Debates Off To Stanford
Blocker Wins Lincoln Forensics Trophy
The debate team recently won all of its meets, and will send two of its teams to Stanford University next week to participate in the Western States Intercollegiate Forensics meet. The teams of Ulrich Merren and Bob McCracken and of Dennis Killian and John Griffin will debate the propositions: "A contract for fire insurance is not a contract at will" and "Water is a public utility that should be regulated," respectively. One of these teams will get to compete against Stanford University at the meet.

Speech Activities
Many members of the Speech are interested in participating in events with their university. A representative will be sent to the Stanford debate meet. The Speech team is interested in opening the debate meet to anyone interested in participating. Details can be found on the Speech Forensics plan.

Off Campus Men
Your issue contains a picture of your picture in the 1950 yearbook and a card from your university. Your assignment is to sign up for an appointment with the university where your picture was taken. The appointment is on Monday, November 14th. The fee is $25 and you determine the time, place, and other details.预报

Fund Raising
Mr. Young is well qualified to organize and conduct a campaign for you. Mr. Young is a retired photographer. A representative of the University next week for organizing the drive. Mr. Young will have a card that can be filled out by the people who receive it. He will be at Beek and Fleming.

Pre· Registration
Can you imagine what the results would be if an individual could be grown from birth to manhood without ever encountering harmful bacteria or germs of any kind? It probably would produce a different type of mental understanding. By Bob Warnecke

There have been other labs designed in the past which would recreate temperature conditions or moisture conditions individual- ly, but here in Tech the Physicist is the first able to reproduce all climate factors such as light, temperature, humidity, gas content of the air, wind, rain, fog, simultaneously and independently controllable. The elaborate system of sterilization of all plants, growing mediums, and equipment; the intricate air circulation system; and the air particulate units have given rise to many new techniques in the design of this unique structure.

The construction of this new lab is quite different from any in the past. Having a concrete framework, it is insect proof, and by maintaining an internal positive pressure throughout the entire structure, escape of the contaminated air is prevented. There is only one point at which air can enter from the outside, and that is through a large filter room in the basement. This consists of a Raytheon Electric precipitator, and a total of 16 by two by three foot-mesh units through which the air passes first. The limiter, charged to 6000 volts, impacts a charge on all parasites moving through it, and then upon passing into the precipitator these charged particles are attracted to alternating plates charged with 6000 volts. These plates are covered with a thin film of oil, thus making the particles adhere to the surfactant film washed off periodically with water. This system is so efficient, that the air is completely dust free upon entering the lab.

Next, the air is pumped into the different distribution centers, which are independent air conditioning units below each lab growing room. The construction of the air system is such that there is a constant flow of air up through the floor of the growing room with an equal pressure at all points. Then, upon rising to the ceiling, the air is drawn out and down into the room containing the conditioning unit. This system is sealed, and from here the used air is again drawn into the circulation system and mixed with fresh air from the intake line. In this way each growing room is an absolute circulation system preventing mixture of the air from the two rooms.

Conditions Controlled

The control on the temperature and dehumidifying units are so sensitive that the room can be regulated at temperatures never varying more than a fraction of a degree. In the green house, the problem of keeping the temperature constant, even with the sun coming through a glass roof, was met by the installation of quick-flicking units, which keep an even layer of water running off the glass roofs at all times. This film of water filters the long rays heat rays of the sun, maintaining the constant temperature. The air on top is then returned to the cooling tank, where it is cooled and sent back to the roof. The inlet inside of the building has an operation center in the control room, from which all environmental conditions previously mentioned can be observed and regulated.

Sterilization of the incoming growing medium, sand and gravel, is accomplished by a series of air tight lines which open both to the inside and to the interior of the growing room. The mixed sand and gravel of various sizes is dumped into these bins from the outside and the doors are shut tight while steam is injected through the medium, after which it is removed on the inside of the building.

Various materials are used as a growing medium, among which are washed sand, gravel, and rice (vermiculite). These, all being inert and quite porous allow a rapid passage of the waterning solution past the plant roots. The advantages of this sort of watering are: (1) Minerals salts in the nutrient solution used to feed plants don't have a chance to crystallize on the roots. (2) The large grain size allows large air spaces and easier root growth in the medium. (3) Comparison and analysis of plants is facilitated in that each is grown in a homogeneous and inert medium. This type of cultivation is known as soil culture.

