

Chamber Music Concert Sunday

Music Lecture Series Also to Be Sponsored by Humanities Division

The Chamber Music Concert Series will begin its second-term concerts this coming Sunday, January 14, at 8 p.m. in Dabney Lounge with a program featuring the Dorothy Wade Trio.

Admission Is Free

Dorothy Wade, violinist, was formerly concertmistress in the Mererblum Jr. Symphony Orchestra, and Barbara Simons formerly played first viola with the same orchestra. Virgil Gates will be heard playing the cello, and Barbara Putnam, who will play in only one of the three selections, will play the flute. Barbara Putnam, who teaches flute at U.S.C., has played several seasons with the Hollywood Bowl Orchestra and has also appeared with the Hancock Ensemble.

The trio, which became well known in 1949 when it won first place in the Coleman Chamber Music Contest, now works for the movie industry.

Program

- Trio in C minor, Opus 9, No. 3, Beethoven
Allegro con spirito
Adagio con espressione
Allegro molto e vivace
Presto
Serenade Dohnanyi
1. Marcia (Allegro)
2. Romanza (Adagio non troppo)
3. Scherzo (Vivace)
4. Tema con variazioni (Andante con moto)
5. Rondo (Allegro vivace)
Quartet in D major for Flute, Violin, Viola, and Cello (K. 285) Mozart
Allegro
Adagio
Rondo

Music Lectures

The Division of the Humanities is also sponsoring a series of six lectures on the topic "How the Composer Thinks." These will be given by Ross Lee Finney, composer in residence at the University of Michigan. He will illustrate his lectures with musical examples both recorded and played by him on the piano.

The subject of the first lecture, to be held on next Thursday, January 18, is "The Uniqueness of Musical Craft." Hindemith's (Continued on Page 4)

Throop Club to Dress for Dance

Tomorrow night at 8:30 p.m. the feature attraction at Throop Club will be a Wax Ball (a function sometimes referred to in more prosaic terms as a record dance). In regards to the question of dress, Gil Kitching answers, "yes." There will be plenty of refreshments for all, and rumor has it that one of the notables present will be able to shed light upon the nature of "The Thing."

CES to Hear of Refuse Disposal

The L. A. County refuse disposal plan will be the topic of a talk given by Mr. Hank Bowerman at the meeting of the ASCE next Monday at 11:00 a.m. The civil engineers will be host to the Consolidated Engineering Society at this time.

Last Monday Mr. Whitman, a Pasadena consulting engineer, gave a talk on the problems confronting the young engineer after graduation.

Campus Calendar

- THURSDAY, JAN. 11
12:05 Upper Class Lunch Club
12:10 Throop Club meeting
7:15 ASCIT board of directors meeting in Lower Fleming
FRIDAY, JAN. 12
7:30 Friday demonstration lecture, 201 Bridge
SATURDAY, JAN. 13
6:30 p.m. Fresh basketball Caltech vs. Occidental at PCC
8:00 p.m. Varsity Basketball Caltech vs. Occidental at PCC
SUNDAY, JAN. 14
8:00 p.m. Chamber Music series, Dabney lounge
TUESDAY, JAN. 16
12:05 Fresh lunch club, Dr. R. A. Millikan
7:30 Band practice, Culbertson hall
WEDNESDAY, JAN. 17
7:30 p.m. Orchestra practice, Culbertson hall

Frosh Swarm to Elect Officers

Ballots were cast yesterday for freshman officers who will serve for the remainder of the school year. Results were not yet available at this time. Nominations were made at a class meeting Monday, Jan. 8.

Heading the ballot as candidates for class president were "Moose" Henderson, J. T. Billings and Chuck Daniels. Nominated for vice-president were Cole Williams, J. Peyton and Ed Bryan.

Secretary, Treasurer

Those seeking the secretary's office were Bob Pechacek, George Johnston, Phil Ulrey, Barney Betz and Art Bailey. Frank Joyce, Phil Miller and Sam Vodopia were candidates for treasurer.

On the slate for frosh athletic manager were Hugh Taylor, Bruce Kaiser and Bart Stryker. Candidates for representative on the board of control were Bob Salkeld, Norm Ellett, Bruce Watkins and Willard Richards.

Einstein & Newton Compared Friday

"The difference between the mechanics of Newton and Einstein" will be the topic of tomorrow night's demonstration lecture, to be given by Dr. Richard P. Feynman, professor of theoretical physics. This will be the second lecture in the present series of Friday evening lectures for the general public.

The series was inaugurated last week with the speech "Explaining the Earth with a Microscope," by Dr. Albert Engel, professor of geology.

Pauling's Patent Plasma

Tech Scientists' New Blood Surrogate Will Save Lives in Case of A-Blast

By Don Tierney

If the United States is ever A-bombed thousands of lives may be endangered by the inadequacy of the supply of blood donated to the Red Cross. The shortage may be remedied in the near future, however, by the development at Tech of a substitute for the plasma.

During the last war a group of scientists at Tech headed by Dr. Dan Campbell and Dr. Pauling, developed a substitute for the plasma from gelatin and now the Army and Navy are conducting clinical tests upon oxypolygelatin, as it is called.

Gelatin Is Substitute

Gelatin was found to be a good substitute for the plasma but must be kept at body temperature during the injection into the blood stream. Caltech scientists were given the job to develop a substitute that would not gel under the difficult conditions on the battlefield.

The Oxypolygelatin, or OPG, is made by polymerization of gelatin with glyoxal, an organic chemical that holds the long intermeshing molecules together. Then peroxide is added to divide the brushlike structure of the polymer into new molecules, nearly ellipsoidal in shape, that lack the intermeshing tendency of the original molecules. Thus the gelling property is destroyed.

The new process also may use a much poorer grade of gelatin than could be used for a gelatin injection and thus increases our resources for a substitute. Animal blood can be used for only one injection; more than one may be fatal. The gelatin and its derivatives don't cause these immunization or allergic reactions.

