unsymmetrical five man line, was excellent for stopping their ground offense. The defense used against Pomona, a seven man line in which the linemen could slant either direction, was also quite good.

The situation in the Riverside game was a little different. Previous to this game, Riverside had only used a straight T formation with a flanker every play. Last week the team learned the defenses designed for this, a four man line from which the linemen and linebackers could slant, and an unsymmetrical five man line; both of these had three men back.

RIVERSIDE passed most of the time and used mostly a spread formation with both ends split and the halfbacks lined up in the slots between tackle and end.

Frosh Lose

(Continued from page 6)

Grimes, sprung loose by a key block from Dean Gerber, galloped 40 yards on a slant play through left tackle. The last six-pointer was scored when defensive end Roger Noll tipped a Pomona aerial into the hands of Hughes who sprinted 50 yards into the end zone. Both pass attempts for the two-point play were muffed.

Well-conditioned Pomona utilized a single-wing formation with two TDs coming on reverses and an additional pair on a weak-side roll-out pass to the opposite end.

Tech manpower was at a shortage with switches occurring at four positions. John Denyes went from Tackle to center. Pete Rux from halfback to end, John Arndt from end to quarterback and Bob Blinkenberg from the defensive to offensive line.

The loss of quarterback Frank Marshall plus the injuries of Arndt and sub Jim Geddis hurt the passing attack seriously. The best effort of the day was probably turned in by Vince Haskell whose running and blocking sparked the Tech offensive thrusts.

An unusual play occurred on the final Pomona touchdown as the Pomona quarterback booted the ball accidentally into the end zone where a Tech player fell on it. One of the two officials called the play a Pomona touchdown.

Saturday Tech goes against Whittier, losers to Occidental, on home ground at 2 p.m.

The defenses we had did not work so well against such a pass-oriented offense, so when the team came off the field at halftime the coach had the new defense ready. It had only three men lined up against their middle five linemen, four men back to watch their four receivers, and two men spread wide on each end of the line to take care of flat passes and end sweeps. This unusual defense worked as well as any formation could to stop their passing.

SATURDAY'S GAME should be an interesting example of defensive strategy. Last week, in beating Occidental 40-14 in football for 59 minutes and 45 seconds and in fisticuffs from then on, Whittier showed two offensive formations with several variations.

They used their I-T formation which they installed last year with the strong side either way and either a balanced or an unbalanced line. They also used a spread formation strong to either side.

In the other league game last week, Redlands beat Pomona as expected, 8-13.

Soccer Men Defeat Redlands



Smiling Beaver soccer team leaves field triumphantly following Redlands game.

The Beaver soccer team whipped the University of Redlands 3 to 1 in a rough but clean contest last Saturday. Most of the time the ball saw-sawed back and forth in the middle of the field with neither side monopolizing it. Caltech's inside left, Cumberbatch, scored first and right wing Norton added another before the half to give Tech a 2-0 lead. The second half was even closer, with Redlands scoring first and then Tech's left wing Tenn booting in the final goal of the game.

Glenn Converse was the chief defensive star for Caltech in a game where our defense played a key role. Brent Banta, covering the field and furnishing that extra spark and drive when and where needed also starred, along with Larry Tenn on defense.

Saturday afternoon the varsity team travels to UCLA in an attempt to extend their current win streak.

The Junior Varsity hosts Webb this Wednesday at 3:15 on the Caltech home field.

A PURE WHITE MODERN FILTER
is only the beginning of a WINSTON

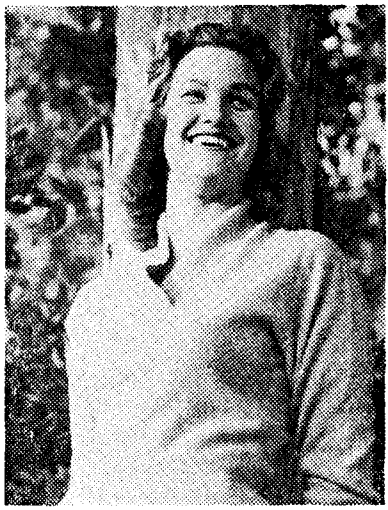
**It's what's
up front
that counts**



WINSTON TASTES GOOD LIKE A CIGARETTE SHOULD!

R. J. Reynolds Tob. Co.
Winston-Salem, N.C.

The Fair Sec's



Patty Harlow, grad office secretary; age 18, beautiful, and unattached.

by Griffen

I was sitting in the graduate office this cold, rainy afternoon, minding my own business and all, when the door swung open real slow and this blonde ambled in. I sat up straight so I could see the doll better as she came toward me. She was good. Finally she reached the desk. Madness.

"What are you doing at my desk?" she said, so only I could hear.

