

# . . . . . OF INTEREST

## ALUMNI BANQUET

The 1941 Alumni Banquet, held in the Athenaeum on June 13 following the Institute's Commencement exercises, marked the well-attended reunions of the classes of 1911, 1916, 1921, 1926, 1931, and 1936. In addition, a feminine member of the class of 1896 and an enthusiastic Alumni Association supporter, Miss Diantha M. Haynes of Pasadena, was present to see another year of Association activity rounded out.

Featured speakers at the meeting were Dr. Milic Kybal, who discussed Latin-American relations, and Dr. Charles Mowat of U.C.L.A., who spoke on Canadian-American relations. Both speakers were presented by Professor J. E. Wallace Sterling of the Institute.

Presiding over the Banquet, Loys Griswold '24, retiring president, presented the retiring and incoming officers of the Association, and summarized activities of the past year and plans for the coming one. The 1941-42 roster of officers reads as follows:

- Alfred W. Knight '22, president
- George Langsner '31, Vice-President, Chairman of Committee on Chapters
- Herbert B. Holt '15, Secretary, Chairman Committee on Placement and Campus Relations
- Frank M. Foster '25, Chairman Social Committee
- W. Stuart Johnson '26, Chairman Membership Committee
- Claude W. Sopp '17, Chairman Finance Committee
- Sidney F. Bamberger '33, Chairman Athletic Committee
- Robert J. Barry '38, Chairman Committee on Publications
- Ernest B. Hugg '29
- Albert D. Hall '22, Treasurer
- Hugh F. Colvin '36, Editor Alumni Review.

## FOG FORECASTER

Newton C. Stone, Tech meteorologist, recently announced the invention of a device which predicts with uncanny accuracy the lifting of fogs and unbroken cloudiness, two enemies of aviation.

With the apparatus Mr. Stone has predicted to within a few minutes the time at which the overcast above Union Air Terminal, Burbank, would break.

Heart of the new instrument which Mr. Stone has named helionephograph, is a photo-tube or electric eye. By measuring incoming light the device makes it possible also to calculate the amount of heat energy that is reaching the earth. It is this heat that evaporates or breaks up a fog or cloud.

## A.A.A.S. MEETING

Over 450 technical papers were presented to a total of more than 1300 official registrants at the 5-day meeting of the American Association for the Advancement of Science, Pacific Division, held on the Institute campus June 16-21. After a general symposium on "Science and National Defense", news of current research and scientific activities was presented to a series of groups representing various interests in the fields of science and engineering.

Participating organizations, most of which held special meetings of their own during the week, included: American Association of Economic Entomologists, American Association of Physics Teachers, American Chemical Society, American Meteorological Society, American Physical Society, American Phytopathological Society, American Society for Horticultural Science, American Society of Ichthyologists and Herpetologists, American Society of Plant Physiologists, Association of Pacific Coast Geographers, Astronomical Society of the Pacific, Botanical Society of America, California Academy of Sciences, Ecological Society of America, Oceanographic Society of the Pacific, Society of American Bacteriologists, Society for Experimental Biology and Medicine, and Western Society of Soil Science.

Dr. Paul W. Merrill of the Mt. Wilson Observatory was general chairman of the conclave. Chairman of the principal assisting committees were Professor William R. Smythe, general committee; Dr. Robert A. Millikan, committee on finance; Professor Ian Campbell, committee on program and publicity; Professor Philip S. Fogg, committee on registration and information; Professor William V. Houston, committee on public lectures; Professor F. W. Maxstadt, committee on meeting places and equipment; Professor William W. Michael, committee on local service and transportation; Professor Franklin Thomas, committee on general entertainment; and J. Paul Youtz '17, committee on excursions and exhibits.

## YOU CAN'T CRITICIZE THE EDITOR . . .

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**C.I.T. ALUMNI ASSOCIATION**  
Pasadena, California

## TACOMA BRIDGE FALL STUDIED

"Excessive torsional oscillations, due to unforeseen aerodynamic instability," resulted in the much-publicized collapse of the Tacoma Narrows bridge last November 7, according to a recent report to the Federal Works agency made by an investigating board of three engineers, including Professor Theodore von Kármán. The report reached approximately the same conclusion and embodied much of the same data that were presented by Dr. von Kármán at the Alumni Seminar on April 5, although the official report had not been completed at that time.