Superior to Plasma

OPG promises to be better than the natural plasma in many respects. It is nearly impossible to sterilize plasma and remove the viruses of many diseases that may have been in the donated blood. The plasma substitute may be easily sterilized and produced at a cost of two or three dollars a pint, and not the 25 or 40 dollars needed for a pint of plasma donated to the Red Cross.

Shock Causes Loss

The plasma, or its substitute, is needed mainly when a person suffers from shock and the plasma leaks through the usually impermeable walls of the membranes into the body tissues. OPG is not a substitute for whole blood, which would be needed in case of profuse bleeding, but it is used to build up the blood volume and albumin content when there has been no loss of red blood corpuscles.

Federal Jobs for Civil Engineers

The United States Civil Service Commission has announced an examination for Highway Engineer (Trainee) to fill positions paying \$2,875 and \$3,100 a year in various Federal agencies in Washington, D. C., and throughout the United States. A few positions located in the Territories and possessions of the United States and in foreign countries may also be filled. Most of the vacancies are in the Bureau of Public Roads of the Department of Commerce.

Requirements

To qualify, applicants must pass a written test and, in addition, must have had college study in civil engineering. For the \$3,100 positions, appropriate

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ME's Offered State CS Jobs

Employment opportunities for graduates in Mechanical Engineering are being offered by the State of California in the State Division of Architecture in San Francisco and Los Angeles.

Get Forms Now

Civil Service examinations for the post of Junior Mechanical Engineer will be held Saturday, March 3; applications must be filed by Feb. 10, three weeks prior to the examination. Information and forms may be obtained from the placement office or by communicating directly with the Recruitment Section, State Personnel Board, 1015 L Street, Sacramento.

JME's Duties

A Junior Mechanical Engineer assists in the preparation of

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Dianetics, Thought Science, Assembly Topic Tomorrow

Revive Chapter Of Chem Society

Caltech's student affiliate chapter of the American Chemical Society was revived late last term. About 25 students representing all four classes met and elected these officers: Henry Richter, pres.; Eliot Butler, 1st vice pres.; Dick Jones, 2nd vice-pres.; Pop Connelly, sec.; and Stan Rawn, treasurer.

The next meeting will be tomorrow at 12:30 to initiate a membership drive. This drive will be concluded in about two weeks at a meeting at which Dr. Beckman of Beckman Instruments Co., will be the featured speaker.

Van Vogt, Cooke, to Defend Engrams; Big T Business Manager Nominations

"Dianetics: Science or Hoax," will be the topic to be discussed by two authorities on the subject at the assembly tomorrow at 11:00 in Culbertson.

Two Authorities Speak

A. E. Van Vogt, noted science-fiction writer and director of the Hubbard Dianetic Educational foundation, and Chas. E. Cooke, a psychologist in private practice and a leading authority on hypnosis who has talked to our Biology Club and the County Medical association on the subject will both speak, with a question period following.

A number of Techmen have shown considerable interest in this "science," which was originated by L. Ron Hubbard eight months ago. The Los Angeles branch of the Hubbard Dianetic Educational and Research foundation which was started Oct. 14, 1950, has 52 employees and 7000 on their mailing list.

Architect Will Speak Tuesday At Y Forum

"The Esthetic Aspects of Architecture" will be the topic of the Y forum of Jan. 6 at 7 p.m. in 119 Kerckhoff by Mr. C. M. Deasy, architect from the local office of the American Institute of Architects.

Illustrated by Film

This talk will be illustrated by a film entitled "Architecture of the West." Carl Hirsch, who is in charge of this forum, stated that Mr. Deasy has had a lot of experience in speaking, especially on this subject.

Draft Forum

A tentative forum on "Is the Draft the Shaft?" is being planned for the near future. It will deal with happenings after induction as well as the usual pre-induction material.

The Y program of visiting churches of various denominations is also on the immediate agenda.

ULC Program

For the next few weeks the Upperclass Luncheon Club will feature speeches in conjunction with this field trip program. On Jan. 11 Father Cranham of the Caltech Newman Club will speak on Catholicism.

The Jan. 18 meeting will have a talk on orthodox Protestantism, while the Rev. George Hive of the First Baptist Church will speak on Jan. 25 on liberal Protestantism.

Student Shop

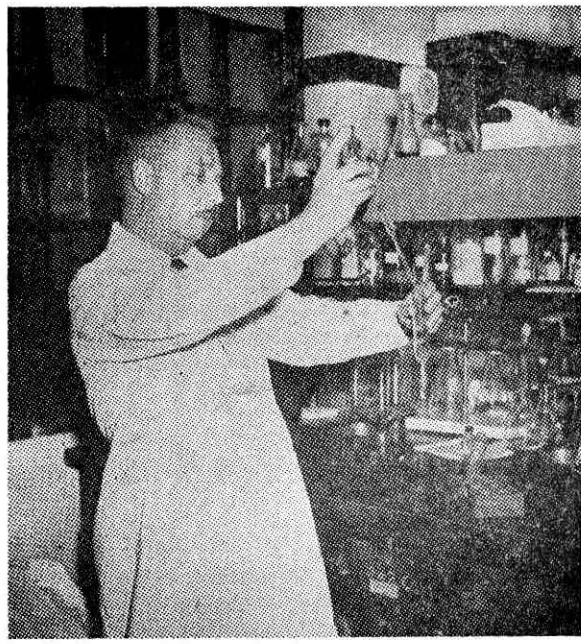
All members of the Student Shop are asked to attend a meeting to be held next Monday at 11:00 in 206 Dabney. Voting on a new constitution will be the main order of business.

Athletic Council Appointees for 1950-1951 Given

Athletic Council appointees for this school year have been announced by Dean Paul C. Eaton, chairman of the faculty Physical Education Committee.

The Council, composed of representatives of the faculty, ASCIT and alumni, directs the athletic policies of the Institute. Student members, appointed by the ASCIT, on the Council are Ulrich Merten, ASCIT president; Dave Hanna, ASCIT Athletic Manager; Norm Gray, and Jack Martin.