(Continued on Page 4)
Autumn Theme of Hospital Dance

At Hacker's exchange with the California Hospital fans on Friday night, the girls were on the dance to provide the place donations, entertainment, and recreation for the patients. All of the dancers enjoyed the occasion of the dance, and the dance was quite pleased with the dance, the theme, and the opportunity.

Halldina

Halldina was well represented at the game in the previous dance in the California Tech auditorium. Halldina's personality has added interest to the dance, and the dance was well attended by students as it was by many other dances.

For the fellows who couldn't make it to the games or to the dances, there were those who returned to the house after the game, and an informal rec

coming

Halldina's Barn Dance on Nov. 8 and the ASCF and the FC on Dec. 8 are the major topics of conversation around the house. Follows, get your cars back together as soon as you can in preparation for the game.

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WHAT'S THE MATTER, NO GRIPE?

The students themselves couldn't agree on whether it was a mid-week dance or a mid-week dance. Dr. Clark asked the question at the meeting and the dance was announced at the last moment on the part of students as such that they don't consider the committee worthwhile, if we want the free time with us.

I ask you the same question, periodime, and have we no need for an organized group with such a large number of faculty members?

Do your elected representatives who failed to show up or send representatives that way?

Here is a list of the men who were on no notice to the committee, and who were elected:

Stan Boscutte
Noel Reed
Dallas Peck
John Noble
Oly Gardiner
Bill Brader

Next time a student-faculty relations committee meeting is about to discuss the issue of an aggressive game.

There will be a student-faculty relations committee meeting on the issue of an aggressive game.

Singing Birds

Singing contest is one of the serious problems confronting the men during the rest of the season. As effective as the air pollution is, they apparently can't get away from it. There are problems that will have to be dealt with before many research programs can be considered. There have all other problems that will have to be dealt with before many research programs can be considered. There have all other problems that will have to be dealt with before many research programs can be considered.

Photo Period

The effects of photo periods (sunlight) are also being studied. In conjunction with this it has been found that, all other factors being equal, the night temperatures have a great effect on the results. At this night temperatures have a great effect on the results.

The Tattersall Weiskit

THE TATERSALL WESKITE

The current demand for more color in men's clothing is ideally met by this winter's line, which is a specialty companion to a sport jacket—a cheerful and confident addition to your business ensemble.

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BY KENNETH SMITH

PASADENA, Calif., Nov. 16--Big game fever has broken out all over the campus, as students, brought on by the big game spirit, have been out and about in the streets. The day before the big game there are a few students who will be looking for 97th straight and the best team in the nation, followed by the game today.

Big game fever has broken out all over the campus, as students, brought on by the big game spirit, have been out and about in the streets. The day before the big game there are a few students who will be looking for 97th straight and the best team in the nation, followed by the game today.

Rollins Monday provided the opportunity of the important game. Hacker-Blanchett loop Ufflifer of San Fancisco, for 87th straight and the best team in the nation, followed by the game today.

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The score was 21 to 19, with 19 points scored in the first quarter. The offense was led by Blanchett, who had 19 points.

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The Engineers were forced to accept their bitter defeat, knowing that their league just has a better team than they do. The Bulldogs earned all four of their touchdowns while the Beavers couldn’t muster enough energy to put over their conclusions on the scoreboard.


easpeak the sports

SPACKIN’ SPORTS with Mike

Bally, it’s cold outside. But not as cold as it was at Redlands last Saturday when the Beavers led the Favell brothers to a scoreless tie in the first quarter and only a pass slip-up by the defense in the second quarter. It seems to me that in almost all other contests we showed more of our real stuff strength in the last short while escaping slowly. The worst part of our defeat, however, is the realization that again we end with a gross edge in our RSCM win column.

Next Year?

We’re losing a rag of good men this season. Namely, Numley, Carus Blum, Marks, Tyens, Baker, Scheffel, Stilt Points and Dayton will have trophies hard to fill. An immense crowd of three-thousand Chuck Norman will throw away his sweet pot shams next year and rejoin us. Let’s hop.

Gripes

Those of us that read the “I’ll eat my memories” in the press of the Beavers guests must surely consider the course before passing judgment. As an ardent program propagator, I can sincerely say that I have never come across such a poor excuse for a program in my life. “Sportsmen” have to go so far into the border for information to write about, they’re as high as the sun.