The published report stated that the Tacoma Narrows bridge was well designed and built to resist all static forces, including wind, usually considered in the design of such structures. However, the factor of aerodynamic damping was not taken into consideration in its design.

The behavior of the completed bridge showed that at a certain critical wind velocity the aerodynamic damping coefficient changed from positive to negative; that is, the wind tended to increase any small twisting oscillation of the structure.

Above this critical velocity, the aerodynamic damping coefficient increased negatively until the positive structural damping was overcome — after which large oscillations were set up.

During a particularly strong wind excessive stresses were set up in the middle span, causing its collapse. The vertical oscillations of the roadbed, although inconvenient, did not contribute nearly so much to the actual failure of the bridge as did the torsional vibrations.

Simultaneously with Dr. von Kármán's investigations, experiments were carried on with bridge models in the Tech wind tunnel under the direction of Dr. Louis G. Dunn '36.

### CRITICAL WIND SPEED

Dr. Dunn's experiments have indicated that the critical wind speed at which the aerodynamic damping coefficient becomes negative increases with the width of the roadbed.

Although it is impossible to eliminate the negative aerodynamic damping effect completely, it is possible to construct bridges such that the critical wind velocity is high enough to insure stability at all wind speeds which are likely to be encountered. Thus there is no doubt that safe suspension bridges will continue to be designed in the future.

According to Dr. Dunn, similar cases of bridge failure have been known for a long time, but no thorough investigation of the principles involved was undertaken before this latest, most striking one.

## 1941 FOOTBALL SCHEDULE

DAY	DATE	TIME	OPPONENT	PLACE
Saturday	Oct. 4	8:00 P.M.	Calif. Poly	San Luis Obispo
Saturday	Oct. 10	8:00 P.M.	LaVerne	LaVerne
Friday	Oct. 17	8:00 P.M.	Occidental	Rose Bowl
Friday	Oct. 24	8:00 P.M.	Whittier	Whittier
Friday	Nov. 1	8:00 P.M.	Redlands	Rose Bowl
Friday	Nov. 7	8:00 P.M.	Pomona	San Diego
Friday	Nov. 14	8:00 P.M.	San Diego State	Rose Bowl

## Telescope Progress Outlined

Announcement that the sag in the 200-inch mirror — "eye" for the world's largest telescope on Palomar Mountain — has been conquered was made by Dr. Max Mason, chairman of the Institute's observatory council, at the June meeting of the American Association for the Advancement of Science held in Pasadena. The threat was one of the major headaches to be encountered in the grinding and polishing of the mirror which has been under way since 1936 on the Institute campus.

According to Dr. Mason, "When the surface of the mirror was brought by polishing to a spherical form it became clear that the disk when tipped from the gridding table to a vertical position for optical test, sagged slightly under gravity.

"After months of study, as the polishing continued, this sag was eliminated by installing a system of 24 squeeze levers, operated by counter weights, distributed around the rim of the glass, and thus another major "200-inch headache" was cured.

"This supporting system must operate so perfectly that no bending of the reflecting surface beyond one or two millionths of an inch will occur as the telescope moves.

"It is doubtful if the 200-inch mirror will be of advantage for planetary or lunar photography, where the shakiness of the air, the 'bad seeing' of the astronomer, destroys detail more than does the lack of theoretical resolving power of the instrument.

"The work of figuring, or grinding, the mirror has continued for about five years at the optical shop on the Institute campus.

"The immediate stage of figuring the mirror to a spherical surface is nearly finished, and during this process more than four tons of glass have been removed by gridding.

"Next, the surface will be changed from that of a sphere to a paraboloid by deepening the concavity at the center by five-thousandths of an inch, and keeping the surface true to one or two millionths of an inch."