"Sit down and make yourself at home," I answered. She sat, giving me a surprised look. "Name, please," I demanded.

"Patty Harlow." It was a good name.

"Age?"

"Eighteen." An age, what an age! Could she have chosen a finer age to be thrown into the midst of one-thousand superior individuals? And there were no rings. Not a ring to be seen. No medallions, pins, bracelets, matching sweaters, — nothing. Putting my astute awareness to work, I decided to gamble.

"Tell me, where do you go to school, Patty?" I searched her gaze. It told me nothing.

"P.C.C." she responded, calmly. Gloom settled over the office. Then she laughed. She laughed and laughed.

"Okay. Big deal. P.C.C. Big deal. Okay, okay. Laugh. Go ahead."

She kept on laughing. I left. Whatta doll. Crazy.

Curtain Call

(Continued from page 5)
aside for Oh Men, Oh Women!

Exclusive first showing of three worthwhile motion pictures in Pasadena is scheduled for the Colorado Theater, 2588 E. Colorado Blvd.

Caesar Grimaldi, theater manager, told me he has obtained first-run rights to present "The Reluctant Debutante," "Cat on a Hot Tin Roof," and "Gigi".

Drugs Sundries Cosmetics Tobaccos
CALIFORNIA REXALL PHARMACY
555 S. Lake SY 2-3156
Breakfast Lunch Dinner

Welcome to
THE CAMPUS BARBER SHOP
(In the Old Dorm)
ALL HAIRCUTS \$1.50
Two Barbers to Serve You

CAMPUS BREWINS

Last Friday Ricketts (en masse) came down with the you-know-what (or if you don't, chances are you will ere long). But it seems the Scurvs also had an exchange. And they decided it was necessary to tell the girls that they had contracted "food poisoning" from something they had eaten. Well, they had their exchange. But a couple of days later one of the girls phoned some Scurvy to say, "Guess what! I caught your food poisoning."

Speaking of this mysterious malady, D. Landois had a droll experience the other night. While he was taking his date home after a party, someone helpfully bolted his window

shut and flipped his plate, leaving the door ajar. So Landois blissfully came home and went to bed, not noticing all this. About this point, he, too, discovered that he had caught the bug.

A certain Blackah Boy had been taking out a girl for a short while, and was becoming rather interested. Until one evening he called her up, and she gave him this:

"I think we'd better not see each other any more."

"But why?" asked our crest-fallen Blackah Boy.

"Because I'm queer."

Missed something, n'est-ce-pas?

Jazz Beat

(Continued from page 5)

The ballads, of which there are many, are also deserving of note, as Bags does a wonderful job of sustaining the jazz feeling while refusing to sacrifice the balladic nature of the song.

Lewis Contrast to Silver

Somehow, Lewis' comping was more evident to me on this album than on others. His work is directly opposed to that of Horace Silver, and that of Silver's many disciples. Instead of the crowded, many-noted chords now common, Lewis rarely plays more than two or three notes at a time. He does not force the soloist on by insistent driving chords. Instead, he tends to fill in the basic rudiments of the chord at well-shaped intervals.

Gridders Test Poets Next

(Continued from page 6)

Ken Robinson to Ed Blakely pass. Robinson kicked the PAT to give Riverside a short-lived advantage.

Just before the end of the half, the Beavers kicked their attack into high gear and rolled 64 yards in thirteen plays, scoring on a reverse to Newman which he fumbled into the end zone and then recovered.

UCR moved from its 33 to the Tech 10 in the first eight plays of the second half, but Holland saved the day by intercepting a pass on the two. Gustafson

then sprinted 70 yards up the middle to get the Beavers out of the hole. However, he fumbled two plays later, so Tech had to try all over again.

This time they ground out 70 yards in thirteen plays, Gustafson going on one for nineteen, a Holland to Newman toss getting 20, and Holland flipping to Newman from five yards out for the insurance score.

The Beavers added one more for good measure late in the fourth quarter with Siegel driving in from the 20.

Mel Holland completed 8 of 16 pass attempts for 111 yards. Newman, in sharp contrast to previous games, was called upon to punt only once.

Cat's Pajamas

COFFEE HOUSE

"It's the Cat's Meow"

50 East Foothill Blvd., Arcadia — HI 6-5934

Player Piano
Group Singing
Cafe Espresso

Open Wednesday
Thru Sunday
8 PM till???

