

California Tech

Associated Students of the California Institute of Technology

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Number 11

Dinner Forum Hears Talk On Biochemistry

Dr. Robert Sinsheimer of the biology department spoke on molecular biology at the frosh dinner forum in Chandler last Monday night. Ten frosh attended, taking advantage of the chance for edible food and the opportunity of not dressing for dinner.

Although Sinsheimer studied at a greatly inferior technical institution in the East, he did not try to hide this fact. Since he openly apologized for this fact, the listeners did not hold it against him.

Most of Sinsheimer's talk was confined to the history of the development of molecular genetics, from Gregor Mendel's experiments in the 1860's to the modern concept of the DNA molecule. He then went into more detail concerning the use of DNA and other nucleic acids by viruses to kill cells. This was followed by a question and answer period covering all aspects of biology as well as several topics outside biology.

The talk began with a short treatment of Mendel's experiments. These experiments, developing the first concepts of genes and chromosomes, were about half a century ahead of their time.

Then Sinsheimer continued with the development of biochemistry and biophysics through the early twentieth century. He discussed chemical reactions in living cells, including the use of enzymes in producing mutations; and concluded his talk with a discussion of viruses and their use of nucleic acids in killing cells, along with the use

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Yearbook Still Meets Schedule

One-third of the 1963 **Big T** has been completed and submitted to the publisher, Taylor Publishing Company, according to Jack McKinley, **Big T** editor. As of last Saturday, December 1, 61 of the 192 pages had been submitted. This was the second deadline met by the 1963 **Big T**, and the first major deadline.

The first deadline, last October, included 16 pages of the faculty section. Because of the early submission of these 16 pages, the **Big T** is entitled to free color endpapers.

The 61 pages submitted included 5 pages of introduction, 16 pages of faculty, 32 of the 40 pages of activity, and 8 other pages.

A total of 131 pages remain to
(Continued on page 5)



Senator Barry Goldwater makes a point during his speech in Culbertson on "Goals of a Free Society".

Goldwater Remarks On Newspaper Bias

During Senator Goldwater's visit here last week, one of the specific topics he commented on was bias in the press. He noted that although the majority of the newspapers in the U. S. are under Republican control, this control applies only on the editorial page, and only 10% of the people read the editorials. Most of the reporters, on the other hand, are liberal, and this leads to their slanting of news articles according to liberal viewpoints, in articles read by 90% of the people, and the impact is much greater than the conservative slant in the editorials.

According to Goldwater, the large majority of editors do not adequately supervise this, and so make no attempt to correct the slanting. He stated that this slanting is not the same as is legal and permissible on the editorial page but is put in the articles by the reporters as actual fact rather than the opinion it really is, and this has even amounted to outright lies.

Along this same line, Goldwater commented that Nixon had a good point in his press conference, and agreed that reporters had given him a hard time in stories. (Editor's note: **U. S. News & World Report** recently printed an article supporting this same position.) The Senator said he felt it was good that someone should have

brought the point out, but that Nixon handled it badly, and that, of all papers, he shouldn't have picked out the **L.A. Times** which was very good to him.

As concrete support to his comments on news slanting and in answer to specific questions, Goldwater discussed the recent controversy concerning the University of Colorado newspaper, and the dismissal of Gary Althen as editor. He said the article was definitely libelous when it called him a "murderer" and "no better than a common criminal," and that the University was definitely liable for this statement.

Goldwater said, however, that he had written only one letter to the university president Newton, and that he made no suggestion that any action be taken against either Mitcham or Althen. In the letter to Newton, which was released to the press, he said that Newton either didn't know what was going on at the school or didn't care and that to be charitable he would assume it was the former, but that he did not think Newton was fit to run an educational institution, as he was a politician, not an educator. Despite this, several magazines came out with articles which claimed that Goldwater had demanded in his letter that some action

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Tech Snows Many As Eager Hordes Come To Marvel

BY KEN KIMBALL

In the opinion of most, this year's Student's Day was a big success. Nearly eleven hundred high school students and teachers were on hand last Saturday for a day of lectures and exhibits. Dr. Richard Sutton, chairman of the Faculty Committee for Students' Day, termed it "better than ever before," although there were, of course, a few minor problems.

All guests were supposed to be in possession of a colored badge or an original letter sent to them concerning the days' activities. This indicated what House they were to eat lunch in. Some had neither. One group of teachers was found to be without a guide. But all these problems were ironed out with typical speed and efficiency.

Some of the most common things said were "I don't understand all this," and "what's your flunk-out rate here?" Some remarked astutely after climbing many stairs that the Caltech campus is built more vertically than horizontally. Most of the guests were men and boys, although a few girls managed to sneak in, contrary to the rules set up for attendance. Many people in the Pasadena area assumed it to be an open house, which added to the confusion more than anything else.

The guides expressed a general enthusiasm in that they were finally able to see "what's going on around the campus." Their main problem was keeping on schedule, and over-eloquent exhibitors did not help the situation much.

The days' activities included

Room Contracts Changed; Give More Freedom

The new Student House terms and conditions of occupancy have been released and they include a liberalization of the former rules about construction in rooms.

The new rules state, in part, that any student who wishes to move any furniture from the room assigned to him, do construction in the room, or bring other furniture into the room shall "make written request to the Resident Associate for approval of the move or construction by the Master of Student

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a series of guided tours in the morning, covering a total of 63 exhibits. Following this, the students managed their way through lunch in the student Houses, while the 170 teachers present ate in the Athenaeum. Following lunch Dr. DuBridge made an address on the Athenaeum lawn, after which an afternoon of lectures began. These included "Review of Mariner II," "What is Interesting about Biology," "Radio Astronomy," "Scanning Patterns of the Eye," and "Liquids—Chaos or Order?" The most popular of the lectures was Dr. Apostol's "The Geometry of Numbers," which saw seventy-five standing.

