

Next AUFS representative to speak on Brazil problems

Professor of agricultural economics to be heard in three houses and Graduate-Faculty luncheon

Next Monday, January 26, the second of four representatives of the American Universities Field Staff will arrive at Caltech. Lawrence W. Witt, an economist and authority on agriculture, is to report on his recent study tour of Brazil during a week-long stay here.

Nolte concludes visit

Richard H. Nolte, expert on Moslem life who was the first AUFS representative to visit Caltech this year, concluded his report Wednesday. After visiting the other U S colleges participating in AUFS, he will return to his home in Beirut, Lebanon.

Classes to hear Mr. Witt

While he is here, Mr. Witt will address several history, economics and ROTC classes. He will be a guest for lunch with the Geology Club and with the "Y" Graduate-Faculty luncheon group. Next Thursday, January 29, he will speak to the Caltech faculty on "The U.S. and Brazil." He will also visit Blacker, Dabney and Fleming Houses for dinner and discussion.

Mr. Witt is currently on leave of absence as Professor of Agricultural Economics at Michigan State University. He is editor of the *Journal of Farm Economics*. Besides his recent study tour of Brazil, he spent two years in Brazil and Colombia after World War II as a representative of the Department of Agriculture and director of an agricultural resources mission. He also studied in Brazil from 1941 to 1943 as a representative of the Institute of Current World Affairs.

Highly educated

Mr. Witt is a native of Wisconsin, and received a degree in economics from the University of Wisconsin. He received his master's and doctor's degrees in agricultural economics from Iowa State College.

Following Mr. Nolte and Mr. Witt will be two more AUFS representatives. On February 9, Mr. Richard D. Robinson, who has been studying in Turkey, will arrive to make his report. Mr. A. Doak Barnett, an authority on China, will visit here from February 20 to 27.

Drama Club

The Caltech Drama Club will meet to discuss the title, casting and organization of this year's play tonight at 7:30 pm in 208 Dabney.

Campus Calendar

THURSDAY, JAN. 22—
7:30 S.A.E. Meeting, 206 Engineering Building
FRIDAY, JAN. 23—
7:30 Friday Evening Demonstration Lecture, 201 Bridge
SATURDAY, JAN. 24—
6:45 Frosh Basketball vs. Redlands Redlands
8:15 Varsity Basketball vs. Redlands at Redlands
SUNDAY, JAN. 25—
8:00 Chamber Music Concert, Dabney Hall Lounge
TUESDAY, JAN. 27—
7:30 Y Sex Lecture, "Facts of Life," 201 Bridge

Scientists find protein cables

Rope of protein molecules is the picture of a body proteins in muscles, hairs, and fingernails offered by Caltech scientists Linus Pauling, chairman of the Division of Chemistry and Chemical Engineering, and Robert B. Corey, professor of chemistry.

They found in 1951 after 15 years of work on the problem that the individual molecules in muscle, hair, fingernail and many other proteins consist of a series of atoms of carbon, hydrogen, nitrogen, oxygen and sometimes other elements which are coiled into spirals or helices.

Now they have found that seven of these coiled molecules can be twisted into a cable and they believe that these cables are present in hair and some other proteins. Each cable consists of a central molecule, coiled into a spiral, and six other molecules, also coiled into spirals, which are themselves coiled around the central molecule to form the seven-strand cables.

This coiling closely resembles that of a rope, in which the individual strands are coiled in one direction, and then the

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Tech receives Dupont grant

Caltech and Pomona College, at Claremont, are among 32 institutions in the country which will receive new fellowships or grants next year as the result of a survey by the Du Pont Company.

In one plan under this program, the chemistry department of Pomona College was awarded \$2,500 for the 1953-1954 academic year, and in the other plan, the company has awarded a postgraduate fellowship to the Caltech chemistry department to improve the teaching of chemistry to undergraduates by keeping an experienced postgraduate in that work within the department.

Teaching Fellowship

It offers \$2,400 for an unmarried fellow and \$3,000 for one who is married, provides \$500 to the Institute for support of his work, and pays tuition and fees. Similar grants have been made to 12 other universities and colleges in the nation.

At the same time, Du Pont announced renewal of its grants to the University of California at Los Angeles of a postgraduate fellowship in chemistry and \$10,000 for fundamental research in chemistry, and to Caltech of a postgraduate fellowship in biology and a \$15,000 research grant.

Chemistry research

The grants-in-aid to U.C.L.A. and Caltech are to be applied to unrestricted fundamental re-

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Schedule for rest of term's Assemblies already set

Tech Instituturs to be reorganized

The Caltech Instituturs is now being revived and is soliciting new members according to Jack Walker, Instituturs chairman. The Instituturs is Caltech's second service club, the other being the Beavers. The Instituturs take care of athletic parties and perform odd jobs for the ASCIT. Any students who are interested in joining should see their house chairman, who are: Ricketts, Jerry Crocker; Blacker, Jim Crosby; Fleming, Jim Collins; Dabney, Jerry Freeman; Throop, Gary Boyd.

Because Bob Salkeld, elected Institutur chairman for the year 1952 to 1953, left Caltech to attend Yale, the Instituturs was not organized during the first term.

Tech awarded cancer funds

A \$10,000 grant for cancer research at Caltech has been made by the Damon Runyon Memorial Fund.

Part of the grant, presented to Dr. George W. Beadle, and representing a renewal of a grant made last year, will be used for studies of growth-regulating mechanisms and part for studies of some naturally occurring cancer-producing substances.

Bread mold growths

The studies of growth-regulation will be conducted on the bread mold neurospora by Dr. Sterling Emerson, professor of genetics. These were undertaken, Dr. Beadle said, because changes from normal to tumorous growth appear to result from alterations of body processes which regulate growth. The funds allocated to the Division of Biology will also help

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Richard Nolte describes Middle Eastern culture

While Richard H. Nolte of the American Universities Field Staff was here last week, the *California Tech* was able to monopolize a few moments of his time for an interview. We opened the conversation with that interesting but confused subject, "the situation in Egypt." Mr. Nolte said that he had never spoken to General Naguib himself; one opportunity was missed in arrangements.

He finds, though, that it is generally easier to contact and speak to men in the lower echelons and that a few hours' conversation with such men is often more fruitful than interviews with the big wheels. He declined

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Vickman's movies, Caltech orchestra and ASCIT nominations are included

The first assembly lineup of this term will be on January 22, with Leon Vickman showing the results of some of his experimentation with motion photography techniques. As this will take up only a part of the hour, the program will also contain music put on by Dick Jaffe. This should be worth seeing and hearing, so give it a try.

On January 29 the Caltech Symphony Orchestra is slated

The following Thursday, February 19, will feature the PCC Highlighters, a top-notch variety show. The show contains the girl who did the cowboy singing and yodeling at the Pajamarino Rally. As anyone who was there can tell you, don't miss this! And the rest of the show will be equally as good.

Then on February 26 the Caltech Glee Club will put on its world premiere performance. This is going to be another show which we feel will be well worth attending.

March 5 will see the Ben Yost Royal Guards, a first quality group of five male singers.

YMCA offers film classics

As a result of the small amount of publicity on this term's Film Classics Series, all of the memberships were not sold. For this reason, the Caltech YMCA and Film Art Society are selling memberships for the four remaining film classics at \$2.00 a membership (\$1.67 plus \$.33 tax). By doing so, the Y will be able to break even, permitting an even better program next term.

Memberships in Y office

Many grad students and faculty members have not had a chance to buy memberships. Membership cards are available at the Y Office, Dabney Basement. Make checks payable to Caltech YMCA.

The four films are all excellent. The fourth is the only silent and is one of the best that was produced.