Members of the faculty Physical Education Committee who were appointed are Dr. Richard Jahns, Dr. Rodman Paul, Dr. Royal Sorensen, Coach Bert LaBrucherie and Coach Ed Preisler. The Alumni member, chosen by the CIT Alumni Association, is Dr. Richard P. Sharp, and on the council in an ex-officio capacity are H. Z. Musselman, secretary, and Dean Eaton, chairman.



Dr. Dan H. Campbell, professor of Chemistry, and discoverer with Dr. Pauling of the new plasma substitute.

The whole blood may be kept for only 30 days before it must be processed and the plasma removed.

Plasma Supply Insufficient

The supply of plasma has been sufficient to prevent an active interest in a substitute by the government. But with the imminent danger of atomic attack, in which there would be a great shortage of plasma, the Army and Navy have begun clinical tests with the OPG.

The facilities now being used at a pilot plant are able to produce 150,000 units a month—the average victim of an atomic attack would require about 40 units, or pints, to save his life.

Government Responsible

Dr. Campbell feels that the reason a government stockpile has not been started is due solely to "government lethargy," since the substitute has distinct advantages over the plasma itself in that it is cheaper, can be sterilized, and is more stable.

He feels that a company could stockpile several hundred thousand units and if not needed for emergency they could be used to advantage in ambulances and other emergency units.

Foreign Studies Are Encouraged

The Institute of International Education has announced its list of fellowships and scholarships for foreign study during 1951-52. The fellowships offered will include the following:

How to Apply

Those who wish to pursue graduate studies abroad in 1952-53 may apply to the U.S. Student Program of the Institute of International Education for grants under the Fulbright Act. Competitions open and close a year in advance of the academic year in which the student wishes to study. To be eligible, a student must be a graduating senior attending an institution in the state in which he is now residing.

General eligibility require-

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Correction

The location for the ASCIT dance this term, tentatively announced in last week's issue of the Tech as the Oakmont Country Club, has been changed to the Riviera Country Club, according to First Rep Art Case.

Claims of Dianetics

The dianeticists claim they have a science of thought which goes farther than modern psychiatry. Their basic theory is that frustrations and complexes are at the root of man's troubles, and that the removal of these complexes and frustrations by dianetic treatment restores clear thinking.

Psychomatics Cured

They postulate two types of complexes, "engrams," which are received during unconscious states, and which are more significant than "blocks," which are received during conscious states. Dianetics, they claim, has been validated through the cure of psychosomatic illnesses, and a few cases of cures of physical illnesses, probably psychosomatically caused.

Nominations for the recently vacated office of Big T business manager will also be held at this assembly.

Interview Schedule

- There have been some changes in the Interview Schedule for January. We call the following to your attention:
WESTINGHOUSE change of dates: will now be 18th Jan. Group Talk 4:30, 101 Dabney Interviews Jan. 22nd.
The following includes changes of date and additional interviews scheduled, bringing interview information up to date.
THURSDAY, JAN. 11—Carbide and Carbon Corp., Dr. R. W. McNamee, Supt. of Res. and Dev., So. Charleston, W. Virginia. They will be selecting prospective candidates for employment in any one of the following Laboratories: (Located in New Jersey, W. Virginia, New York, and Ohio) Bakelite Div., Carbide & Carbon Chemicals Div., Res. & Dev. Lab., Electro Metallurgical Div., Res. & Dev. Lab., The Linde Air Products Co., Res. & Dev. Lab., National Carbon Div., Res. & Dev. Lab.
FRIDAY, JAN. 12—BS/ME, Analyze lab. tests of turbomachinery, facility in writing technical reports desirable. Advanced degrees in Ae, Ch, ME specialized in Aerodynamics, Thermodynamics, and Vibration Analysis. AIRESEARCH, Los Angeles—Mr. Leighton King, Chief of the Preliminary Design Section.
MONDAY, JAN. 15—BS, MS/EE, ME. HELIOPOT CORP., South Pasadena (connected with Beckman Instrument)—Mr. Robert N. Stapleton.
TUESDAY, JAN. 16—DOUGLAS AIRCRAFT, Santa Monica, Calif.—Mr. C. C. LaVene, Group Meeting, 4:30, 206 Dabney. All interested are invited to attend.
WEDNESDAY, FRIDAY, JAN. 17 & 19—SHELL OIL CO.—Dr. Bailey, BS, MS/Ch, ChE, ME, PhD/Ch. Nationwide.
WEDNESDAY, JAN. 17—BS, MS/ME, ChE, GOODYEAR TIRE & RUBBER CO., All Plants—Earl Cook.
THURSDAY, JAN. 18—PhD/Ch & BS/ChE. MINN. MINING & MFG. CO., St. Paul 6, Minn.
THURSDAY, JAN. 18—BS/ME. AMERICAN SMELTING & REFINING CO., Salt Lake City, Utah—Mr. R. C. Beckstead.
THURSDAY, JAN. 18—WESTINGHOUSE, Los Angeles—Group Talk—4:30—101 Dabney.
THURSDAY, FRIDAY, TUESDAY, JAN. 18, 19, 23—Ae, ME, (servo-mech. necessary, design helpful), EE (design helpful), CE (structural design), Ch, Ma (A), Ph (electronics, fluid flow etc.), and Aerodynamics with BS and Advanced degrees. DOUGLAS AIRCRAFT, Santa Monica, Calif.—Mr. C. C. LaVene.
MONDAY, JAN. 22—WESTINGHOUSE, Los Angeles—Stanley M. Johns, E. W. Morse, Los Angeles and G. D. Lobingier, Pittsburgh, Pa.
MONDAY, TUESDAY, JAN. 22 & 23—BS/A, Ch, MS/ChE, BS & MS Mechanical Engineers. SHELL CHEMICAL CO., Pittsburg, Calif.—D. B. Luckenbill and E. S. Bodine. Plant Manufacturing. Operations. Process and Product Development.
REST. WEDNESDAY, THURSDAY, JAN. 24 & 25—BS, MS/Ph, EE, ME, Ae, Ma, PhD/Ph, EE, The Aero. HUGHES AIRCRAFT CORP., Culver City, Calif.—R. F. Mettler.
THURSDAY, JAN. 25—BS/ACh, ChE. HERCULES POWDER CO., Wilmington, Delaware—Geo. F. Cooper, Technical Employ. Supervisor.
FRIDAY, JAN. 26—Ph, ME, EE—All degrees. I.B.M., Poughkeepsie and Endicott, New York, Mr. E. C. Stranden, and L. R. Mobley.
MONDAY, TUESDAY, JAN. 29 & 30—RCA—Mr. Coleman. Talk—4:15, 206 Dabney. BS and up, EE, ME, Ma, Ph. Interview.