Subjects for exhibits were lasers, Galcit wind tunnels, electron microscopes, genetics, neurophysiology, x-rays and molecular structures, hydraulics laboratory, digital computers, a solar furnace, the low temperature laboratory, and many more.

Credit should be given to Dr. Sutton, who was in charge of the tremendous amount of organizational work done, and to the student organization in making the plans work.

Opera Singer Next Feature

The ASCIT-Alumni assembly committee makes its first try at presenting opera on Wednesday, January 9, 1963, at 11 a.m. The committee will present Marie Gibson, opera singer who for three years has been chosen to open the season of the Los Angeles Opera. She will sing at Dabney Lounge.

Gibson has, in addition to singing for the Los Angeles Opera Company, appeared twice as the featured soloist at the Hollywood Bowl. Her career began in 1957 when she won the San Francisco Opera Debut Auditions. Since that time she has been a member of the guild opera of Los Angeles, singing roles in "Cinderella," "The Bartered Bride," and "Hansel and Gretel." She also spent some time with the Los Angeles Civic Light Opera Association and has appeared in three Broadway musical productions in New York.

Anita Priest, who is a regular organist and pianist with the Los Angeles Philharmonic Orchestra, will accompany Gibson during her concert here.

Editorials

Why Volleyball?

Though the subject of physical education has been hashed and rehashed several times already on this page, additional points concerning the controversy continue to rise. In addition, it is important for every student at Tech to become as well-acquainted as possible with the question of compulsory physical education, so that he will have formed an intelligent opinion about it when a vote is held.

One of the major problems with physical education at Tech is the scheduling. Because a student must average over two hours of PE per week to pass at Tech, he is required to enroll for a class or classes meeting at least three times a week. Because many students have only one or two holes in their schedule into which they can fit desirable and enjoyable courses, they are forced to meet their requirements by taking volleyball the rest of the time.

Volleyball class not only meets at an inconvenient time, but is mainly a calisthenics class. No real progress is made in the class, and a student would benefit just as much from taking a sport he enjoys and is interested in one or two times a week without being forced to take a practically worthless volleyball class the rest of the time merely to pass PE. The optional PE classes for juniors and seniors could have mandatory attendance, if necessary, so long as no one was required to take them.

Improved scheduling could also be used, if junior and senior PE were eliminated, to answer objections to this elimination on the grounds that Tech students would not be adequately acquainted with many sports. By maintaining freshman and sophomore PE as mandatory, and instituting different, required courses each quarter, every student would be introduced to each sport during his first two years, and then would be able to engage in sports of his own choice during his junior and senior years, and to participate as frequently as he thought best.

—J. C. Simpson
Richard Karp

From Other Campuses

by Richard Karp

"It has been traditional in years past for Pomona to hire Caltech men to set off Oxy's homecoming bonfire before the appointed time. Sometimes they are successful but other times they are foiled by the alert Oxy men who are guarding the woodheap," reports the *Occidental* about the Oxy bonfire held (this year at least) on the night before the Interhouse dance. As an afterthought, it is perhaps fortunate that there was no attempt made to light the bonfire, for, the *Occidental* noted, "This year, any Techmen who intend to come to Oxy's bonfire before the appointed time are in for a disappointment. There simply won't be any wood there. The bonfire department intends to build the fire a few hours before it is to be set off." CS now?

Tech Gridders Scare Oxy

In case anyone feels really pessimistic about the Oxy-Tech football game, the same issue of the *Occidental* notes under the headline "Schwenkmen seek Sagehen; rebound from Caltech scare" that "The Techmen, it must be admitted, actually dominated the game during most of the first half as they moved the ball well, and only two quickie touchdowns in the final minutes broke a 7-6 cliffhanger into a 19-6 Oxy lead." In short, Oxy was worried; hopefully, next year, their fears will be realized.

The Winner!

Typical clean-minded Techman will be interested to know that music major Nancy Davis, a sophomore at PCC, was chosen to be queen of the 74th Rose Parade. She was chosen from seven finalists whose contestant

(Continued on page 3)

The Critical Ear

by
rickerman

One of the foremost interpreters of orchestral music in the world today is Herbert von Karajan. His recording on London of Richard Strauss' *Also Sprach Zarathustra* (CM 9236-CS 6129) is a triumph. New, however, to the "ear" is von Karajan's recording of Gustav Holst's *The Planets*. (London CM 9313-CS 6244).

On first listing to the recording I was of the opinion that he had equalled Sir Adrian Boult's magnificent Westminster disc (XWN 18252) done a few years back before the advent of "Madison Avenue Stereo" (then stereo was on tape, not from every dime store contrivance called a phonograph). Repeated hearings of both led me slowly to admit that the new recording is better. The sound is vintage of 1962, rather than 1956 and, reluctantly I must say, it IS stereo. Of course Boult has a new recording out on Westminster — in stereo — but I have not heard it yet.

Side one opens with "Mars, The Bringer of War" which is especially suitable for next week. The pace is more slow than usual recordings, but this is quickly forgotten as the Vienna Philharmonic uses its full power to proclaim the battle's fury. Throughout this violent movement there is a noticeable lack of ragged chords and a marked prominence of simultaneity in the staccato attacks. The fury pauses and a dissonant string section works a beautiful sequence in opposition to the trumpets (muted). The final resolution is a study in precision. The last chord is remarkable in that it has a pure bass tone — the sign of an excellent orchestra; the drums do not drown everything. "Venus, The Bringer of Peace" according to Holst's mythology is a quiet lyric piece in distinct contrast to the violent "Mars." One immediately notices the fine French horn section and the particular lack of "screech" in the high strings. There is, however, a hint of sluggishness in some of the violin solos.

Mercury and Jupiter

"Mercury, The Winged Messenger" is a bright scherzo movement in which the strings predominate. A hint of slowness here also, but excellent precision throughout.

"Jupiter, The Bringer of Jollity" concludes the first side with a jovial C major key. The brass section does a fine job playing the majestic passages with a twist of pompous humor. This type of mood control is often difficult to achieve. Here we have "blatantly humorous" music, as the jacket says.