Next Monday's program

The Monday, January 26, program is the film *The Lower Depths*. This is a French film produced in 1937 with English titles. The film is directed by Jean Renoir from a play by Maxim Gorky, with Jean Gabin and Louise Jovet. "The Lower Depths" is the story of a group of social outcasts, set in nineteenth century Moscow but told with universal appeal. Renoir translates Gorky's purely atmospheric play into a compelling film, distinguished by its poetic quality. In addition there

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Psychologist gives sex lectures

At last, the promised sex lectures sponsored by the "Y" will be given. Next Tuesday at 7:30 in 201 Bridge, the eminent psychologist, E. P. Mindlin—chief of the Veteran's Administration Mental Hygiene Clinic in Los Angeles, will deliver the first of what promises to be a most interesting and informative series of lectures.

The talk next Tuesday is entitled "The Facts of Life" and will concern itself with the structure and function of sexual organs, the biological reasons for sexual urges, and many more sorted topics. Dr. Mindlin will also discuss probably one of the most confusing aspects of the present generation, namely, why does society as a whole have a reaction against the word sex.

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Beginners to learn fencing technique

The Caltech Fencing Club had its first meeting at 7:30, January 14, in the recreation room in lower Fleming. Committees were appointed to take care of equipment and to investigate the problem of finding an instructor.

Wanted: instructor!

The purpose of the club is the promotion of the art and sport of fencing at Caltech. The club invites anyone, regardless of training or experience, to join. They hope to have a program which will appeal to all from novice to expert.

At present instruction is limited to beginners but when and if a professional instructor is obtained there will be instruction for all. All interested parties should contact either Don Roberts, Ricketts 27, or Ron Cochran, Blacker 52.



This is really Richard H. Nolte!

How Interesting ;

Now and then we feel the press of studies let up a little, and being real cultured we look around for a little light reading. Thinking that perhaps a library is a place to find such literature, we wandered into the Humanities Library. On glancing around and searching in the shelves we found very little to catch our fancy. We found plenty of old novels, plays and poems and many more books analyzing these same books but hardly any new or current literature.

The catalog says: "The Humanities Library, in Dabney Hall of the Humanities, provides materials in literature, history, and the other non-technical fields, and offers additional books for general cultural and recreational reading." The shelf of new books would probably show how well these purposes are fulfilled. This shelf now has the following books: Readings in Ethical Theory, The Eyes of Discovery (about exploring), From Main Street to Stockholm; the Letters of Sinclair Lewis, Articles and Pamphlets of Maxim Gorky, The Origins of the War of 1914; vol I, Letters on the American Revolution; 1774-1776, A

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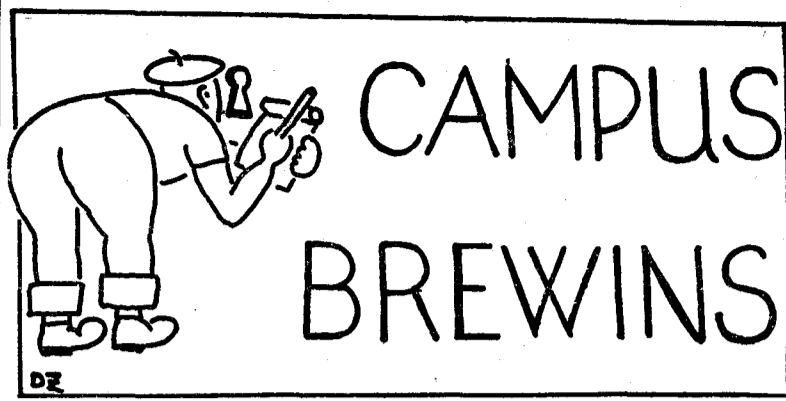
President's message

Intercollegiate and intramural athletics are very important to us as students personally and are held in high regard by the faculty. Practice, especially for Caltech teams where 1½ to 2 hours per day is the maximum possible, is of the utmost importance in shaping a strong team and maintaining a reasonable level of competition to match other schools.

Classes scheduled for four o'clock and lab courses that run to five o'clock are detrimental to the teams because they prevent players from getting in sufficient practice. With the coming of the AFROTC the number of four o'clock classes has greatly increased. This past year some football players, especially freshmen, had two four o'clock classes and thus got only two or three days of practice per week. Other sports are having the same problem. The difficulty cannot be blamed on anyone in particular but is the result of the complicated circumstances connected with scheduling classes. Next year the situation could be worse with the inauguration of the junior year of AFROTC which includes four classes per week plus drill.

The problem can be solved and the cooperation of the AFROTC, registrar's office, and other groups affected has been assured. The situation has been discussed several times in

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Who was that blushing Ricketts man who rushed out of the young yelling "An Obscenity," and turned to find himself treading on the toes of someone's lil ol' white-haired grandmother?

John Bailey, conducting his high voltage experiments Sunday evening, suddenly plunged his alley into Stygian blackness. When the lights went on again all over the alley, Bailey saw to his amazement, that his sink had been converted to a seething, steaming pool of porcelain.

Paul Concus has been acclaimed the most-talked-about-man on campus by a unanimous vote of the Dabneyites. Paul, given to long soliloquies in far distant rooms, apparently has an ardent admirer who attempts to be his constant telephone companion. After four or five nights of searching and calling for Paul Concus to come to the phone, the Darbs decided that this methodology was undoubtedly the most efficient means of combating Fleming's five-kilowatt phonograph amplifiers beamed at Dabney court. As a result, at any odd hour of the day or night one is apt to hear a dozen or two Darbs yelling for Paul Concus at the top of their lusty lungs, completely regardless of

whether there happens to be a telephone call for Paul or not. At last report, Fleming is attempting to counter by arranging with the synchrotron to bring in extra power for their phonographs and Paul himself is beseeching his house brothers to whisper his name among themselves . . . reverently.

The screaming of brakes and general havoc noticeable among automobiles on California Street on Sunday was caused by the Darbs' massive engineering feat of swinging Bob Pachacek's bed between Dabney House and a stately oak nearby, with the bed fifteen feet off the ground, and oscillating with simple harmonic motion. Bob had a hard time getting into bed, since to crown things neatly, it had been short-sheeted.

Sunday found Bob Pechacek complaining, not because he found his bed hanging on a rope between the balcony and a tree, but because someone took it down before he could sleep in it. As Bob said, "I've always wanted to sleep in a hammock."

It seems that one Darb by the name Dave King has incurred the wrath of several fair damsels from that never-never land behind the Great White Wall. Dave told a certain Schmippsie that he couldn't take her out as much any more, as it was costing too much. This Schmippsie observed Dave at the B Ball game Friday with a Pomona girl, and has now nominated him for

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MUSICAL SHORTS

by Stanley Grotch

On December 27 of last year, the Metropolitan Opera Company presented the world premiere of Howard Dietz's English translation of Puccini's "La Boheme." The opera will be broadcast in Italian on February 21, making this the first season in which the Met has produced the same opera in two languages.

The new production of the Puccini masterpiece was greeted with varying reactions by the critics. Most thought the sets (Rolf Gerard) and the direction (Joseph Mankiewicz) were excellent. The main fault they found was the essence of the occasion, the English libretto.

Operas in English

Once again with this new version we begin anew the discussions of opera in English or in the original language. Dietz, a champion of the opera-in-English school, said in an interview with Harold Schonberg of the New York Times. "After all, opera is music set to words. If you understand the words you appreciate the music more. There's no more to it than that."

"Half a loaf . . ."

I found in listening to the broadcast that only about 30 per cent of the dialogue was intelligible. Yet regardless of how few of the words are understandable, the English is superior to the foreign, in which nothing can be understood.