At the same meeting, Dr. John Strong, also of the Institute staff, declared that when the 200-inch telescope finally does swing into use, one of its employments will be in the study of radiations from the planets.

Planets not only reflect visible light which they receive from the sun; they absorb and then reradiate considerable quantities of solar energy, largely in the form of the invisible infra-red rays. These will be caught by the great mirror, and analyzed in a number of specially constructed instruments.

"These instruments," Dr. Strong said, "are now being constructed, and the special techniques necessary for their operation are being developed by members of the Institute staff. Much of the information necessary for comparison of conditions on the planets with those on the earth can be obtained only by a more careful and exact study of physical processes taking place on our own planet's surface and in its atmosphere. Determinations, on an entirely new order of exactness, of what happens to earth radiations when they pass through water vapor, carbon dioxide, ozone and the major atmospheric gases, are on the program of research at the Institute."

Incidentally, Dr. Strong pointed out, data obtained in these researches will probably have considerable value to meteorologists as well as to astronomers.

## POET'S CORNER

### THE SERVICE HOWL

By G. AUSTIN SCHROTER, '28

You may think the service rough  
And the non-coms plenty tough,  
When you draw a double-duty on  
the roster.

If you want a lead-pipe cinch  
And the duty makes you flinch,  
Then a little cussin' is your  
paternoster.

If you're on the book as sentry  
'Stead of minglin' with the gentry  
And the cutie waitin' for ya' on  
a date —

Then your recourse lies in gripin',  
As your rifle you are wipin',  
'Cause it's just a waste of time  
to supplicate.

If it's bunk-fatigue you seek (1)  
To forget some long critique, (2)  
And the Top-kick, with his whistle, (3)  
rolls you out —

Or you hear the bugle's blare,  
With its rest-disturbin' air,  
And your forty winks of sleep are  
put to rout —

Why there's still the consolation,  
Mouthin' forceful imprecation  
Of the Army, and your orders to  
look smart,

When you're moppin' up latrines (4)  
In a pair of G.I. jeans,  
You can smartly curse the military  
art.

When the section's on the march  
And the dust is dry as starch,  
And your pack-straps mutilate your  
hide like Hell —

When your tin hat weighs like lead  
On your poor, old, aching head,  
And you're conscious of the column's  
sweaty smell —

You can sling your piece around (5)  
As your weary feet resound  
To a mighty sound of beefin' down  
the line.

Yes, it's belly-achin' mister,  
When you've got a lousy blister  
With eleven hours of marchin' to  
malign!

When enlistment time is up,  
And you've had your final sup  
With the old, familiar chow-time  
section mess —

When it's time to settle scores  
With the Quartermaster stores,  
There's a feelin' that pure reason  
can't suppress —

Though civilian-life is fine,  
It's an effort to define  
Why you slowly tread the way  
to reenlist.

So you sign the dotted line, (6)  
With a fogey when you sign,  
It's the soldier in your blood  
you fatalist!

#### GLOSSARY

1. Bunke fatigue—Army slang for rest, relaxation.
2. Critique—A discussion of a maneuver.
3. Top-kick—First sergeant.
4. G. I.—Government issue, or general issue to all personnel.
5. Piece—The army rifle.
6. Fogey—Period of service to apply on longevity pay increase.

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THE PROGRESSIVE  
**UNION PACIFIC**

## Commencement Stresses War Problems

Tributes to Amos G. Throop, who founded the institution that is now Caltech in 1889, a summary of the progress of the school during the past year combined with a look into the future by Dr. Robert A. Millikan, chairman of the Executive Council, a warning to the country to increase its supply of skilled workmen, and an analysis of war and post-war aims by the Rt. Hon. Richard Gardiner Casey, Australian minister to the United States and principal Commencement speaker, featured the annual Commencement exercises held June 13 on the lawn between the Athenaeum and the student houses. Over 2,000 people watched the exercises, as 297 degrees were given to set a new record high.

Commenting that while a large percentage of the Institute's graduates were destined for immediate employment in national defense industries, the country as a whole is still lagging in its training of skilled workmen through apprenticeships in industry, partly because of improper emphasis in its educational setup.