More Planets

"Saturn, The Bringer of Old Age" opens side two. The tolling ninth chords, synchopated for the first twenty-six bars, underscore the quietly beautiful string

section. The toll develops into a marching crescendo in 4/4 tempo. The dynamics of the orchestra are brilliantly controlled by von Karajan, reaching a fortissimo after twenty-eight bars of gradually increasing loudness. The chimes harshly panic at the "yawning abyss" and then with a rapid fade, the horns and strings conclude the movement.

End of the Solar System

"Uranus, The Magician" shatters the double pianissimo of "Saturn's" ending with a triple forte blast. The orchestra waddles through this piece without getting lost in the complex and multiple time signatures used. Counterpoint and syncopation are followed—still no one seems to get lost. The climax is reached when the orchestra, with an organ glissando, goes from ffff to pp. The faint undertones of the high strings punctuated by the harp give me the distinct impression that the magician has made the universe vanish. The orchestra sweeps back and the movement ends as it began.

"Neptune, The Mystic" is the best performance on the album. Of particular note are the harp arpeggios which pervade this concluding movement. The Vienna State Opera Chorus enters on a high G tone which is sustained for no less than forty seconds. The control of the chorus with the complicated harmonies is wonderfully executed over the string and harp in the orchestra. The record ends without resolution — the voices fading out.

No quick takes this week. Next term I'll attack some folk music and maybe some popular recordings.

Cepheids Give Better Position For Andromeda

A more accurate value for the distance from the Milky Way to Andromeda, 22 million light years, was announced by the Mt. Wilson and Palomar Observatories last Sunday. This distance had previously been estimated to be between .7 and 3.3 million light years. The new figure was calibrated by Henrietta Swope, research fellow in astronomy at the observatories, using Cepheid variables as a measure.

After examining 230 Cepheids in Andromeda, Swope selected twenty for use in calibration. The chief difficulty in using Cepheids is the dimming effect of intervening dust; since the main effect of this dust is one of reddening the spectrum, by examining plates taken with blue and yellow filters, Swope arrived at a value for the effects of this dimming, and hence at a value for the distance to Andromeda more accurate than previous findings.

AFROTC Unit Wants Officer Candidates

Freshman who meet entrance criteria may still enroll in the AFROTC Program at the beginning of the second term. All freshmen who are U.S. citizens are eligible provided they are acceptable to the Professor of Air Science.

Freshmen who are interested and qualified should enroll in Air Science 1b for second term, either this week or the first week of next term. For further information contact the Air Force ROTC office.

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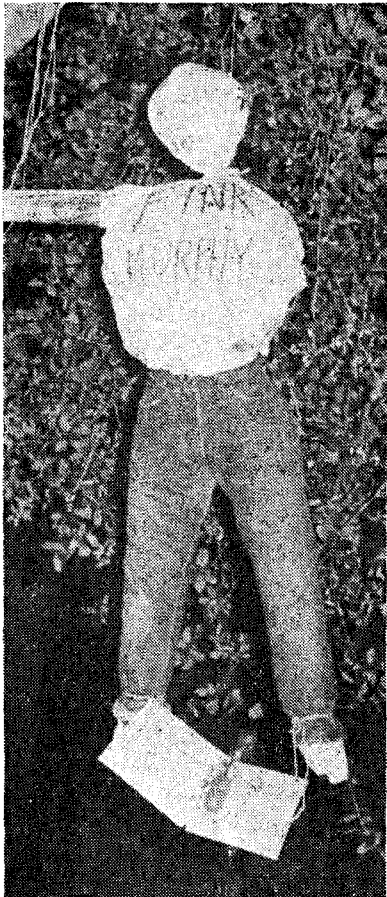


EVERY MAN'S CHEERLEADER

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Traditionally the Finest for Discriminating Men



—photo by Ken Brown

A group of Marks House grad students, incensed by Fletch Murphy's commentary in *Graduate Rattle* on their football endeavors against Dabney and Ricketts, showed their appreciation by hanging Murphy in effigy outside of M-J House.

More Campuses

(Continued from page 2)

numbers ranged from 35-265. Nancy Davis' number was 69.

Good Clean Fun

The South Dakota Tech of the South Dakota School of Mines and Technology (in case anyone forgot) has a writer named Shilberg, whose duty, evidently, is to write a column entitled "What is this Barf?" At any rate, in the November 1 issue, he wrote a letter of sorts to a friend for his column. "Dear Sam," it started, "Well, the first couple of months are over out here at Mines and I've had my first blind date. The guy who fixed me up said that she travels strictly with the upper set. (I found out later that she kept the lowers at home in a glass of Listerine.) I called her up and asked her if she would be free Friday evening. She said no, but that she'd be reasonable.

"When I went to meet her, she came down in one of those new creations — a gownless evening strap . . . She had a huge lower lip, but it wasn't very noticeable because her upper lip covered it. However, she did have beautiful eyes, especially the pink one. I was a little worried, but at the dance she was the life of the party. The gang, went simply wild when she yawned and her ears disappeared . . ."

"One former and one present patrolman of the Stanford Police Department have been arrested within the past five days by the Santa Clara County Sheriff's Office and charged with burglaries committed while walking on their beats, the Sheriff's Office revealed late Friday evening." Thus notes the *Stanford Daily*. For those in doubt about the honesty of the rest of the patrol force, Lieutenant John W. Gilkey has few words. As the *Daily* notes, "There is no place on my force for a crooked cop."

Mice in the Dorm

The same issue of the *Daily* reports more trouble for the campus police. "Shrill hysterical screams and shrieks from the third floor shattered the tranquil atmosphere of Roble Hall after dinner last night.

"In panic the police and press were summoned.

"And what was all the commotion about? A raid? No sir. The girls from 3-A and 4-B had discovered swarms of mice scurrying about the corridors.

"Some of the little creatures were painted blue and gold — proof that unimaginative Cal pranksters had been in the farm. (Cal men pulled the same out-moded colored-mice stunt in Roble before the '60 Big Game).