ROTC at Tech?

"The air is filled with the sound and fury of people who know nothing about the draft giving advice to other people who know nothing about the draft"—Tech staff member, upon reading this editorial.

There have been rumors drifting about school for the past few months, unsubstantiated by the administration, that if the students here demand an ROTC, and if there are not enough deferments given to keep an active student body, such a training program might be installed.

There are several points to note about possible features of any ROTC program. We might examine the way such a plan works at another institution, MIT, with problems similar to those of Caltech. Our information is obtained from the September 29, 1950, issue of the *Tech*, MIT's undergraduate paper and from the MIT catalogue.

1. How would enrollment in the ROTC enable a Caltech student to complete college?

According to the MIT paper the following arrangement allows the student, in many instances, to finish school: a draft deferment agreement is signed with the ROTC; then, quoting from the MIT *Tech*, "this contract, if the student is in the advanced course, (Ed. —see question 2) is practically a guarantee that he will not be drafted until he finishes school. To the freshman or sophomore, it means that he probably won't be inducted during his summer vacation. The agreements stipulate that one take all four years of ROTC and accept a reserve commission, if offered, at the end of the course."

2. Would the ROTC be voluntary at Caltech?

At MIT an ROTC course must be taken by freshmen and sophomores; juniors and seniors may take an advanced course, but are not required to; and, under a new government ruling, seniors and graduate students who are vets may take the two year advanced course in one year, and will be in line for a reserve commission after that year.

However MIT, being a land-grant college, must offer those compulsory first two years of ROTC. That the program at Caltech would have to be taken by every freshman and sophomore is a question to be decided by the administration and ROTC officials.

How non-veteran juniors and seniors at Caltech would fit into a newly inaugurated ROTC schedule is still another point. It is probable that juniors would be admitted to the early course, later to take an accelerated advanced course, but whether they would be required to take ROTC we couldn't guess.

It might be noted again that a four year hitch in the ROTC was required for deferment at MIT. It is also probable that a definite percentage of the student body would have to sign up for the program before the Army would give it.

Speaking facetiously, an optimum arrangement would be to have the lower half of the class in the ROTC and those in the upper given the choice of enrolling. That way, everybody gets deferred.

3. Would we at Tech have the time for such a program?

Looking in the MIT catalogue, we find that the ROTC course takes about — hours a week. The administration here, as stated in the article about the draft in last week's issue of the *Tech*, would probably lengthen the course from four to five, or at best, four and one-half years, if an ROTC program were undertaken.

These three questions, we realize, do not cover even a major portion of other problems associated with the installation of a ROTC at Caltech. For example, we have assumed that the world situation will remain in the present state of half-crisis, short of total war, and that Congress will enact no drastic changes from the present law in any new draft bill.

At any rate, we believe that ROTC at Caltech deserves serious and fast consideration by the students. Until the new draft law is passed it would be hard to know what to decide.

But if the present situation is not improved and the probability that half or more of the Caltech undergraduates will be taken into the Army, without finishing college, remains—then we should demand an ROTC program—voluntary, if possible, compulsory, if not—that will enable us to remain in school.

The lesser of two evils in this case appears to be ROTC.

How the Other Half Lives

Editorial Note: The following poem was taken from the Illinois *Tech's Technology News*. It is still timely, as those of us who are still recuperating from the vacation can testify.

HAPPY NEW YEAR!

'Twas the Night After Christmas—and, boy, what a house!
I felt like the devil! And so did the spouse.
The eggnog and candy and turkey were swell
But ten hours later they sure gave me hell!

The stockings weren't hung by the chimney with care,—
The darned things were sprawled on the back of a chair
The children were nestled all snug in their bed,
But I had a large cake of ice on my head
And when at long last I dozed off in a nap
The ice woke me up as it fell in my lap.

Then for some unknown reason, I wanted a drink,
And so, started feeling my way to the sink.
And I got along fine till I stepped on the cat,
But I just don't recall what occurred after that.
When I came to, the house was all flooded with light,
Though under the table, I was high as a kite,
While visions of sugar plums danced in my head
I somehow got up and got back to bed.
Then what, to my wandering mind should appear,
But a miniature sleigh and eight tiny reindeer.
Then the sleigh seemed to change to a red fire truck,
And each reindeer changed to a bleary-eyed buck;
I knew in a moment it must be old Nick—
I tried to cry out but my tongue was too thick.

Then the old devil whistled and shouted with glee
While each buck pawed the earth and looked daggers at me.
Then he called them by name and the names made me shudder
When I heard them I felt like a ship without rudder.
"Now Eggnog! Bacardi! Four Roses! and Brandy!
Now Fruit Cake! Cold Turkey! Gin-Rickey and Candy!
To the top of his dome to the base of his skull,
Now whack away, crack away, with thumps that are dull!"
And then in a twinkling I felt on my roof
The prancing and paying of each cloven hoof.

How long this went on I'm sure I can't say
Though it seemed an eternity, plus a long day,
But finally, the Night After Christmas had passed
And I found I could really think straight at last.
So I thought of the New Year a few days away
And I've made me vows no tempter can sway.
I'm sticking to water,—don't even want ice,
For there's nothing so tasty, there's nothing so nice.
The night after New Year may bother some guys
But I've learned my lesson,—yes, brother, I'm wise.

You can have your rich victuals and liquor that's red,
But what goes to my stomach, WON'T go to my head.
So a big "HAPPY NEW YEAR" to you and to all
I'm back on the wagon,—and I hope I don't fall!