"The United States is far behind all other Anglo-Saxon countries and the whole of Europe in the provision it makes for the training of skilled workmen through apprenticeships in industry," Dr. Millikan warned.

"Why are we so far behind? Partly because those responsible for the work of the secondary schools have failed to give adequate attention to one of the most vital needs of American education, and partly because we who have the responsibility for the development of our higher educational system instead of setting up adequate hurdles for entrance to the higher schools have worshipped the god of numbers and through the accrediting system have made passage from secondary school to college almost a formality, rather than a careful sifting process designed as far as possible to prevent misfits in life, with their necessary accompaniments of unhappy lives and social unrest."

Regarding the current campus program, Dr. Millikan reported that about 1,000 men, in addition to pursuing their studies, are engaged in solving or trying to solve no less than 65 practical projects, some of them of large magnitude; this cost is provided by the country's industries, or by the government through its defense activities, or by the foundations, or by private philanthropists who seek thus to promote human well-being and know of no place where more results can be obtained per dollar of investment.

### WAR PROBLEMS HIGHLIGHTED

Highlighting his address, the Rt. Hon. Richard Gardiner Casey, who was a graduate mechanical engineer and a successful practicing mining engineer in Australia before entering public service, declared that post-war problems may prove even more difficult and unpleasant than the mere winning of the war as far as the democracies are concerned. In his own words:

"To those who still cling to the idea of a negotiated peace — we say that this is completely impossible. It would mean nothing more than giving Nazi Germany just the breathing space that she so urgently

wants, in order to prepare herself for the final blow that would make for the Nazi conquest of the world. We are fighting Nazi Germany today. We will be fighting the horrors of unemployment after the war. I would hesitate to say which of the two — Nazi Germany or unemployment — is, in the long run, the greater enemy of democracy.

"I believe that, for our individual and collective salvation, in the postwar years, the United States and the British countries — together with all other countries of good will — will have to work closely together, from the financial, economic, commercial and many other points of view.

"I believe that the most formidable task of statesmanship with which the world has ever been faced is just ahead of us at this moment. I believe the problems that I have ventured to outline have to be tackled before the war ends — and that it is none to early to tackle them now, if we are to salvage the postwar democratic world — and if democracy and free institutions are not to become mere words in the post-war dictionary.

"We want to banish war from the world. That can't be done while Nazism remains. Nazism is the ideal organization of a country for waging war. It has but little peacetime significance. Democracy is the ideal type of organization for peace — but it is a slow, inefficient system for waging war. Let us choose which system we want — and know why we want it.

"Please don't make any mistake about it — we didn't go to war because of some European dispute. We went to war because we realized that if every one of us didn't stand by Britain and throw ourselves across the track of this Nazi juggernaut — the writing was on the wall for democracy and for our way of life.

"Given adequate American assistance, I find myself able to be optimistic about the outcome of this war — although we have no illusions about what the future holds for us before the war is won. It will be a long and bitter business.

"But I find myself cast down with doubts and fears about the period after the war — and it is about the postwar era that I now want to speak to you for a little.

### POSTWAR PROBLEMS

"It is going to be very much more difficult for the American and British people to work together in peace than it is in war — and yet I believe that it will be just as essential, although for quite different reasons.

"We will have problems to tackle that will appear individually to lack the vital urgency of today's problems of war — and they will be complicated by tariffs, vagaries of international exchanges, the bitter struggle between competing national vested interests, the problems of gold, the problems of depleted purchasing power, the difficulty of disposal of international surpluses, of high and rising costs and prices, of disparity between farm and manufacturing prices, and of problems inseparably connected with the wholesale return of ex-service men to civil life.

"The real serious part of the business will undoubtedly be that these problems will express themselves in widespread and perhaps unmanageable manifestations of unemployment and distress amongst the working populations — of your country and of our countries.

"I believe that neither the United States nor the British Commonwealth of Nations

## Alaska Expedition Lures Student

William Shand, Princeton graduate working for his doctor's degree at the Institute, is now in Alaska as a member of an expedition seeking to climb and map the hitherto unscaled Mt. Hayes, whose top towers 13,752 feet above sea level.