I still think it will be necessary for the listener to have an understanding of the plot beforehand in order to supplement this English version. The new production will not replace the dozens of "plots of the opera" books or any of the standard librettos.

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SEC'S AT TECH

by Bernie Schweitzer & Tou Taussig

It looks to us, like there are more girls named Pat than all the other names put together. Sure enough, this week's choice is named Patricia, "Pat," Pualoa.

Pat works up on the second floor of Throop Hall in the accounting office. Her official designation is that of voucher clerk, which, after many minutes of concentrated explanation and deduction, means bookkeeper.

Pat was born in Columbus, Ohio, and came out to California last year after spending six months working for the Ohio Bell Telephone Company.

Pat's sporting interests range from swimming to golf, though she claims that her golf game



consists mostly of caddying for her husband.

Duties of ASCIT officers

Big T Editor

Being Editor of the Big T is a good job for a man who wants to express his artistic, literary, and organizing abilities. Most of the art work on the Big T is present in photography, although there is some drawing. The editor must see that the photographs and type are arranged on the page in a manner pleasing to the eye. Planning of the photographs to be taken and editing them presents a good opportunity for original and imaginative work.

Yearbook theme

By choosing the right theme for the yearbook, the editor can give himself the chance to write on one or more of the topics that interest him at the time he is publishing it. Then, under the literary heading, comes a mass of proofreading for him to do.

Time consuming

This job requires a lot of

Big T Business Manager

The work of the business manager of the Big T can be divided into two phases: the making of the necessary contracts and the selling of ads. The first part involves contacting as many printers, photographers, and engravers as possible and procuring from them bids for their work on the Big T.

Printer problems

The bids accepted are the lowest, but care must be taken that the contractor does fine workmanship and will live up to his part of the contract. The former may be found out by inspecting samples of his work and the latter by any previous experience he has had with the Institute.

In this department and the writing of the final contract George Green, the Institute Comptroller, is an indispensable aid. He is acquainted with the reputation of most of the bidders and checks the contract to see that we are fully protected.

In the second phase, the business manager is in the opposite position. He is the seller, rather than the buyer. To sell the ads he has a group of salesmen who contact the prospective ad buyers and make the sales. These salesmen receive a commission

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PRESIDENT'S MESSAGE

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the past two months at Board of Directors meetings, and it has been discussed with the athletic department and other interested people. This Thursday night, January 22, at the Board meeting at nine pm the problem will be brought up for discussion and action.

The plan of action decided upon is as follows: at the meeting Thursday a resolution will be presented for discussion and action, if passed the resolution will go to the next Student Faculty Relations Committee meeting and then to the Faculty Board. If the resolution is approved by all three groups, the registrar's office will have the authority to attempt to arrange the schedule with a minimum of four o'clock classes. The theme of the resolution to be presented is that we of the student body value highly the continuation of intercollegiate and intramural sports at Caltech and

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25 Years—Serving Techmen
Same Location
Carl's Caltech Barbers
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FLICKER FLASHES

by Ron Cochran

Now playing at the State is one of the current rash of biographical movies. This one differs from the usual Hollywood variety not only by being made in Britain but by being better than average. J. Arthur Rank's production of "The Magic Box" should be rated as one of the best of the season.

Photography fans should be particularly interested in this movie as it is the life of William Frieze Greene, who was one of the early (and relatively unknown) photographers. He was a pioneer in the field of motion pictures and one of the inventors of the movie camera. Aside from

the historical significance, the movie is a moving story of his life through two marriages, several bankruptcies, changes of address and laboratories.

The story is told simply and convincingly; and, although it could, it never does become maudlin. Color could be better, but the photography is excellent. This is one movie that leaves a feeling of truth: the simplicity of presentation and the fine acting of Robert Donat, Margaret Johnston and Marion Schell gives the feeling of inevitability which is the true meaning of tragedy.

Accompanying "The Magic Box" is the "Man in the White Suit" with which most Tech men are familiar.

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(Continued from Page 1)
will be short subjects.

The program of Monday, February 9, will be the films of Jean Vigo—"Zero de Conduite" and "L'Atalante" (1934). The films of Jean Vigo are the expressions of a cinema unhindered by the need for commercial success. "L'Atalante" is a masterful study of a minute

fragment of society—the barge, whose world is a river boat. "Zero de Conduite" is about life at a boarding school interpreted by the eyes of children. Both films reveal a humane intelligence and an instinctive mastery of the medium. When Vigo died at the age of 30, France lost one of her greatest exponents of the cinema.—Griffith, "The Films Since Then."

The program on February 23 is "Our Daily Bread" (American, 1934). Directed and produced by King Vidor. The film examines one solution to the problem of unemployment—a return to the land.

The last program, on March 9 is "The Italian Straw Hat" (French, 1927). Directed by Rene Clair. "Around a simple dual theme of a man who was a little

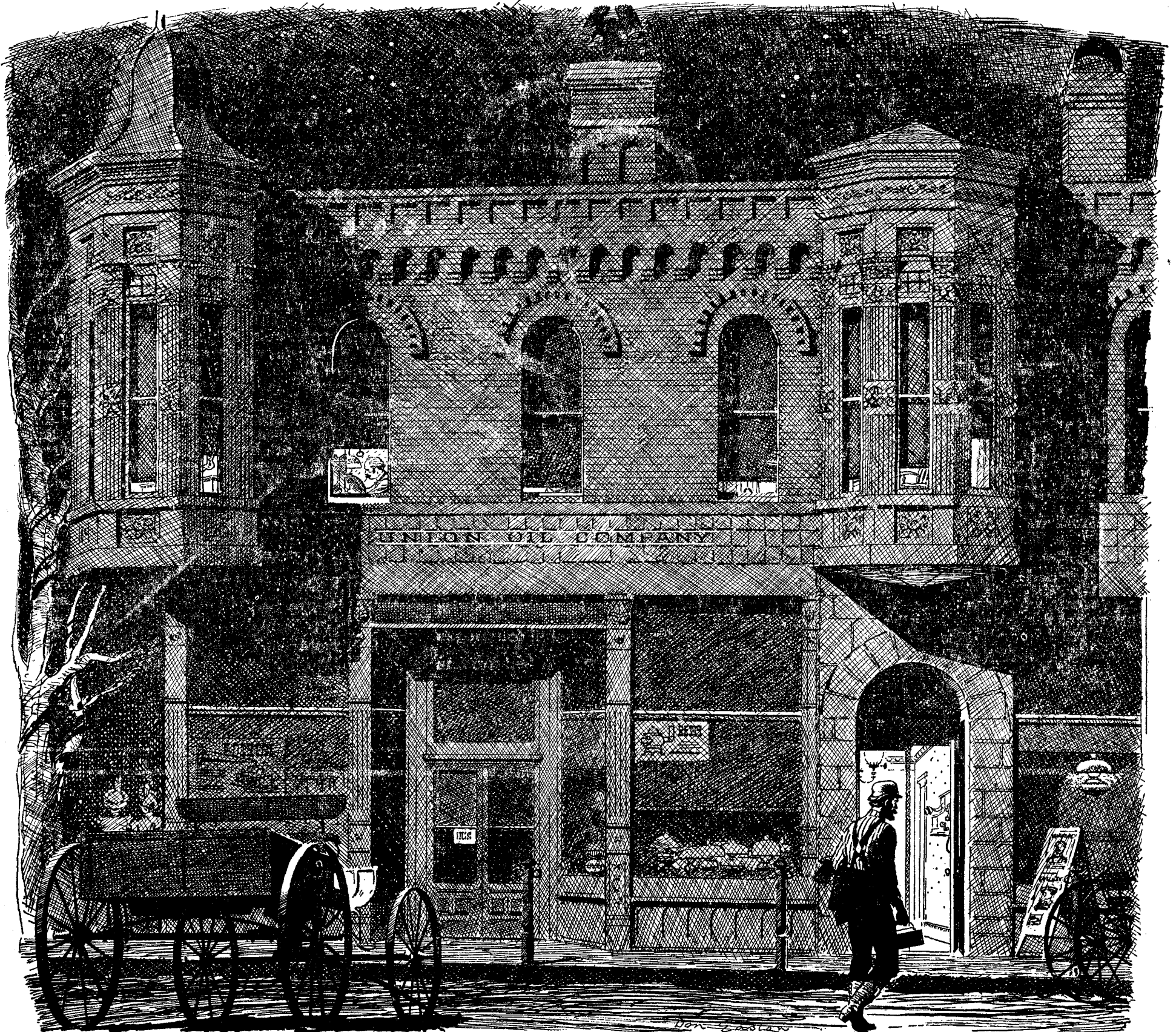
hard of hearing and the destruction of a lady's straw hat, Clair wove a film that was not only exceptionally witty but a penetrating commentary on the pettiness of the bourgeoisie.