"Stanford police now have the captured mice in a barrell. Perplexed officers have yet to figure out what to do with them."

New Contracts

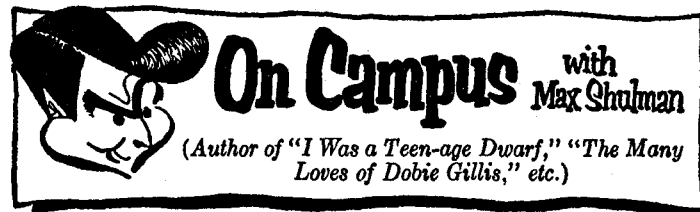
(Continued from page 1)

Houses and the Manager of Student Houses. Approval will be based upon potential damage to Institute property and impediment to maintenance. The Resident Associate, Master of Student Houses, and the Manager of Student Houses must be satisfied as to safety considerations and may consult with the Safety Engineer as required."

In addition, students who wish to bring other furniture into their room must consider the criteria of sanitation, pests, and vermin.

Under the new standards for room construction and stuffed furniture, etc., the Housekeeper will not have the final decision. The decision will be made by her supervisor, namely, the Manager of Student Houses.

Other changes in the conditions are of minor importance. Students who have constructions or modifications in their rooms, which will now be allowed under the new contract, are requested to stop at the Manager's office before the beginning of second term to sign a new contract. The new terms of occupancy will become effective on January 1, 1963.



HAPPINESS CAN'T BUY MONEY

Can education bring happiness?

This is a question that in recent years has caused much lively debate and several hundred stabbings among American college professors. Some contend that if a student's intellect is sufficiently aroused, happiness will automatically follow. Others say that to concentrate on the intellect and ignore the rest of the personality can only lead to misery.

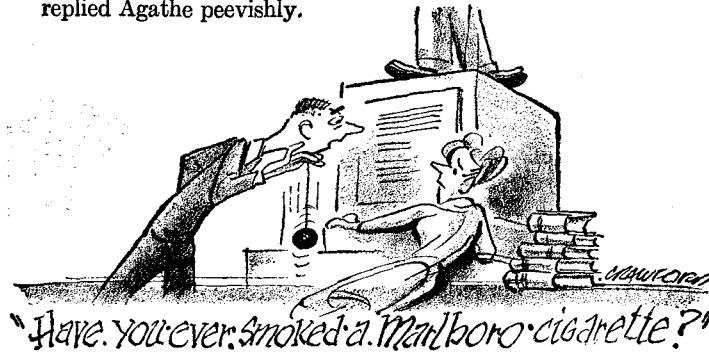
I myself favor the second view, and I offer in evidence the well-known case of Agathe Fusco.

Agathe, a forestry major, never got anything less than a straight "A", was awarded her B.T. (Bachelor of Trees) in only two years, her M.S.B. (Master of Sap and Bark) in only three, and her D.B.C. (Doctor of Blight and Cutworms) in only four.

Academic glory was hers. Her intellect was the envy of every intellect fan on campus. But was she happy? The answer, alas, was no. Agathe—she knew not why—was miserable, so miserable, in fact, that one day while walking across campus, she was suddenly so overcome with melancholy that she flung herself, weeping, upon the statue of the Founder.

By and by a liberal arts major named R. Twinkle Plenty came by with his yoyo. He noted Agathe's condition. "How come you're so unhappy, hey?" said R. Twinkle.

"Suppose you tell me, you dumb old liberal arts major," replied Agathe peevishly.



"All right, I will," said R. Twinkle. "You are unhappy for two reasons. First, because you have been so busy stuffing your intellect that you have gone and starved your psyche. I've got nothing against learning, mind you, but a person oughtn't to neglect the pleasant, gentle amenities of life—the fun things. Have you, for instance, ever been to a dance?"

Agathe shook her head.

"Have you ever watched a sunset? Written a poem? Smoked a Marlboro Cigarette?"

Agathe shook her head.

"Well, we'll fix that right now!" said R. Twinkle and gave her a Marlboro and struck a match.

She puffed, and then for the first time in twelve or fifteen years, she smiled. "Wow!" she cried. "Marlboros are a fun thing! What flavor! What filter! What pack or box! What a lot to like! From now on I will smoke Marlboros, and never have another unhappy day!"

"Hold!" said R. Twinkle. "Marlboros alone will not solve your problem—only half of it. Remember I said there were two things making you unhappy?"

"Oh, yeah," said Agathe. "What's the other one?"

"How long have you had that bear trap on your foot?" said R. Twinkle.

"I stepped on it during a field trip in my freshman year," said Agathe. "I keep meaning to have it taken off."

"Allow me," said R. Twinkle and removed it.