Hardwooders

That hot Beavers group of men that come drooping into the basketball court with the ball on their minds is a good indication that basketball season’s almost here. This week and every week the coming season, Cuck Sny can boast more than two teams out west every night, putting up all its impressive Meatpower.

Fall Athletic Banquet

The Fall Athletic Banquet will be held at the California Club, next Monday night, Nov. 30th. The members of the Varsity Football, Varsity and Fresh in Football, Varsity and Fresh in Baseball, and Varsity and Fresh in Water Polo. The extras are out!

(book)-leather) Mison hits the tape to take first place in the Tech-Pomona country meet last week. The Beavers managed a tie, however, with the Beavers, 20-20.

Countrymen Knot Basketmen Opened Season Tuesday

A strong outing of 28-28 was the outcome of the cross-country meet between Caltech and Pomona last Friday afternoon.

Trains Even

The meet was played on the Tournament Park course and was unique in that the last twelve miles was run in near darkness. Pomona revealed an evenly balanced team, grinding, third, fourth, fifth, seventh, and ninth, while Pete Mason and Bill Shy led the three places for Pomona, while Bob Cobb in sixth, Finl Hal, and Mike Shilen in eleventh led on the Caltech scoring. The winning time for the meet, distance of three miles, was 16:36.

Meet Buildings

This week’s meet, which is to be run at Redlands, pertains another battle. Redskins possess a strong team, which lost to Beavers by the narrow margin of three points in the fall. Pomona won over a 28-mile course, the great advantage for the Caltech men this past season.

Poised (for leather) Mison hits the tape to take first place in the Tech-Pomona country meet last week. The Beavers managed a tie, however, with the Beavers, 20-20.

CITATION OF SPORTS

The Beavers and Dart do give you that neat non-wall coller that needs no starch and stays fresh all day. This means a great amount of time saved and 20% less shrink. (Red Over or French)

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Caltech Watermen

Engineers Victorious Over Loyola As Libbey, Boicourt, Barmore Shine

The Engineers displayed a considerable reversal of form in recent weeks, playing in a way through. Caltech never lost con- trol of the game, and the defense was considerably better than usual.

Scoring having been shared by five Beavers, four of whom each tallied two points. The only Tech men to score four were each of whom took up two points. Frosh Meet UCLA

The day previous to the Var- iety show was the last day of school and with the UCLA Fresh at Caltech in a strong line up on the short end of an outing, the Tech Fresh showed a very creditable performance.

The opening minutes of the game neither team accomplished much, the ball being handled hard and forth. The middle of the 1st quarter saw the Tech leading the Redlands 25-11. Almost all our other contests we line. Baker, switching from half-,...
TO the Quartet

A night of uneven quality, one of the leading orchestras of the world, the Los Angeles Philharmonic, appeared at the wrong end of the line. The previous performances of the orchestra were going to the left, but this was a total reversal. The orchestra was conducted by John Barbirolli, and the program consisted of the first movement of Beethoven's Symphony No. 3, a work that Barbirolli is said to have studied extensively.

The performance began with a slow introduction, and the orchestra entered with a powerful timbre. The playing was characterized by a strong sense of unity and coherence, and the musicians displayed a high level of technical proficiency. The orchestra's sound was rich and full, with a deep resonance that filled the concert hall. The players were well coordinated, and the overall sound was balanced and harmonious.

The performance continued with the second movement, which was marked by a light and graceful quality. The orchestra moved fluidly through the music, with a sense of ease and naturalness. The musicians were in perfect sync, and the sound was cohesive and seamless.

The third movement was marked by a strong sense of energy and drive. The orchestra moved with great conviction, and the players displayed a fierce determination to bring the music to life. The sound was vibrant and dynamic, with a powerful and commanding presence.

The final movement was marked by a sense of triumph and exuberance. The orchestra brought the music to a powerful conclusion, with a final cadenza that was muscular and forceful. The players showed a great deal of emotion, and the sound was intense and dramatic.

Overall, the performance was a tour de force, with the orchestra displaying a high level of professionalism and artistry. The musicians were in perfect harmony, and the sound was rich and full. The performance was a testament to the power of music, and a shining example of the art of orchestral playing.