DU PONT ESTABLISHES
(Continued from Page 1)

search in chemistry, with the schools themselves determining

the lines of work to be undertaken.

The postgraduate teaching fellowship given to Caltech is to be offered to an outstanding graduate student having two years' experience as a half-time teaching assistant in the chemistry department. The recipient will be required to continue to teach on a half-time basis during the time of his appointment.



Original home of Union Oil Company in Santa Paula, Calif. The company was founded here in 1890. The California Oil Museum is now located in this building.

WHY DO YOU EARN 2½ TIMES AS MUCH AS YOUR GRANDFATHER?

Most people do. And they earn it with ¼ fewer hours of work.* The average factory employee in the U. S. earned 19¢ per hour in 1890. Today the average factory employee earns \$1.65 per hour. When you convert these earnings into real dollars,** today's factory employee earns 2½ times as much as his counterpart of 1890.



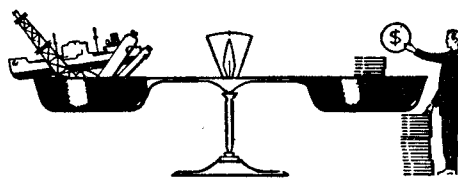
Because of these tools, he can produce more and thus create many times more wealth with his day's work. And the more wealth he creates, the more he earns.



For only in that way can we Americans continue to produce more, create more wealth, and thus earn more than any other people in the world.



The reason for this is that today's factory employee has far better and more elaborate tools to work with. For example, the average Union Oil employee of 1890 had only about \$5,000 worth of tools. Today's average Union Oil employee has over \$60,000 in tools at his disposal.



The tools that make this possible are provided by Union Oil's 38,600 share owners. Therefore, the employee's earnings are directly related to how much money the share owners put into tools. These "tool providers" aren't apt to put more money into tools unless they can anticipate a reasonable compensation. That's why the incentive to put money into tools must be preserved.

UNION OIL COMPANY
OF CALIFORNIA

INCORPORATED IN CALIFORNIA, OCTOBER 17, 1890

This series, sponsored by the people of Union Oil Company, is dedicated to a discussion of how and why American business functions. We hope you'll feel free to send in any suggestions or criticisms you have to offer. Write: The President, Union Oil Company, Union Oil Building, Los Angeles 17, California.

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Source: *Douglas, Paul H., *Real Wages in the United States, 1890-1926*. Bureau of Labor Statistics, *Industry Report for May, 1952*. **What the 1890 dollar and the 1952 dollar would actually buy. Source: The National Industrial Conference Board.

TECH AWARDED

(Continued from Page 1)

support the continued research of Dr. J. W. Dubnoff on enzymes and transmethylation processes.

Barnacles bothered

In the Division of Chemistry and Chemical Engineering, Dr. L. Zechmeister, professor of organic chemistry, and Dr. B. K. Koe have isolated some carcinogenic substances from barnacles. These substances are not inherent in the barnacles, the investigators said, but enter them with small floating particles from the ocean. They may originate from either natural tars or artificial tar products.

In connection with these findings some natural tar fractions obtained from the La Brea Tar Pit in Hollywood are being investigated in collaboration with Dr. W. Lijinsky, a Noyes research fellow in chemistry at Caltech.

SCIENTISTS FIND

(Continued from Page 1)

strands themselves are coiled around one another in the opposite direction.

Professors Pauling and Corey found that certain fibrous proteins found in the body are constructed similarly. The individual molecules coil in one direction to form a helix in the shape of a left-hand screw. The set of coils then twists around the central molecule, with the twist in the direction of a right-hand screw.

Muscle, hair, fingernail and other proteins appear to be built up of these cables, together with individual singly-coiled molecules which fill in the spaces between the cables.

They found evidence in their investigations that hair and similar proteins contain three different kinds of protein molecules (keratin A, B, and C). These three kinds are, respectively, in (A) the coiled molecule forming the center of the cable, (B) the six coiled molecules twisted about this central one, and (C) the two additional molecules filling in the spaces between the cables.

The Caltech chemists believe it should be possible to separate the different kinds of molecules from one another chemically.

The principle protein of muscle—actomyosin—was separated into two distinct proteins—myosin and actin—a decade ago by Dr. Albert Szent-Gyorgyi, Hungarian Nobel Laureate, who now is with the Marine Biological Laboratory at Woods Hole, Massachusetts.

Professors Pauling and Corey suggest that in muscle the molecules of myosin are seven-strand cables and that the molecules of actin are coils filling up the spaces between the cables in actomyosin. They predict that it should be possible to separate myosin further into two distinct proteins: the one found in the central coil and the one consisting of the molecules twisted around it.

The most complex protein structure discussed by Professors Pauling and Corey is that of feather keratin, the protein of feathers. They report in Nature that feather keratin may well consist of seven-strand cables, resembling those in hair and other similar proteins. But in feathers the spaces between the cables appear to be filled by ropes formed of three coiled protein molecules twisted around one another. These three-strand ropes are twisted in the direction of a left-hand screw, while the seven-strand cables are twisted in the direction of a right-hand screw.

This new knowledge about the structure of proteins has been

DUTIES OF ASCIT

(Continued from Page 3)

of 10% on their sales, and the total sales amount to about \$3,000. The business manager profits 10% on all ads sold by salesmen and 20% on any he sells himself. The job is indeed profitable, netting from \$300 to \$600 for the business manager.

Busy, busy, busy

The lot of the Business Manager is certainly a busy one, probably much more so than this article indicates, but the time spent is rewarded not only in a monetary fashion, but experience in the business world that is by far the more valuable of the two. Where else does a college student have the opportunity of meeting businessmen in all fields and at the same time be a capitalist himself?

—Bob Pechacek.

California Tech Business Manager

The business manager of the California Tech holds a very responsible as well as an extremely lucrative position among elective student body officers, as he is not only responsible for all Tech advertising and the \$6000 account of the newspaper, but he can also easily make better than \$500 commissions during the school year.

Money, money, money

About 75 per cent of the total cost of this rag is financed by advertising, both national and local, and the responsibility for obtaining it is solely in the hands of this man. He must spend a few hours each week soliciting and buttering up various stores and people for local ads, on which he takes a cold 30 per cent cut for himself. National ads, such as cigarettes, Union Oil (salam!), and Angostura come in automatically, but the bus mgr still gets a four per cent cut on these also.

Balancing the budget

Advertising rates are fixed so that the paper can just break even, so that the business manager must be constantly on his toes if he does not want a deficit to appear on the books, as it occasionally has in the past. Other

(Continued on Page 7)

CAMPUS BREWINS

(Continued from Page 2)

"Heel of the Week."