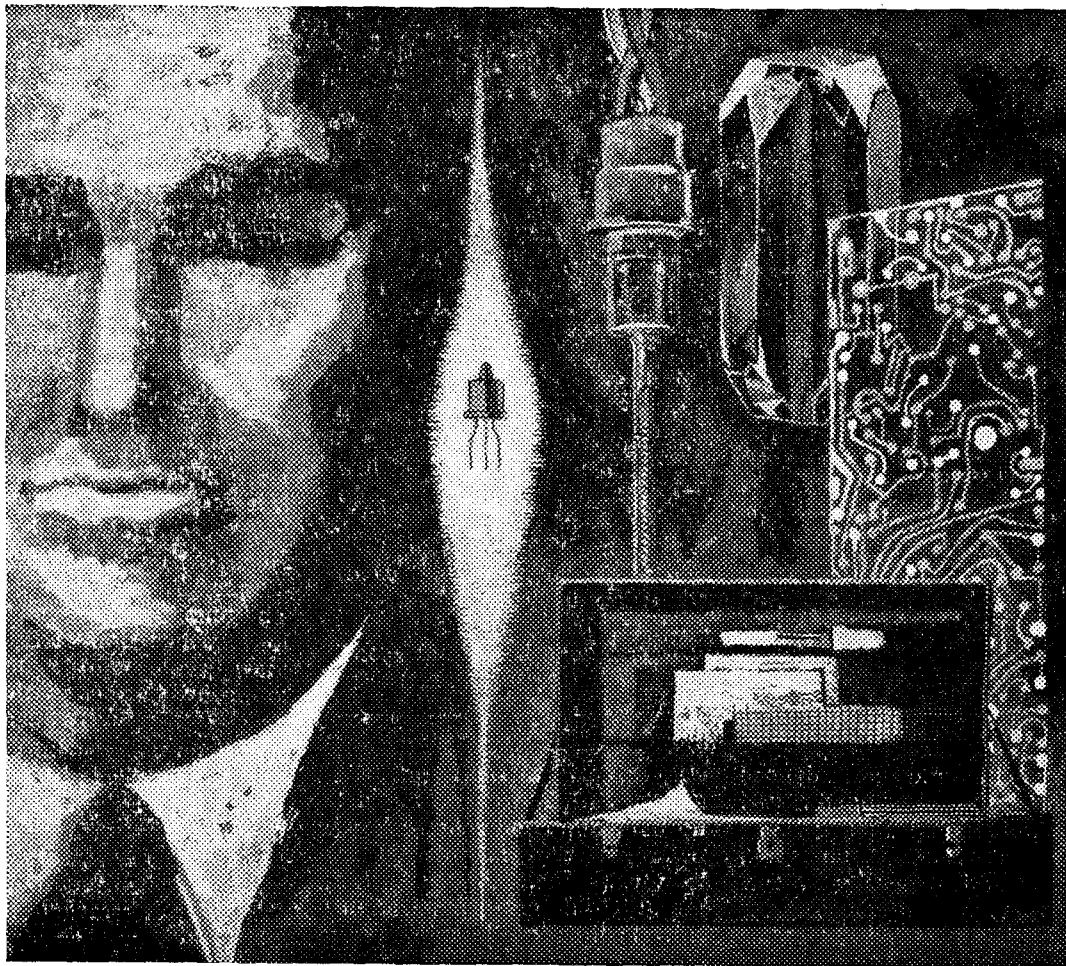
"Land sakes, what a relief!" said Agathe, now totally happy, and took R. Twinkle's hand and led him to a Marlboro vendor's and then to a justice of the peace.

Today Agathe is a perfectly fulfilled woman, both intellectually and personalitywise. She lives in a darling split-level house with R. Twinkle and their 17 children, and she still keeps busy in the forestry game. Only last month, in fact, she became Consultant on Sawdust to the American Butchers Guild, she was named an Honorary Sequoia by the park commissioner of Las Vegas, and she published a best-selling book called *I was a Slippery Elm for the FBI*.

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* * *

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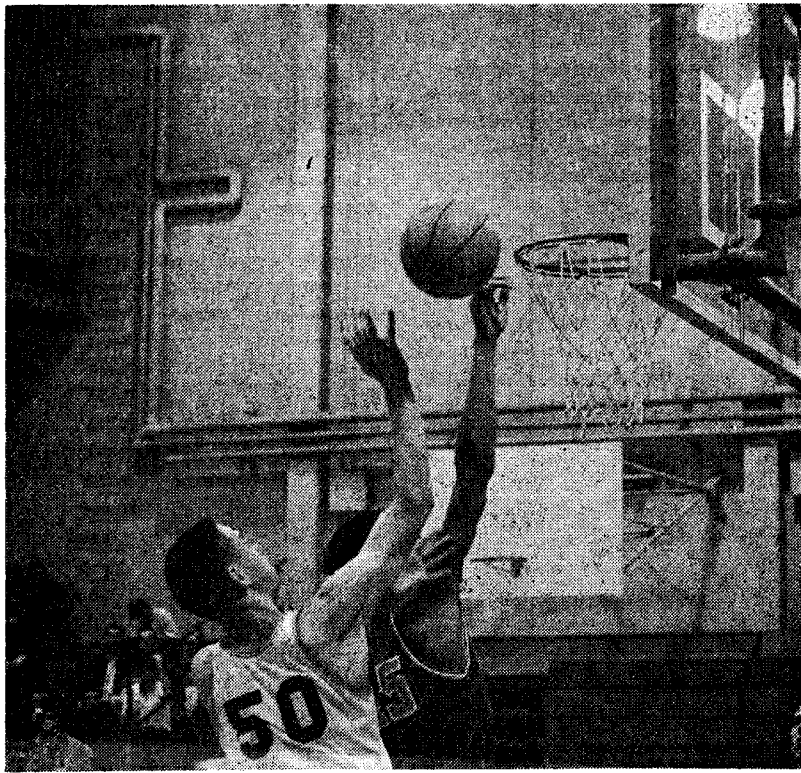
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SPORTS



—photo by Thor Hanson

Techman Dick Burgess scores over outstretched hand of Cal Lutheran defender.

CIT Tops CLC In Overtime Thriller

BY THOR HANSON

With two seconds left in the second overtime period, Techman Roger Korus recovered a loose ball and scored to give the Beavers a 71-70 come-from-behind victory over Cal Lutheran last Saturday night in their first home basketball game. This was Tech's second victory against no defeats as they had romped to a 70-57 win at Upland College the previous night.

Sophomore Korus was high scorer for the locals with 15 points, 7 of them coming in the crucial overtime periods. The team showed very good balance as the scoring was divided up nearly evenly among the rest of the players. Tom Bopp and Gary Dahlman both scored 14 points before they fouled out late in the fourth quarter. Mike Pearlman hit 10 points, while Dick Burgess and Volker Vogt picked up 8 and 9 points respectively. **Slow Start**

In contrast to the finish, the game started off very slowly and the ball moved up and down the court several times until Cal Lutheran finally scored. The lead exchanged hands frequently throughout the first quarter, as neither team could start a rally.