CAMPUS BREWINS

Oh, wo! Oh, woeful, woeful,
woeful day!

Most lamentable day, most woeful day,

That ever, ever, I did yet behold!

—Shakespeare.

The Beak, with breath coming in short, irregular gasps, arrived in the nick of time for his first class of the new term. The Beak was eager for knowledge. He

ON THE RECORD

By George Abell

Movie Review:

Marriage of Figaro

Currently playing about the Los Angeles area is an excellent German film release of Mozart's delightful comic opera, "The Marriage of Figaro." Unlike many fine and not so fine films of a similar nature released by Italy, "The Marriage of Figaro" is very good technically. In particular, here the sound track is sufficiently good to do full justice to Mozart's exquisite music.

The complicated story, which deals with the ultimate wedding of Count Almavivo's servant, Figaro, to the maid, Sussana, is well executed. Not only is the acting, on the standards of operatic acting, good, but the sets are very convincing.

With the exception of the page boy, Cherabino, the singing (done by unseen opera singers whose voices are dubbed into the sound track) is uniformly good.

Berger Excellent

The star of the show, vocally, is Erna Berger, the European coloratura-soprano. Miss Berger's bell-like voice is beautiful, clear, and wonderfully controlled.

Those who understand German will delight that both the spoken dialogue and singing are enunciated clearly. For the rest of us, the story is explained with adequate English subtitles (a feature of opera on the screen which is unfortunately lacking in stage productions).

Musical Chamber Concert

The fourth in the excellent series of chamber concerts sponsored by the Caltech Musicale, the Faculty Music Committee, and the Humanities Division will be next Sunday evening, January 14, in Dabney Lounge at 8:00 p.m.

Those who attended the all Brahms program on December 10 were well rewarded, and will vouch for the high quality of these concerts. We hope for a large turn out for this most varied and interesting program next Sunday. Admission, of course, is free.

MUSIC THIS WEEK

Tonight:
Los Angeles Philharmonic Orchestra; Oscar Levant, pianist.
Philharmonic Auditorium
Vaughan Williams: Fantasia on a Theme by Thomas Tallis
Rimsky-Korsakoff: Symphonic Suite, "Scheherazade"
Tchaikovsky: Concerto No. 1 for Piano and Orchestra

Friday, January 12:
Los Angeles Philharmonic Orchestra; Oscar Levant, pianist.
Philharmonic Auditorium
(Matinee) Same Program as Thursday.

De Paur's Infantry Chorus
Thorne Hall, Occidental College;
8:15 p.m.
Saturday, Jan. 13:
DePaur's Infantry Chorus
Philharmonic Auditorium; 8:30 p.m.

Sunday, Jan. 14:
Musical Chamber Concert: Dorothy Wade, violin; Barbara Simons, viola; Virgil Gates, cello; Barbara Putman, flute. Dabney Lounge; 8:00 p.m.
Beethoven: Trio in C Minor, op. 9, No. 3

Dohnanyi: Serenade in C, op. 10
Mozart: Quartet in D Major, K 285.
Monday, Jan. 15:
Blanche Thebom, mezzo-soprano
Philharmonic Auditorium, 8:30 p.m.

Wednesday, Jan. 17:
Hungarian Quartet
Wiltshire-Ebell Theater; 8:30 p.m.
Beethoven String Quartets: (second in series of five concerts)
Opus 18, No. 2; Opus 131; Opus 59, No. 2.

bent his gaze upon the modestly attired professor, who, donned in garbled tweed, was in the midst of an inarticulate muttering.

The professor, with eraser in one hand, and chalk in the other, covered the board with only half-seen symbols, and with great skill, attained only after 45 years of practice, was able to obliterate the whole mass before anyone could see, regardless of the angle of vantage.

The Beak groaned aloud. This class in mystical phlogiston 2b was going to be the death of him. His thoughts wandered on to the coming events of the weekend, and he licked his chops.

's No Snow!

Proceeding alphabetically, we cannot but start with the unexcelled events of Blacker. The social season there got under way: and it was a cold and frosty beginning with a snow party up in the hills where there was no snow. For if there were snow, it would have been a snow-party, yet, marry, a snow-party 'twas, so 'tis just as well there was no snow. By the mass, no snow.

However, this appeared not to disappoint the participants, and, with the earnest eagerness in matters social which is characteristic of Techmen, they proceeded to disregard the fact that a snow-party sans snow is, when you get right down to it, not really a snow-party.

Pyatt on the Ball

Be that as it may. As usual, Pyatt was on the ball. When a man's verses cannot be under-

Who Dealt This Mess

by John Rogers

The hand discussed below was played in last year's Intercollegiate Bridge Tournament. It illustrates a very simple example of a play known as a throw-in. North is the dealer and east-west are vulnerable.

BIDDING			
N	E	S	W
P	P	1N	P
P			
	S J,8,5		
	H J,7,5,2		
	D 10,4		
	C 8,3,2		
S A,10,6	N	S K,9,4	
H K,9,8	W	H A,10,4	
D J,9,7,5		D Q,8,6,2	
C J,9,5	S	C 10,6,4	
	S Q,7,3,2		
	H Q,6,3		
	D A,K,3		
	C A,K,7		

West's opening lead will probably be the five of diamonds, although there is certainly some justification for leading from one of the shorter suits in the hope of striking a longer and more powerful suit in east's hand. (West really has little hope of taking many diamond tricks.)

What Lead

South should win the first trick with the ace and promptly take four club winners. The situation now is that south must take one more trick in addition to the king of diamonds. Since the north-south partnership does not have either the heart or the spade ten, a lead of hearts or spades by north-south would result in the loss of three tricks in the suit led.

These three tricks, coupled with two losers in both diamonds and the other major suit, would add up to seven losers, and the contract would be set. The only way in which south can take the

stood, nor a man's wit seconded with the forward child understanding, it strikes a man more dead than a great reckoning in a little room. Thus, had Pyatt not been on the ball, the dram of ale would have done the noble substance of a doubt to his own scandal. Truly, Pyatt was on the ball.