Speaking of the influence of Pomona, it seems that Kenyon Hall made quite an impression on the gentlemen of the southwest. The basketball game Friday and the party afterward at Curry's saw Darbs Stockebrand, Johnson and Levy escorting the Pomona beauties.

Bryan and Pechacek, exponents of the Claremont Theory, found a new method of evad-

obtained by the study of X-ray diffraction patterns of the amino acids which make up proteins, and also of the X-ray patterns of the proteins themselves. The Caltech investigators now believe that the X-ray diffraction method should provide significant information about the structure of abnormal proteins involved in disease and that it may soon become a powerful tool in fundamental medical research.

THE SPACE BEAVER

By WALT LEE
Movies

Four Sided Triangle (Alexander Paal) filmed in England in three weeks, has arrived in this country and will be released about the same time as **War of the Worlds** (George Pal). It seems that **Four Sided Triangle** doesn't set too well with most Britishers. They would much rather have had an actress like Ann Todd—or better yet, Joan Greenwood—play the part of the duplicated woman. The controversial Barbara Payton is too well remembered for her love escapades and her very poor role in **Bride of the Gorilla**.

WALT DISNEY has just released his future shooting schedule. Fantasies include **The Sleeping Beauty** for 1955 and Jules Verne's **20,000 Leagues Under the Sea** for the same year. **The Sleeping Beauty** was supposed to have appeared last Christmas—oh well, what are two years to Walt Disney. For 1956 he is planning only one fantasy of a sort . . . **Hiawatha**, which is currently playing across country as an Allied Picture production, will be entirely a cartoon feature. Unfortunately **Peter Pan** has long been delayed in release, but will be shown around Easter, or a little before.

The unsatisfactory shooting ti-
(Continued on Page 7)

ASCIT DANCE

Let's hear from you students on what you want for an ASCIT dance this coming March 6.

Please check the boxes and put in the "L" box in lower Throop or in any of the houses "L" boxes.

- Semi-Formal Dance
- Suits for the fellows and formals for the girls.
- Sport Dance
- Bozart Ball
- A bacchanalian costume party.
- Western Stomp
- Your Idea

ing the 1 o'clock deadline. The method involves something about having the gals sign out overnights to some friend's apartment. Some Darbs wondered if the boys were going to make it to lunch Sunday.



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PRESIDENT'S MESSAGE

(Continued from Page 3)

feel that the increase in four o'clock classes is very detrimental to these programs and could curtail them greatly in the future if the trend continues. We therefore recommend that four o'clock classes be held to a minimum.

I hope that anyone who is interested in the problem and who has something to contribute to the discussion will come to the Board meeting Thursday night and express his opinion.

—John D. Gee.

PSYCHOLOGIST GIVES

(Continued from Page 1)

The lecture will last from 7:30 till 8:18, at which time the floor will be open for discussion and Dr. Mindlin will attempt to answer the questions that have been put forward by the audience.

Since this is but the first of a series, the other topics have likewise been chosen from the requests of Techmen representing the five student houses. The second lecture will be on February 10 and will concern itself with the "Techniques Involved in Dating" discussing such things as "Interpretations of the Girl's Actions," "How to Overcome Feelings Against Engineers," and "What Are Today's Ethics in Dating." (The fourth subject is "Should I Follow These Ethics?")

PASADENA BOWLING COURTS

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Headquarters of Caltech Bowlers
Open 11 a.m. to 1 a.m. SY. 3-1341
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Humanities subject at league dinner

Husbands are invited by members of the Caltech Service League to a special dinner meeting on Monday, January 26. Principal speaker of the evening will be Dr. Hallett Smith, chairman of the Division of Humanities who will talk on "The Humanities at Caltech." This topic should be of special interest to the fathers and mothers of Caltech students. Among technical schools Caltech is outstanding in the emphasis it places on the study of the social sciences and liberal arts.

Dinner and talk

Dinner will be served at 6:30 pm at the Athenaeum, cost \$2.50 per person. Reservations should be made before January 21 by mail to the Caltech Service League, 1201 East California St. Box 51, Pasadena, or by phone with Mrs. W. W. Lake at SY 6-5021.

Anyone interested who is unable to attend the dinner is cordially invited to attend the meeting which follows at 8:00 pm.

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CAMPUS INTERVIEWS

Thursday, January 29

Friday, January 30

Call your College Placement Office for appointment

HOW INTERESTING

(Continued from Page 2)

Thousand Paintings of 20 Centuries (a catalog of prints), Elizabethan Poetry by Hallett Smith, The Shakespeare Classics; King Leir (published in 1909) and a number of other books on the

same subjects. A little investigation brought out some interesting facts about how those books get there. If a faculty member finds out about a book which he is interested in, he has the library order it and it is placed in the collection after he has read it.

If no one in the faculty is interested in a particular subject no books are gotten on that subject.

As it is now, the Humanities Library seems to be just a good place to study, and a repository for books the professors have finished reading or don't want to

add to their personal libraries. Letters written from 1774-1776 about the American Revolution may interest the professional or amateur historian, but it certainly would have little appeal to the general reader who is more
(Continued on Page 8)

RICHARD NOLTE

(Continued from Page 1)

to generalize on most subjects and noted that "the situation in the Middle East is so complicated that we must work with gloves."

We asked him whether the Wafdist leaders were such deep dark villains as we had been led to believe, and he said that reports of corruption, maladministration and nepotism had not been exaggerated.

The average Lebanese, and Moslems in general, feels a greater responsibility to family and friends than he does to the community as a whole, and this feeling, Mr. Nolte pointed out, is what probably has fostered corruption in the Middle East to a greater extent than in the U.S. Compared to certain Egyptians, corrupt American politicians "are left at the post."

Middle Eastern dislike for Americans is due to American policies, but Egyptians are often led by their emotions and may be fast friends with individual Americans. Once when Mr. Nolte was visiting a local police station (which was "a miracle of inefficiency") a police corporal came up and told him in no uncertain terms that he would like to slit his throat just like that. After twenty minutes and with the intervention of Mr. Nolte's Egyptian driver, the corporal was swearing his eternal friendship.

Mr. Nolte's residence, when he was in the Middle East, was in Beirut, Lebanon, where he has left his family while he is traveling around the U.S. He said that there are residential districts in Beirut which are quite similar to ones in the U.S., and that rents are about the same for equivalent accommodations, having risen since the influx of Americans in connection with Point Four.