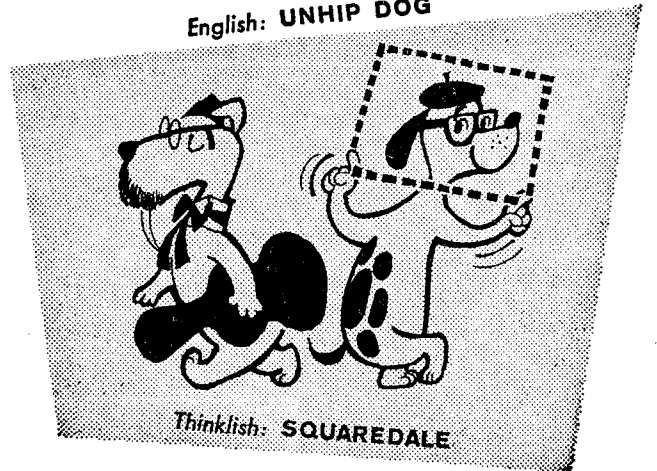
THINKKLISH

ENGLISH: endorsement of Lucky Strike cigarettes



THINKKLISH TRANSLATION: Other brands of cigarettes burn (with envy) over the matchless taste of a Lucky Strike. Lucky's taste is honest taste—the rich, full taste of fine tobacco. So any endorsement of Luckies is bound to be a *Tastimonial*. Mmm!

English: UNHIP DOG



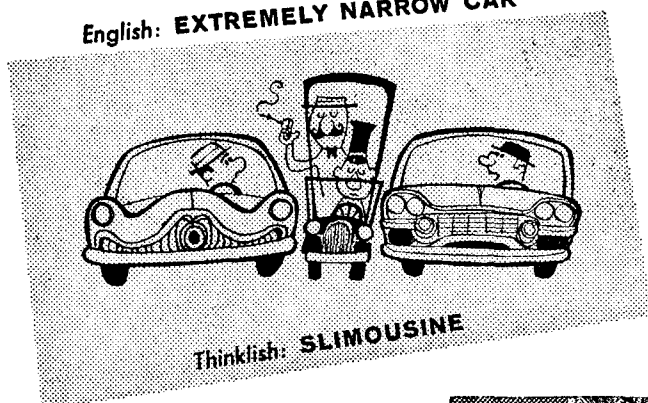
Thinklish: SQUAREDALE

English: SCREWBALL BULLY



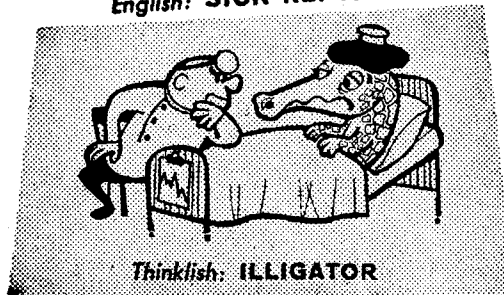
Thinklish: MEANIAC

English: EXTREMELY NARROW CAR



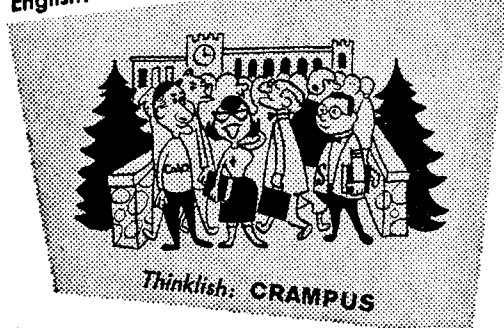
Thinklish: SLIMOUSINE

English: SICK REPTILE



Thinklish: ILLIGATOR

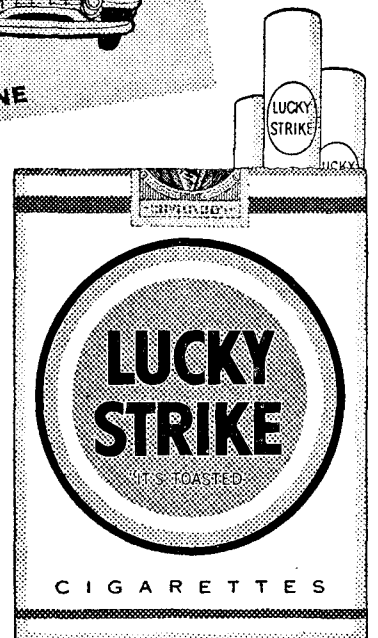
English: CROWDED COLLEGE GROUNDS



Thinklish: CRAMPUS

SPEAK THINKKLISH!
Put in a good word and MAKE \$25!

Here's the easiest way yet to make money! Just put two words together to form a new one. Example: slob + lobster=SLOBSTER. (English trans: shellfish with bad manners.) We'll pay \$25 each for the hundreds of Thinklish words judged best—and we'll feature many in our college ads. Send your Thinklish words (with translations) to Lucky Strike, Box 67A, Mt. Vernon, N. Y. Enclose name, address, college or university and class.



Get the genuine article

Get the honest taste
of a **LUCKY STRIKE**

Product of The American Tobacco Company—"Tobacco is our middle name"