With less than six minutes to go in the first half, Caltech showed signs of pulling ahead as Vogt made a ten foot jump shot to give the Beavers an 18-16 lead. Tech stayed ahead until Cal Lutheran tied the score at 24-24, less than a minute before the half. Dahlman got the lead back on an outside shot, but Cal Lutheran's Paul Andersen came back with an unusual four point play to give his team a 28-26 lead at the half. With seconds left, Andersen scored and the referee ruled that he was fouled underneath the basket after the shot. With a one-and-one situation in effect, he sunk both of the free throws.

Second Half

Cal Lutheran got off to a fast start at the beginning of the second half as they made eight quick points on three field goals and a pair of free throws, while Caltech was held scoreless. Bopp broke the spell with two shots from close in to put the score at

36-30 in Cal Lutheran's favor. The Beaver offense failed to rally as Cal Lutheran held a 6 to 8 point lead for nearly ten minutes. Tech pulled to within three points with a 50-47 score and 8:32 left in the game, but sloppy ball handling by the Beavers enabled the visitors to retain their lead.

With the score at 59-50 and less than three minutes left in the game, Tech called time. Following the time out, Dahlman scored on a quick play and Pearlman connected on an 8 foot jumper. Pearlman then made a lay-in and Burgess tossed in a pair of free throws to put Tech within one point, 59-58. After recovering a bad pass, the Beavers took the ball down to the front court where Dahlman hit a jump shot from the top of the key to give Tech a 60-59 lead. With only 11 seconds left in the game, Cal Lutheran got the ball and immediately called time out.

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Interhouse Swim Finals Today

With two records broken and a third established in Tuesday's interhouse swimming preliminaries, today's finals will feature some of the best in the history of the competition. Rickett's Joseph Russo set a new record of :29.2 in the 50 yard butterfly and had the top time in the 100 yard individual medley which is a new event this year. In the 50 yard backstroke Philip Graul of Blacker House smashed the old standard by one and one-half seconds for a time of :30.6.

Lloyd leads with nine qualifying positions and appears to be the team to beat. Rickett's qualified in only six spots, but because of Russo and strong relay teams they are expected to be tough.

From Tuesday's qualifying heats eight men were selected in each event to compete in today's finals. Also there will be 200 yard freestyle and 200 yard medley relay races. The diving competition was held yesterday.

Tuesday's qualifiers:

50 yard Free—Suits (L), :26.0; Bergman (P), :26.4; Rayner (P), :26.8; Brown (Ru), :27.0; Holmes (F), :27.2; Stofa (F), :28.3; Wolfson (B), :28.3; Krieger (Throop), :28.3.

100 yard Ind. Med. — Russo (Ri), 1:10.0; Williams (L), 1:13.9;

Soccer Team Loses Finale to UCLA, 9-2

In their final game of the season the soccer team went down to a rampaging UCLA eleven by a score of 9-2. This gave the Beavers a 6-4 record for the year and a third place finish in the conference.

UCLA had beaten Caltech on their home field 3-0 earlier in the season. Playing at Tournament Park should have given Tech an advantage, but UCLA scored twice in the first ten minutes and from then on were never in danger. A goal from a penalty and another just before the half made the score, 4-0.

A few minutes after halftime Caltech's Jacques de Barbeyrac scored to give the home team its first goal. Moments later UCLA had increased their lead to 6-1 and brought their goalkeeper out to the halfback line. Joel Kwok scored Tech's other goal. Before the end of the game UCLA scored three more goals for their 9-2 victory.

Meanwhile at UCLA the Caltech junior varsity ended one their most successful seasons with a 3-2 victory.

Weiss (Ri), 1:17.5; Harry (Ri), 1:20.5; Mastin (B), 1:20.6; Thornbur (B), 1:23.2; Lau (P), 1:28.8; Goldner (F), 1:30.4.

50 yard Backstroke — Graul (B), :30.6; Rabinowitz (P), :32.3; Vollbrecht (Ri), :34.2; Payne (P), :34.5; Galley (Ru), :35.8; Neill (Ru), :36.7; Brunswig (Ru.), :37.2; Dumont (P), :39.7.

100 yard Free — Suits (L), :59.0; Brown (Ru), 1:03.8; Bergman (P), 1:04.2; Wolfson (B), 1:06.4; Krieger (Throop), 1:08.2; Lippman (F), 1:09.1; Greenfield (Ru), 1:10.6; Anthony (D), 1:15.0.

50 yard Breast — Williams (L), :36.3; Baskets (Ri), :36.8; Thornbur (B), :37.0; Ayers (L), :37.6; Storwick (L), :37.7; Hammer (Ru), :38.3; Smythe (Ru), :38.7; Tyler (B), :38.8.

50 yard Butterfly—Russo (Ri), :29.2; Schoene (F), :32.2; Rabinowitz (P), :36.2; Wallace (L), :36.8; Kimball (L), :37.9; Yeagley (D), :38.2; Chandler (L), :44.9.

Ruddock Takes Discobolus Tilts

After three straight victories Ruddock House has moved into second place in discobolus competition one point behind Lloyd. Last Saturday Ruddock won over Lloyd in a closely fought softball contest, 2-0. Ruddock, aided by a large segment of the varsity baseball team, scored its two runs in one inning on consecutive hits by Dick Stanton, Bill Weber, and Bill Ricks. Ray Plaut was the winning pitcher.

Ruddock gained possession of the trophy several weeks ago by defeating Blacker in a softball game, 4-2. Fleming then challenged in swimming, water polo, and ping pong. Ruddock accepted in swimming and took the meet by the narrow margin of 19-17. George McBean led the winners with close victories over Fleming's William Owen in the 50 and 100 yard freestyle races. Ruddock swept the 50 yard breast stroke with Pat Miller taking first place.

Dabney is next in line for a chance at the trophy and has until 6:00 of Registration Day next term to make their challenge.