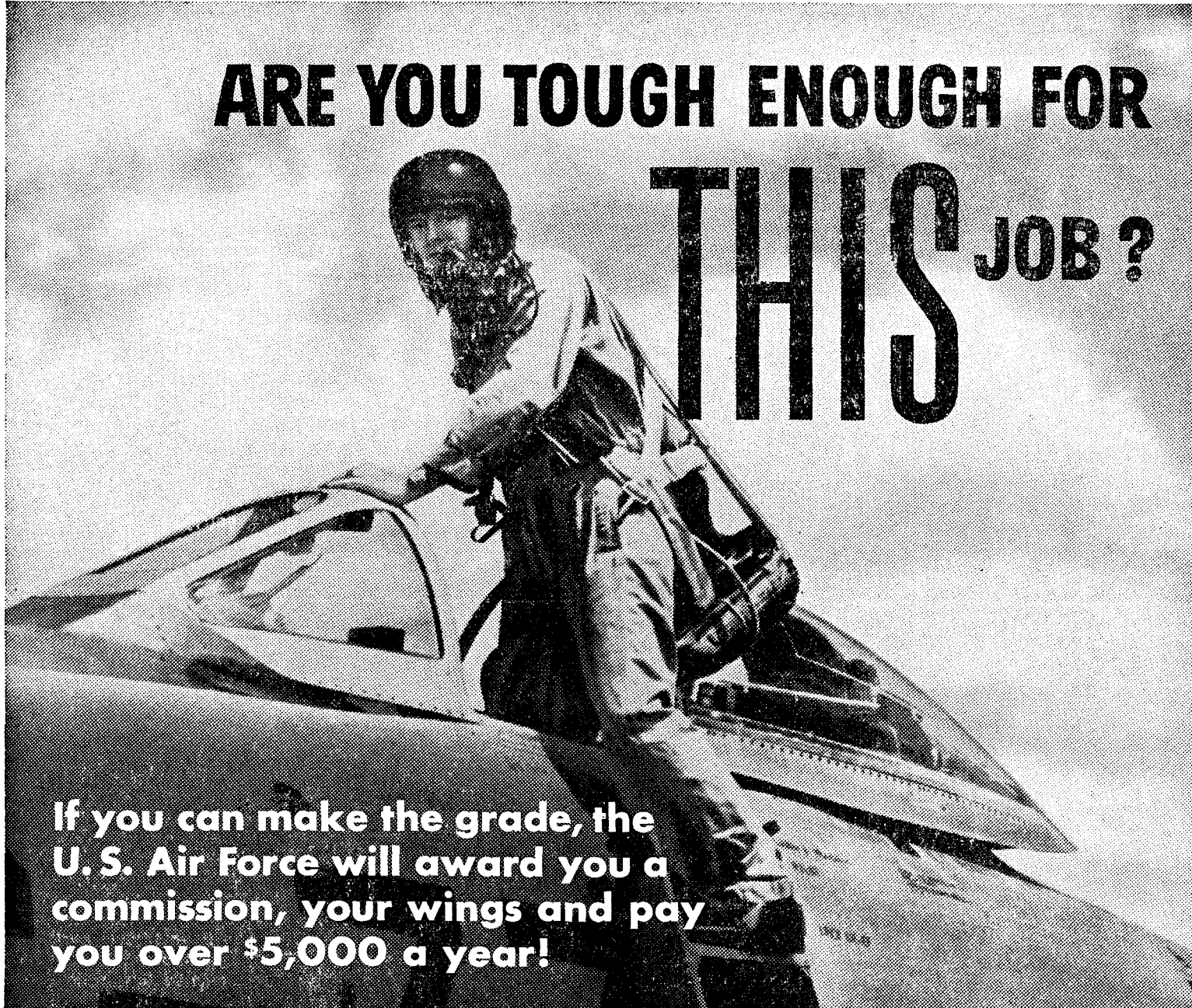
Downtown Cairo is thoroughly westernized and has all the bright lights, theater marquees and store windows that an American city has, and some of the women looking into those windows "are really wonderful."

Our impression of Eastern capitalists has been that they are extremely avaricious, and Mr. Nolte confirmed our suspicion. He said that Egyptian landlords will build an apartment house and try to get back their investment as soon as possible, and that after construction they don't concern themselves with anything but collecting the rent; with the result that buildings appear to be un-repaired until they crumble to the ground.

The Lebanese are reputed to be even shrewder businessmen. It is said that the Lebanese is the only man in the world who can buy from a Jew and sell to a Scot and make a profit.

Many young men in Lebanon and neighboring countries are going to college, but partly as a result of European attitudes, a technical education is not held in as high esteem there as a "white collar" education, although many Lebanese graduates of American technical schools are very successful.

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1. Take a transcript of your college credits and a copy of your birth certificate to your nearest Air Force Base or Recruiting Station. Fill out the application they give you.
2. If application is accepted, the Air Force will arrange for you to take a physical examination.
3. Next, you will be given a written and manual aptitude test.
4. If you pass your physical and other tests, you will be scheduled for an Aviation Cadet Training Class. The Selective Service Act allows you a four-month deferment while waiting class assignment.

Where to get more details: Visit your nearest Air Force Base or Air Force Recruiting Officer. OR WRITE TO: AVIATION CADET HEADQUARTERS, U. S. AIR FORCE, WASHINGTON 25, D. C.



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Tech wipes Pomona, LaVerne

Peekin' In

by Patraw

Anyone who braved L.A. fog and Highway 66 last weekend to attend the basketball games was treated to the grand unveiling of the new "double-post" offense. Offense, long a bugaboo of Tech teams, used to be a system of "scatterball" or, under the new Anson regime, a system of "try and feed it to Fred." However, the new double-post is just made for Tech. Bill Chambers, an all-league center in high school, has been definitely handicapped playing at guard. Now in the center, he can use his hook with good results. Also this new system takes a lot of pressure off Anson, who has been long and triple timed in league play. Rebounding and long-shot potential are also increased.

Strategy

Against a zone defense, Chambers plays out at the head of the key instead of alongside of Fred in a man-to-man. Tyler, the Bounding Basque, whose jumping technique is the talk of the league, plays on the right side with either Shanks or Moody on the left. Britt and Madsen alternate at playmaker position.

Stars

Art Britt, who has won the ball-stealing honors, played his best game of the year while hitting for a two-game total of 20 points. He was hurt at LaVerne making a layup but is now over the injury. Rol Moody hit four goals right in a row against LaVerne to pull out their defense and provide for the victory. How Shanks only hit for two but played a very cool game.

Great Ref

Incidentally, the LaVerne game was one of the best refereed game ever seen around here. One ref did all the work, but he was really it! It is hoped that there will be more like him when we hit some of the tougher opponents.

* * *

Winter football is now starting and 16 are already signed up. More are needed including those just interested in house football. It is a terrific deal and should be worth the PE credit.

Pole vaulters are still urged to come out for track. There is a desperate shortage of the cloud-scrapers. Bert LaBrucherie wants to see all those interested immediately.

SPACE BEAVER

(Continued from Page 5)

tle of **A Men** (United Artists) was first changed to **Crack of Doom**, but it is now to be called **Implosion**.

Famous Fantastic Mysteries

The April, 1953, issue of **FFM** will feature "The Wanderer's Necklace" by H. Rider Haggard. The cover for this lead novel will be by Lawrence, and the sunburst around the title will be returned. **FFM** is usually rather dull reading, but if you are a collector, **FFM** is cheaper than the books reprinted.

News Notes

Fantastic Story Magazine will drop its "porthole" style cover in favor of the regular full-page covers with printing all over.

Bob Lowndes announces that **Future Science Fiction** and **Dynamic Science Fiction** will have trimmed edges with their next issues.

Dr. Edward Elmer Smith, Ph.D., is returning to the SF maga-



BEAVER SPORTS

Tidbits by Turcotte

Many reasons have been put forth for our school's relatively poor showing in most sports. One of those most frequently heard is the lack of time for practice. Besides carrying heavy loads our prospective athletes cannot major in Physical Ed. or other courses in which their main concern would be the maintaining of their athletic skills.