After he had proclaimed that there would be no Friday night dinner up in the hills, the troops arrived to find gallons of spaghetti on hand. Not one member of the now infamous Blacker social committee was on hand (along with the spaghetti). Middlebrook, who is co-social chairman, and the operator of the date bureau, couldn't find a woman.

Couch Contestants

Mason and Pilkington staged a "I can go to bed later than you can" race Saturday night. It was two a.m. when the Beak retired, but the two were still competing on the couch. If the interim be but a sennight, time's pace must be so hard, that it seems the length of seven years. Thereupon, the Beak left early in disgust after seeing Lauritsen thrown in the shower for waking up everybody at an undue hour on the Lord's day.

There we leave Blacker. Walking over to Ricketts, where some exchanges were had over the weekend, we know nothing except that Polk is out of it.

"Buzzing"?

We next came to Fleming, that buzzing beehive of blundering buffoons. Friday night was uneventful, and the troops disseminated throughout Pasadena in search of wassail. It is rumored that this was fruitless. The lendeman, however, saw the grueling revelry of a theater party at the Playhouse.

The troops attended in large numbers, and a good time was had by all. The play was well liked, and although some of the carousers slunk off to the Boar's Head Tavern in Eastcheap, most of them ended up in Fleming

necessary seventh trick in either hearts or spades is to force the defense to lead one of the suits.

Proper Play

The proper play, then, after taking the four club tricks, is for south to play the king of diamonds and lead the diamond three. In view of the fact that this is the defenders' longest suit, such a play may seem somewhat suicidal. There is, however, no way to prevent east-west from taking all their diamond tricks, and if one of the defenders has five diamonds, the contract can not possibly be made by any type of play.

The Throw-in

Fortunately, the diamonds split evenly; and the defense, after taking two tricks, is forced to lead either hearts or spades. This play, in which declarer gives away the lead in order to compel the defenders to lead a suit unfavorable to them, is called a throw-in.

By its use, south makes the contract by taking a seventh trick in one of the major suits. Naturally, in discarding on the defender's diamond leads, declarer must be careful not to unguard the spade queen or the heart jack by careless sluffing.

The California Tech

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

California Institute of Technology
1201 East California Street, Pasadena, Cal.

Subscription rates: \$1.50 per year.
Entered as second-class matter Nov. 22, 1947, at the Post Office in Pasadena, California, under the Act of March 3, 1879.

Offices: Lower Fleming
Telephone: SYcamore 6-7121 Ext. 180

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lounge, clammily clutching each other in the darkness.

Dem Broads

The new records purchased were found to induce enthusiasm in some, and scorn in others. Amongst the operators present, the watchful Beak espied one-girl-man Forgy, Ed Schlinger with his supple odalisque, the swarthy Heed Ghauri clutching a Desdemona (it is rumored that he wishes to make this alliance permanent), and the tall goof from the East, J. Kidder toting a light-heavyweight from Hoboken.

Also present were Lynam and Carl Anderson, both returns to Tech, the first dapper and spry, while the latter, stooped disconsolately, sucking on his pipe. Dancing went on until all hours, and the Beak came away con-

(Continued on Page 4)

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Sprint Outlook Poor in First Track Forecast

by Pete Mason

Track season started last Monday as a large number of very stiff and sore Tech men began the process of getting stiffer and sorer. No doubt the excesses of the Christmas vacation had something to do with it, but even the cross-country men were heard to complain that they were going to go out for some nice easy sport like bullfighting.

Meets This Term

Coach Bert LaBrucherie urged all interested to turn out as soon as possible. There will be several meets this term, leaving none too much time to get in shape. Assisting Bert in the field events will be Hal Tyson, shot and discus standout of last year.

It's going to be hard to make money in the dashes this year what with several top notch men returning from last year at the other schools. In the hundred, for instance, will be Mason of Redlands with a 9.8 and Roger Reinke of Pomona who ran 9.7 year before last. He had a bad

(Continued on Page 4)

BUTTIN' IN

—by Butler

This week the annual NCAA confab gets under way at Dallas, Texas. The results of this meeting should be quite interesting. The usual topics of eligibility and "purity codes" will be discussed, but probably the most important item will be talk of de-emphasis of football in major colleges. With the PCC talking seriously of dropping the post-season Rose Bowl game and once powerful Saint Mary's dropping football all together, there is a general under-current of feeling against the continuance of making college football big business.

University presidents, athletic directors, coaches, and faculty are now finding that football is putting too much pressure on school officials, while also tending to lower scholastic standards. With alumni continually howling for winning teams, there is no wonder that coaches have ulcers. Football has gotten too big for its britches and the people who run our universities are finding it's high time that college football be played for fun, not as a means of increasing university revenue.

Beaver Sports

This weekend Carl Shy's cagers officially open the season by tangling with the Oxy Tigers. But all is not roses with the Beaver five. At the moment the two regular guards Al Sereno and Harry Patapoff will probably not make the game. Al is still suffering agony from his broken leg—an unusual case in that his leg was not put in a cast. Harry, on the other hand, is feeling agony from the registrar's office. While Carl feels that his club is handicapped for the opener, he knows that his team is in good shape and eager to give the fans an exciting game.

Old Grads

While gassing about the cabela game, I would like to toss a few plaudits to a few of the old grads. Paul "The Goon" Saltman, Jay Montgomery, and Bill Cox all went out this last vacation and rounded up the local team members for practice sessions at the Police Academy. Their experience and spirit were undoubtedly a great help to the team. Thanks fellas for a truly great interest in Tech sports.

SCIAC OK's Track Marks

At the last meeting of the SCIAC representatives and coaches several conference track records were approved. All of them were set by Oxy last year. The most outstanding of these records is in the mile relay, a sensational 3:10.1 set by McKibben, Ruprecht, Barnes and Parker at the Coliseum in the Coliseum Relays. This is only tenths of a second off the world's record and is the second fastest time ever recorded.

CONFERENCE INDIVIDUAL RECORDS

440—time 46.9, by Bill Parker.
880—time 1:51.1, John Barnes.
1 mile—time 4:19.0, by John Barnes.