Discobolus standings:

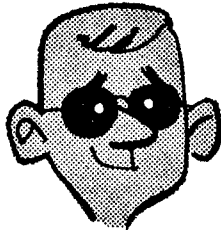
House	Trophy points
Lloyd	11
Ruddock	10
Blacker	8
Ricketts	4
Fleming	2
Dabney	1
Page	1

Y Dinner Forum

(Continued from page 1)

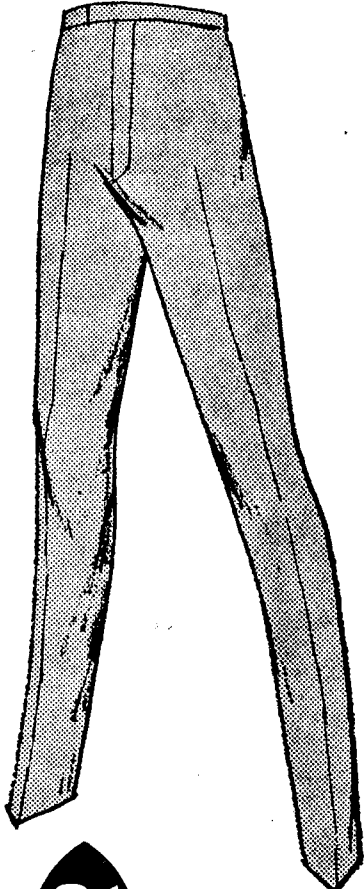
of antibodies to kill viruses. The dinner forum ended with a question and answer period.

This talk was the last scheduled for frosh dinner forums this term. The possibility of continuing next term, and if so in what manner to continue them was discussed at a meeting in Chandler Tuesday night.



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Athletes Hold Sports Banquet

Caltech's athletes were honored last Monday night at the annual first-term Sports Awards Banquet, held at Gwinn's Restaurant.

The highlight of the evening was a speech by Don Paul, former player and coach of the Los Angeles Rams. Paul opened his talk by commenting on the changes in professional football since he played. He said that the players of today are much larger and faster, but they lack the spirit of players ten years ago. Following this discussion, he told some of his experiences in professional football.

Master of Ceremonies for the evening was congenial and good-natured Dr. J. Kent Clark of the English department.

Several trophies were awarded to the outstanding athletes in various sports.

The Wheaton Trophy, given to the man who contributes the most to the football team in both playing ability and team morale, was granted to All-Conference selection Joe Bocklage.

The award given to the top soccer player went to Jacques de Barbeyrac.

Coach Web Emery named Dave Sieb and Mike McCammon as co-captains of next year's water polo team.

More Basketball

(Continued from page 4)

However, they had used up all of their allotted time outs and drew a technical foul. Bopp made the free throw and Tech took the ball out, only to have an offensive foul called on them shortly thereafter. Cal Lutheran took possession and Andersen drove through the Caltech defenses to score the tying points in the final seconds of the game. **Game Goes Into Overtime**

In the first overtime, Tech scored twice to take a 65-61 lead. Cal Lutheran's Norm Denison made two field goals to counter and a free throw by each team left the score tied 66-66 at the end of the overtime.

Pearlman gave Tech an early lead in the second overtime on a free throw. Andersen scored on a jump shot to give Cal Lutheran a 68-67 advantage and Lutheran's James McKenna dropped in a pair of free throws to widen the margin to three points. Time was running out and with 16 seconds left, Caltech got the ball. In order to avoid a three point play, Cal Lutheran let Korus score and took the ball out of bounds. A Techman deflected the pass-in and Korus calmly recovered the ball to score the winning goal as the final buzzer went off.

Throughout the first half and for most of the game in general, Caltech was plagued by poor passing and sloppy ball control. Cal Lutheran couldn't hold onto the ball very well either, and so both teams evened out in this department. The Beaver's rebounding was quite weak in the early stages of the contest, but it vastly improved as the game progressed.

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More Goldwater

(Continued from page 1)

be taken against the paper or editor. He has filed notices with three magazines that unless they printed retractions, he would file suit against them.

The *California Tech* in an article several weeks ago based on some faulty newspaper accounts also stated that Goldwater demanded some action be taken; because of the misleading information this statement was erroneous and is hereby retracted with full apologies to Senator Goldwater.

Yearbook Deadline

(Continued from page 1)

be submitted. Of these, 74 are planned to be sent in at the second deadline, which is February 5, 1963. The remaining 57 are to be sent in during the latter part of March. If these remaining two deadlines are met, the *Big T* will appear on June 1, 1963.

Unofficial reports indicate that the representative of the publishing company, which has published *Big T's* for several years, was somewhat surprised when the deadline was met. These reports are strictly unofficial.

The 1962 *Big T* has not yet been fully completed. As of last estimate, it was predicted that the 1962 annual will be completed some time in March, 1963.

Wrestling Class Starts Next Term

Starting next term there will be wrestling workouts held in the gym from 5:30 to 6:30 every day of the week. Since dinner in the student houses starts at 6:30, people registered for this will be able to eat in Chandler Dining Hall after practice. No prior experience is needed as there will be a coach to teach anyone that wants to learn the sport. This class is open to both people who only want PE credit and those that are planning to compete in intercollegiate matches which will be scheduled later. Those interested should sign up with Coach Nerrie.

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—photo by Ken Brown

Senator Goldwater discusses foreign policy during the Wednesday assembly hour panel discussion in Dabney Lounge. Panel members, left to right, are Mike Gazzaniga, Ben Saltzer, Senator Goldwater, J. C. Simpson, chairman, Dr. Peter Fahy, and Art Robinson.