Tech does it

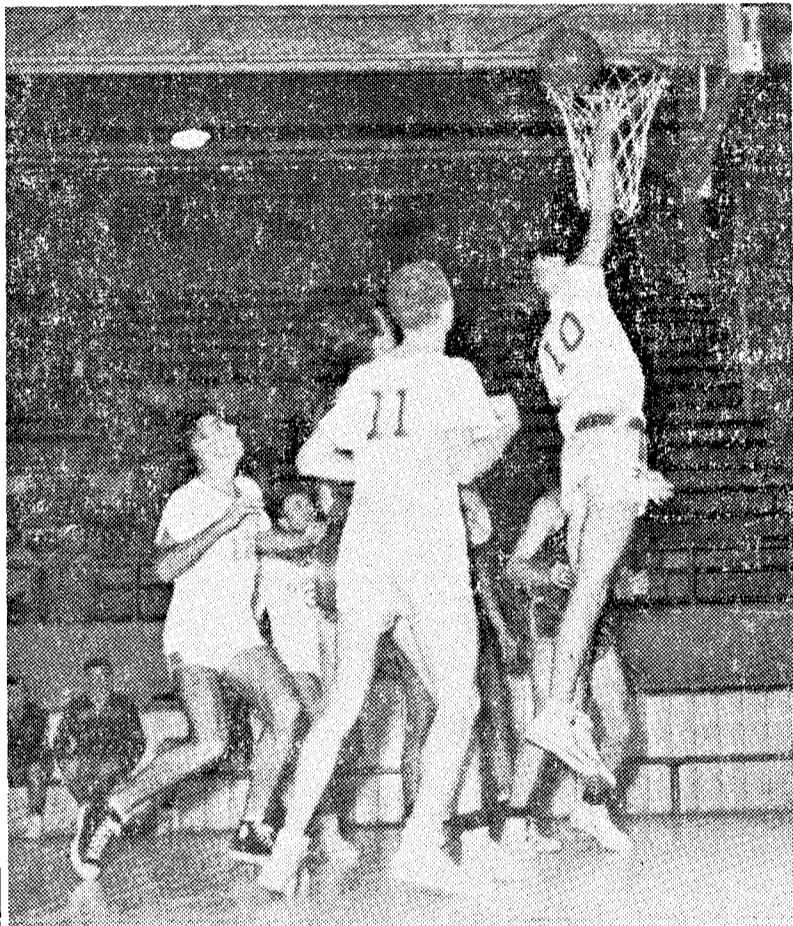
There are ways this disadvantage can be largely overcome. Georgia Tech had one of the top teams in the country last year. According to their coach they accomplished this despite only two hours of practice a night. They made up for this by having their players practice and stay in shape the year around, on their own.

Out now

This same method would probably help our teams greatly. Now is the time for the tennis players, trackmen and baseball players to start getting in shape. Now is the time for the baseball players to loosen up their arms and sharpen up their batting eyes and for the golfers to sharpen up their short game.

Practice makes Freddie

Our present basketball team has one of the best records that we have been able to show in years. And who is the best shot on this team? Undoubtedly it is Fred Anson even though he may



ANSON LAYS ONE IN

Fred Anson hits for two while following the shot are Tyler (12) and Chambers (11).

not be the best player on the team. And where does Fred spend much of his spare time, in season and out? Right out on the basketball courts in Tournament Park.

So all you prospective athletes, let's get out and work NOW!

Tips-N-Tails

by Ralph Kehle

Attention all skiers! Every morning upon rising and every evening upon retiring, ask forgiveness of your sins and pray for snow. As you all know, the mountains are showing their summer coat of brown with an occasional patch of glare ice. Voodoo ceremonies will be held throughout the ensuing weeks until the situation is improved.

Slalom

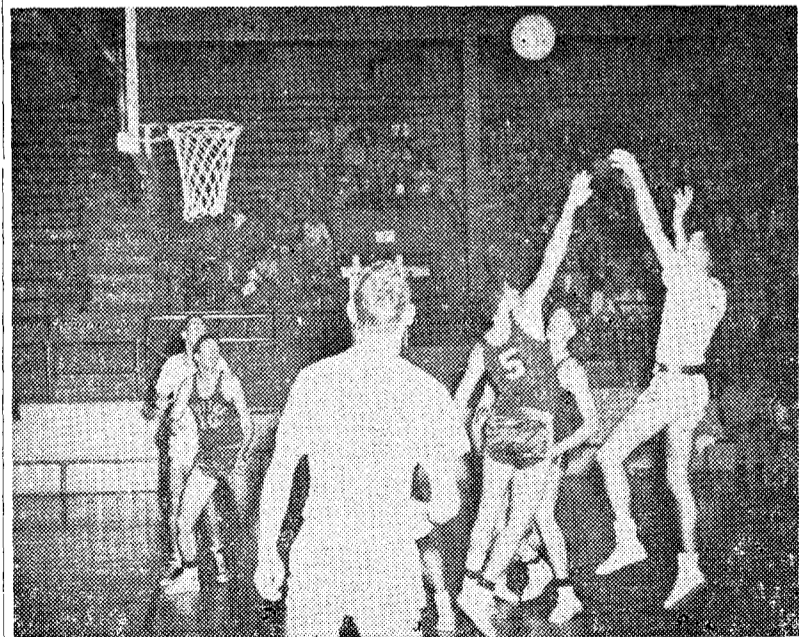
Two weeks ago the Southern District C Combined Championships were held at Snow Valley. A field of 70 men and 20 women participated. Yours truly crashed and burned in both the downhill and slalom but still pulled a 25th. Last weekend, the Dick Springer Memorial Race was held at Kraika Ridge. Being persuaded to go rock climbing, I didn't enter this one. On the slate for next weekend is the Carnival Cup Giant Slalom at Big Bear and the Hollywood Ski Club Annual Giant Slalom at Blue Ridge.

Plan now

Plans should be made now if anyone is intending to be at a ski resort during Spring Vacation. Sun Valley is already filled up for that period.

Awake!

Fleming and Blacker! How about getting your legs limbered up. The interhouse meet will be held in the near future. Dabney and Ricketts have got quite a head start on you. Incidentally, anyone may participate in this meet. Intercollegiate sports don't disqualify you.



Stevens hits from the side for two.

Bridge

A meeting of all bridge players who are interested in playing in the National Intercollegiate Bridge Tournament will be held tonight in the Dabney dining room at 7:00. Anyone interested who will not be able to attend should see Paul Concus, Dabney, or Don Turcotte, Fleming, as soon as possible.

Double post leads way Redlands, Cal Poly next

Caltech moved right back into contention in the SCIC basketball race by downing Pomona, 62-52. The Shymen had a 1-1 record in the league via the Friday night win. The second win in as many days came as Tech blasted the luckless LaVerne Leopards, 84-59. The victory gave Tech an 8-3 season record.

Sagehens squirm

Pomona's Sagehens, although badly outclassed, fought gamely and gave the casabamen many bad minutes before the fourth quarters. The halftime score was 34-26 as Anson led the team by caging 15. Pomona came out in the third quarter to pull within striking distance, however Art Britt stole the ball several times

in succession and scored a quick seven. Art was second in scoring with nine while Fred Anson hit for 28. Fred now has a 19-point average in league play.

Frosh

In the preliminary game the CT frosh were upset by Pomona frosh. Conally was well guarded; the only one who could hit with any consistency was Tom Parker. Kuntz had a sore leg and was handicapped in his running.

Leopards Lowered

For the second time LaVerne was snowed under by a barrage of Tech field goals. Everyone played at least five minutes in the last quarter. LaVerne was hitting some fantastic shots in the first half and at the last evened the score at 36-all. Tech bounced back in the third quarter to take an unstoppable lead. Anson again led scoring with 20, Chambers hit for 16, and Britt with 11.

Redlands

Redlands is the big opponent next week which will be at Redlands on Saturday. Cal Poly will also try to wreck the Tech record on Tuesday. See "Peekin' In" for more game details.

DUTIES OF ASCIT

(Continued from Page 5)

duties include the "making up" of the dummy every week before the paper goes to press, deciding the number of pages to be printed, and also keeping books. Since the Institute must audit all books at the end of the year, and about 250 bills are sent out during the year, a knowledge of writing is necessary (bookkeeping also).

Thus there are many desirable pre-requisite qualifications for business manager, but perhaps the most important is the time and ambition to get out and sell advertising, and to maintain a well-balanced budget.

—Chuck Benjamin.