Mile relay—time 3:10.1, Walt McKibben, Ted Ruprecht, John Barnes, Bill Parker.

ALL-CONFERENCE MEET RECORDS

1 mile—time 4:20.9, by John Barnes.

Mile relay—time 3:18.4, Dave Kamanski, John Barnes, Walt McKibben, Bill Parker.

He: You have a wonderful form, dear.
She: Must you go over all that again?

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Beaver-Tiger Match Opens Tech Season

Oxy Out to Avenge 63-49 Loss to Whittier; Frosh Prelim at 6:30

At 8:00 p.m. tomorrow night in the PCC gym the sound of the whistle will start Coach Carl Shy's basketballers in their first SCIC game this season. For their initial encounter the Beavers are matched against a strong Oxy team that already has a 1-1 record in conference play.

Will Better Record

Although such key men as Cox, Montgomery, and Bowen of last year's team are gone, the new squad is determined to avenge the lowly 1-7 record achieved last year. They would like nothing better than to begin this adventure by stopping the Tigers. Always a tough foe, Oxy has looked good in early games; however a powerful Whittier team topped them last week to the tune of 63 to 49.

In the four practice games the Beavers have played Coach Shy has used many of his men in order to give them playing experience and to enable him to come up with his best starting five. Thus far, center Dick Libbey leads the team's individual scoring with 26 points. He is closely followed by forward Norm Gray and guard Harry Patapoff with 23 and 22 points, respectively.

Full Strength

With the return of guard Al Sereno this week the Beavers should be at full strength. Every one of the starting five is

(Continued on Page 4)

Frosh Sports Roundup

by Nick Nicholson

With two weeks' practice under their belts and a practice scrimmage with the varsity behind them, the frosh casabamen are all ready for Oxy and looking for a win. The game comes off Saturday at 6:30 down in PCC's gym, before the varsity contest.

Tech looked good in the last half of the La Verne game, and since then a lot of new material has come out. Center Fred Anson, averaging 25 points per tilt in two games played thus far, will be Coach Ed Preisler's mainstay again.

Last week, by the way, we neglected to mention Hugh Taylor, who filled out the meager eight man squad that lost a tough one to La Verne. Revenge will be had a week from Friday, though, in a second tussle between the squads.

Track and Field

Training for the track season started this week, with light workouts the order. There's no dope yet on how the squad will shape up. Their first big trial will come March 3 at the conference relays, after a tune-up meet with Riverside J. C.

Some 15 frosh are signed up for tennis team try-outs, which are now under way. The first match is due for Feb. 24 with Redlands to be the victim.

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ATTENTION
BECAUSE SHE
IS SO POPULAR.
HECK! NO
LEATHER JACKET
BURNS
THAT EASILY. HE
SPARKED
THE MATCH
HE STARTED THE
FIRE!

HEY, CHARLIE—YOU GOT THE
WRONG GUY! HE'S A HERO!

KEEP CALM, GALS!
(I'LL SAVE YOU!)

WOW! I SMELL
GASOLINE AND
HAT PANTS
HANGING
ROSES
GO!

CHARLIE WILD PRIVATE DETECTIVE
WILDROOT CREAM-OIL
HAIR TONIC

LOOK, CHARLIE—THAT
HAYRIDE'S ON FIRE!

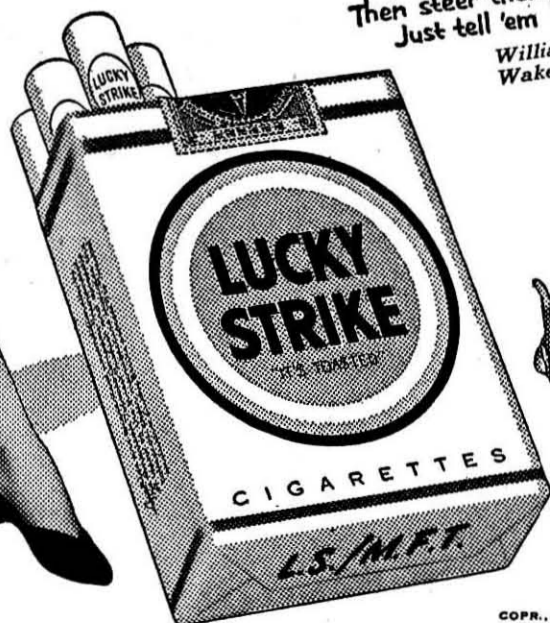
Be Happy - Go Lucky!

When finally that last bell rings,
I rush out in all haste,
For at the end of every day,
There's Lucky's perfect taste!
*Edith Kirsch
Queens College*

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*Arthur Raben
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*William P. Tucker
Wake Forest College*



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CAMPUS BREWINS

(Continued from Page 2)
vined. Frailty, thy name is woman! As the leading character in the play said: "those broads always hook you in the end," and we had best all be wary.

23.8 Mi.

Touching next upon Dabney, Friday saw a fleet of Darb autos converging upon Claremont, where, passing safely the Scylla and Charybdis of Scripps and C.M.C., they came upon the prize premises of Harwood Court, Pomona. Upon reaching Dabney, the girls were met by a crowd of six men (their drivers) who somehow multiplied (parthenogenesis? Flemingogenesis? Einwohneresis?) during the evening to provide a handy band of stags for the women to admire. Gad-zooks!

Entertainment in the persons of Charleston Bob Stanaway and Thirtyfingers (Connelly, Wood, Hedrick) brought the crowd to its feet (ever try dancing while sitting down, 'sblood, it can't be done) whereupon several of the girls mumbled something about Saturday field trips, grabbed cars and drivers and hustled home-wards.

Odd Moments, Indeed!

If anyone has recently noticed Jim McQuiston and Dick Brewer stealing through Dabney House court during the wee hours of the midweek, there need be no cause for alarm, yea, no cause for alarm. For, 'swoonds, men of their ilk are the sort that keep T. Texas Tyler, McKinney's Cotton Pickers, Roy Acuff and Frankie Yankovich in groceries.