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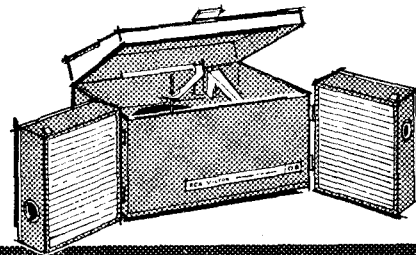
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|-------------------|--------------------|
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| 2. C065695 | 7. C375972 |
| 3. A014505 | 8. B398344 |
| 4. C403887 | 9. A487788 |
| 5. C001596 | 10. A121605 |

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graduate rattle

BY JON KING

The jacketed and necktied collection of M-J mashers, assembled for photographing Tuesday night, was no doubt intended to hint of some angelic Boystown choir. Unfortunately the resemblance was much more akin to Murder Incorporated. A seasoned observer suggested the picture be labelled "Dutch Schultz and the South Side boys" and sent to the Police Gazette.

Girls Want Grads?

A mysterious phone call was received last Saturday from an assemblage of giggling young coeds. We happily passed on the information that the last name of the "cute R. A. on the soccer team, his first name is Mike" was Fournery and hoped for the best. Oh, that we should be the object of such glowing admiration!

Religion in the Hills

Paul Purdom, off to a mountain retreat last weekend, was seen to be carrying his beloved portable short wave radio (he has six non-portables), reminded

me of that old spiritual, "Turn your Radio on, Get Heaven in Your Home". Incidentally, stay away from Purdom if he offers to teach you how to play the ancient Japanese game of Shogi. It's fixed.

At the INA party Mike Fried, Stan Krane, Clyde Hutchinson and Mike Nesson spent four hours working on the problem and finally managed to come up with the names of all eight reindeer and all seven dwarfs. My own proposal to substitute Herman for the illusive seventh dwarf was squashed when Mike (Fried) triumphantly shouted, "Aha, Bashful!"

Let Them Eat Plenty of Cake

Tomorrow, from 10 a.m. to 2 p.m., the Caltech Junior Women's Club will have its annual bake sale. The Club, consisting of faculty and grad student wives, sponsors the event once a year, supplying Techmen, faculty members, and random passers-by with all manner of homemade (as opposed to Sagamade) baked goods, candies, etc. The sale will be held on the Olive Walk by the Master of Student Houses office. Greediness is approved, as are full wallets.

Incidental Intelligence. All those interested in all night poker, see Bill Scott in Braun. Dick Levine suggests pulling into the orange groves out Pomona way for romance, fragrance and utter blackness.

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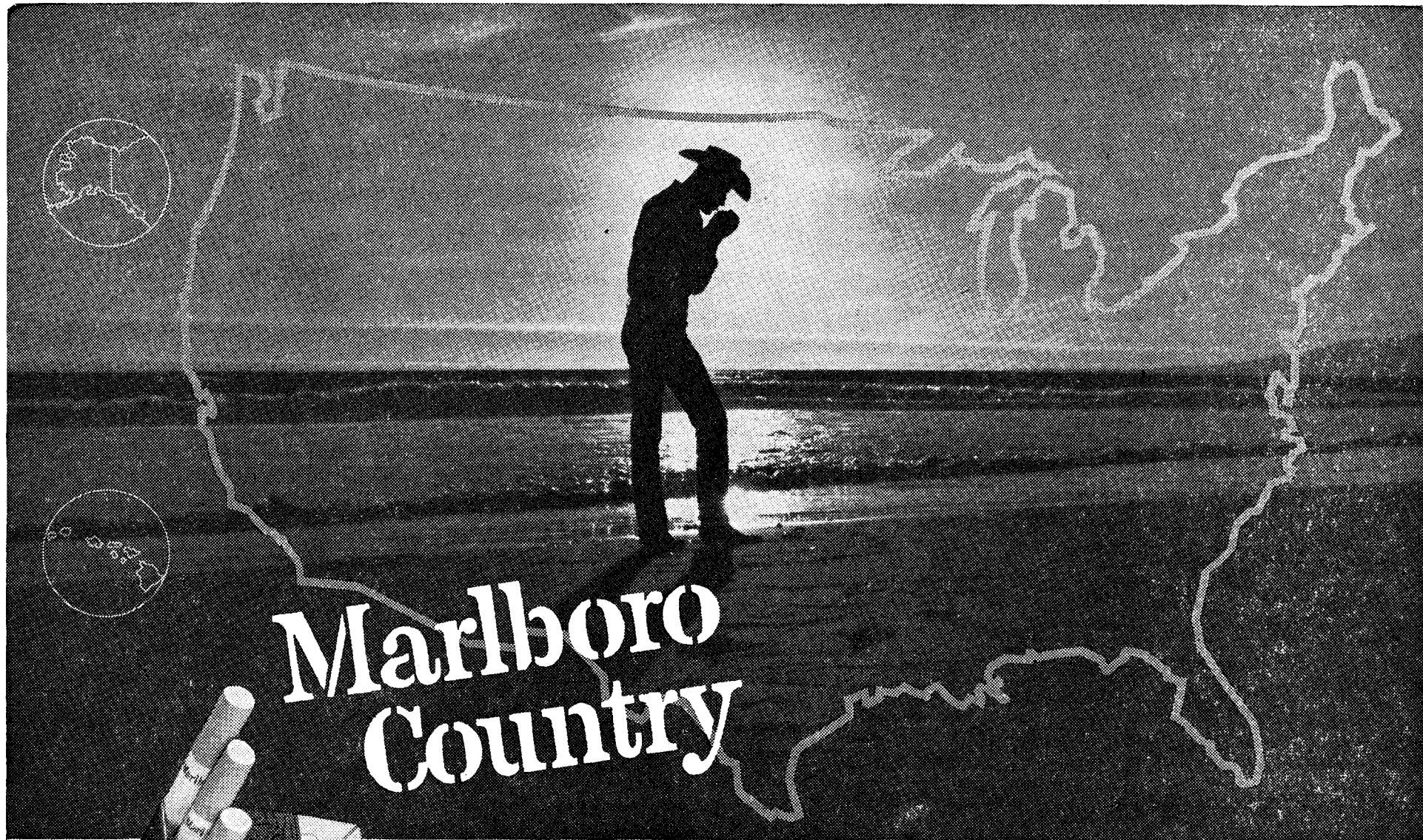
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