Cheerleader

The most obvious duty of the head cheerleader is the organizing and leading of cheering and singing at football and basketball games and at rallies. These duties entail, however, a great deal more time than the "few hours" a week of games and rallies. Cheerleader practice usually requires three hours a week of practice during the football and basketball season.

Besides making sure that all three cheerleaders are synchronized and reasonably polished on the routines, the head cheerleader should also organize rehearsals of the songleaders with the cheerleaders and also with the band, if possible, to assure their proficiency as a unit and as a well-conducted part of the complete cheer and song-leading group.

The head cheerleader and the rally commissioner work together to organize one of the

(Continued on Page 8)

Tech asked to join in drama reading

The Caltech Women's Club extends an invitation to students at the Institute to attend meetings of a play reading group which they are sponsoring. The group meets the fourth Thursday of each month at the home of one of its members. This month's play is August Strindberg's *The Father*. It will be read at 8 pm, January 28, at the home of Mr. and Mrs. Jacob Chaitkin, 391 S. Parkwood. Visitors are welcome at the reading.

DUTIES OF ASCIT

(Continued from Page 7)

biggest school events of the first term, the Pajamarino. The form of the Pajamarino will constitute an important problem next year due to the box-stealing incidents this year, but it is my conviction that, notwithstanding isolated letters to the Tech, the student body is predominately in favor of the Pajamarino and I hope that the next cheerleader will strive to continue it.

There are numerous other jobs which should be tackled by the head cheerleader, since they involve important parts of school morale and spirit. The marching band has now been organized and outfitted with Caltech (not ROTC) uniforms but is still lacking a director with adequate time and capabilities to develop its full potentialities. A glee club, second only to a victorious athletic team for focusing school spirit, has been organized and is rapidly progressing but still needs a full-fledged director and

will require constant publicity and backing to become a smoothly functioning, competent unit. There is much work still needed on revising and supplementing Caltech songs and cheers.

Finally, as those who saw the Cal Poly half-time entertainment realize, our half-time entertainment is in need of vast improvement. Whether we win or lose football games our enthusiasm as shown during the half is a big factor in raising our school spirit and other colleges' evaluation of it.

In conclusion, I'd like to say that there is a tremendous amount of opportunity for ideas and organization in the office of head cheerleader. And when you're out there leading cheers, you'll find the stands are far from lacking in spirit even in the midst of an aced-out season. They realize high powered scientific schools can't always have high powered athletes, but they'll yell themselves hoarse backing those guys who are putting up the fight on the field.

—Dick Jaffe.

Rally Commissioner

The office of ASCIT Rally Commissioner is one of the most interesting and challenging of student body offices. Interesting

because the Rally Commissioner is constantly dealing with people outside of Caltech, trying to sell himself and Tech to entertainers in an attempt to develop an assembly schedule. It is challenging in that his budget, which is about \$500 per year, is not enough to pay for the best assemblies all year, and he must try to obtain superior entertainment at the lowest price.

The Rally Commissioner is a member of the Board of Directors and holds a seat in the student faculty relations committee.

He has the help of a group of fellows known as the Rally Commission. These seldom recognized men are the key to his success or failure. The secret of the job is to have his whole commission organized with every man doing a job and doing it well.

By far the biggest job of the year is that of the Pajamarino. It is a time-consuming task. It is the ultimate test of a person's ability to organize a good working committee under him and to pull together the activities that must be perfectly synchronized in order to have a successful Pajamarino.

Publicity is one of the biggest

HOW INTERESTING

Continued from Page 6

interested in the best sellers. If the Humanities Library had a planned, independent acquisition program, it could probably serve both its purposes of research and pleasure.

Someone has suggested that they start a lending library for current literature, which would charge a rental fee. Such a library could be started with a small grant and would add to its collection from the money collected. Such a library, charging 2c per day per week could add 2c per day could add one \$3 book to its collection every two weeks for every ten books it had in circulation.

all-year problems of the Rally Commissioner. The best program draws only a small audience if the publicity is poor and if the event is not repeatedly drawn to the attention of the student body.

Next year's Rally Commissioner has several problems waiting for him. He must decide how he can spend his money through the year as well as other basic policies of his office.

—John Merrill.

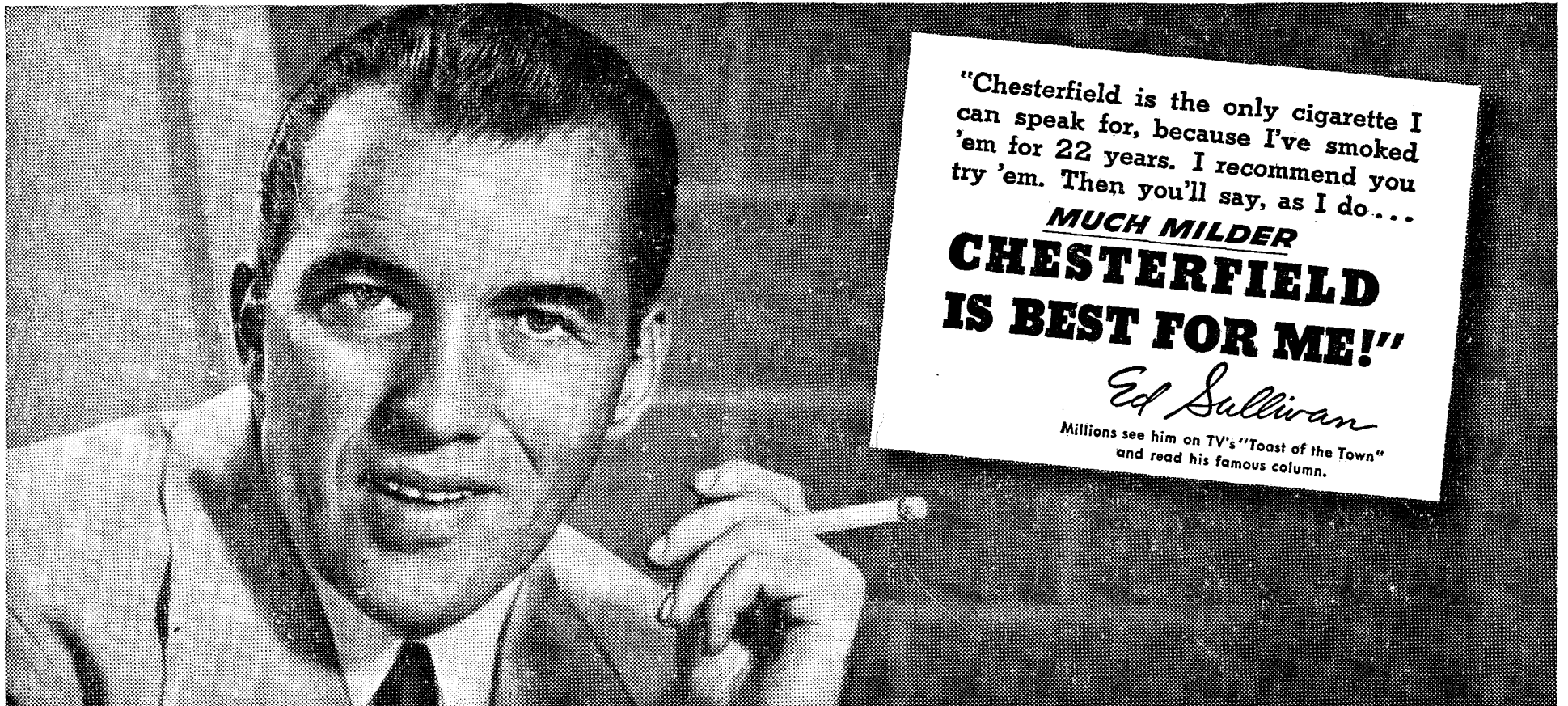
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