At odd moments, McQuiston and Brewer can be seen busily engaged in pedal manipulations that would stagger the imagination of St. Vitus himself. The explanation is simple: By the mass, the boys are taking lessons in the gentle sport of folk-dancing.

Frigid Frolic

Saturday brought a really Fri-

gid Treat (with an ice-skating frolic for those Darbs who dared. Gad-zooks! Norris, Stockebrand, Avery, Crowell, and Admiral Brundin pushed unsteady Sonjas around the rink, while Weil dried off before the fire, and Gillingham made advances towards a fast little number wearing pants. Zounds! Bob Laff didn't show at the dance afterwards with his blind date by B. F. Ludwig, but neither did J. C. Noll.

No Pillows?

The classical film series started off with a bang Sunday: Paul Ballard introduced "Children of Paradise" and the audience writhed in agony for 2½ hours as the picture went over their heads and their posteriors grew insensitive. Besides some trouble with the popcorn bags, however, all went well.

Marry, sir, these are the happenings of the weekend, and in view of the dispassion resulting from the consummation of the miscellaneous wassails, such as the Frigid Treat, may we remind our readers that much water flows by the mill that the miller knows not of.

As the Beak finishes typing these lines, the rosy-fingered dawn is about to break. The cock in Ricketts has just crown, and we have now long in hope

Kept faithful watch, though vain; as once of old
The hapless Mother from her casement gaz'd

All unavailing for his glad return
Whom in her Tent the avenging Kenite pierc'd

With sharp and bitter Nail. In deep Despaire,

And by Frustration rack'd, at last we turn'd

Unsatisfied away.

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CHAMBER MUSIC

(Continued from Page 1)
"Mathis der Maler" will be used as a musical example.

Lecture Schedule

Thursday, Jan. 18, at 4:15 p.m.
The Uniqueness of Musical Craft
Musical example: Hindemith, Mathis der Maler.

Monday, Jan. 22, at 8 p.m.
Music Moves Only in Time
Musical examples: Khachaturian, Sabre Dance; Alban Berg, Lyric Suite, allegro misterioso; Stravinsky, Le Sacre du Printemps, Danses des Adolescents, Danse Sacrale.

Thursday, Jan. 25, at 4:15 p.m.
Melody—"Flat" and "Round"
Musical examples: Tchaikovsky, Piano Concerto, first movement; Bartok, Concerto for Orchestra, fourth movement; Beethoven, Fifth Symphony, first movement; Beethoven, Piano Sonata Op. 14 No. 1, first movement.

Monday, Jan. 29, at 8 p.m.
The Musical Plot
Musical examples: Hindemith, Symphonie Metamorphosis, Turandot, Scherzo; Bartok, Concerto for Orchestra, first movement; Stravinsky, Symphony in Three Movements, first movement.

Thursday, Feb. 1, at 4:15 p.m.
True Confessions of a Composer
Musical examples: Finney, Fourth String Quartet; Finney, Three Love Songs, to

FEDERAL JOBS

(Continued from Page 1)
civil engineering experience or a combination of such experience and education will be accepted as qualifying. Applications will be accepted from students who expect to complete the required courses not later than June 30, 1951.

The age limits, 18 to 35 years, will be waived for persons entitled to veteran preference.

Application Deadline

Full information and application forms may be secured from most first and second-class post offices, from civil service regional offices, or from the U. S. Civil Service Commission, Washington, D. C. Applications must be on file with the Commission's Washington office not later than February 6, 1951.

ME's OFFERED JOBS

(Continued from Page 1)
drawings for air conditioning, heating, and ventilating systems, and other mechanical installations. He helps prepare estimates and specifications for plumbing and other materials, and maintains the library of mechanical and technical publications. There are excellent op-

words by John Donne.

Thursday, Feb. 8, at 4:15 p.m.
The Trained Intuition of the Composer
Musical example: Bartok, Concerto for Orchestra.

The lectures will be given in the lounge of the Dabney Hall of Humanities.

***SPRINT OUTLOOK**

(Continued from Page 3)
leg last year and ran only in the All-conference meet, but as those who saw the Pomona football game can testify, he's in pretty good shape this year. Caltech's prospects were dimmed by the inability of Pat Fazio to run this year, but Jack Walker, Bob Waid, and possibly Bob Parnes will be running for Tech.

Poor Outlook

In the 220 things don't look a great deal better. Walt McKibben of Oxy ran 21.1, one of the better nationwide marks, while Mason of Redlands has a 21.9 to his credit. Bob Waid of Caltech has a 23.5 time and will be assisted by Al Teague, Jack Walker, and possibly Bob Parnes.

In the 440 Oxy again has John Barnes with a best of 48.1 while Bechell of Whittier can probably do 50.0 this year. Waid, Teague, LaTourette, and Parnes will probably carry the banner for Tech.

BEAVER-TIGER MATCH

(Continued from Page 3)
capable of scoring 20 points in a game; so when they all start hitting together in a scoring spree, watch out, Oxy!

Probable line-ups:

Caltech	Occidental
Gray	Palma
Ireland	Whitham
Butler	Potter
Gee	Duncan
Patapoff	Tunney

FOREIGN STUDIES

(Continued from Page 1)
ments for the awards are as follows:

Unless otherwise indicated, a candidate must hold a bachelor's degree from an American college or university or be a graduate of a professional school of recognized standing (or meet this requirement by the summer of 1951). He must present proof of: American citizenship; good academic record and capacity for independent study; ability to read, write, and speak the language of the country in which he will study; good moral character, personality and adaptability; good health.

Application blanks and information may be obtained from the Institute of International Education, 2 West 45th Street, New York 19, N. Y. Applications must be returned by March 1, 1951.

Certain Swiss universities, the Federal Institute of Technology at Zurich, and the School of Economics and Public Administration in St. Gallen offer tuition grants, some of which are supplemented by stipends for living costs. Grants for advanced study and research at Swiss universities in the natural and medical sciences are awarded annually by American-Swiss Foundation for Scientific Exchange, for candidates holding the Ph.D. or M. D. degree.

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