The expedition is under auspices of the National Geographic Society and the Harvard Geological Institute and its director is Bradford Washburn of New York, recently featured in "Life" magazine.

Others in the party will be Mrs. Washburn, Henry Hall, Boston, Ben Ferris, New York, and Sterling Hendricks, Washington. Mr. Shand's home is near Lancaster, Pa., and he was associated with others in the group as a member of the American Alpine Club where he won recognition for his skill as a mountain climber.

The party left Seattle July 8. It was planned to take a steamer to Fairbanks and then fly about 100 miles south, landing on a gravel flat at the foot of a glacier. From there the party will begin the ascent of Mt. Hayes, whose summit no human beings ever have scaled.

Some members of the expedition are expert photographers and others have had much experience in map-making, and under the direction of Mr. Washburn it is believed a record of this peak will be secured which will be of great value in geographical circles.

Mr. Shand, who is planning to get his doctorate in chemistry, expects to return late in September.

by themselves, and working separately can solve these problems. And if we don't solve them, we are sunk. If we don't go some way toward solving them, I would give the world 10 years at the outside — before we all dissolve in hopeless chaos.

"I believe that many of the previously accepted principles of international contact and international practice will have to be revised, if, having survived the war, democracy is to survive the peace.

"These are some of the problems that you — your generation — will have to face. And probably no generation will have had such vital problems of reconstruction and rehabilitation to deal with. Pray God that your backs will be broad enough and your minds sufficiently unhampered by prejudices and inhibitions to tackle them successfully. May you not be discouraged or dismayed by the prospect."

### LIFE PHILOSOPHY ADVISED

Rev. John F. Scott, pastor of All Saints Episcopal Church in Pasadena, gave the graduates another indication of the things they must strive for in these words:

"The really important things in this world are not the kind of beds we sleep on or whether we eat three or four minute eggs; not the degrees you are entitled to write after your name, or whether you get a job with a salary or go into the military service for a year.

"The fundamentally important thing is your philosophy of life: What are you here for? What are you supposed to do about it? What's the nature of this universe? Are there any principles or moral laws that underlie it, any motives that give promise of peace and progress? In the long view

(Continued on page 22)

## ADDRESS MISSING

No current addresses for the following men are in the Alumni Association files. Directory cards sent to the last known address were returned marked "No Forwarding Address Known." Information as to the whereabouts of these men will be valuable for the Directory and will assist in keeping the files up to date.

1917		
Leo B. Hardiman	1923	Richard G. Osmun
Carl Berg	Glen I. Miller	1924
Ralph M. Langdon	1925	Arthur G. Pickett
Ernest C. White	1926	
George Clapp	Burnett Wisegarver	1927
Arthur Robinson	1929	
H. A. Campbell	John W. Daly	1930
Glenn H. Meyer	True W. Robinson	1931
John C. Montgomery	Alvin Tutschulte	Oscar M. Newby
P. B. Brass	D. E. Marshall	Jackson Gregory, Jr.
Dana Washburn	1933	Arnold Wilking
William McFadden	1934	
Charles A. Dawson	1935	Louis T. Rader
Fun Chang Huang	1936	Henri Levy
Edmund Borys	Dale Van Riper	Newell Pottorf
Simon Ramo	Walter C. Wong	1937
M. A. Dike	Willard Pye	Frank Rechiff
William Ellery	Clark Wiget	Shirley S. Miller
Gordon Wylie	1938	
Kneeland Numan	J. Edward Shreve	Richard Rowell
Munson W. Dowd	Donald Taylor	1939
J. J. Browne	Harry Majors, Jr.	Charles Carstarphen
Carr Chia-Chang Liang	Harold W. Sharp	1940
Dwight H. Bennett	Sabin Ustel	John M. Holloway
Carl G. Schrader	Robert Spielberger	

## Letters To The Editor

33 Walnut Street,  
Savanna, Illinois,  
June 15, 1941

Dear Sir:

After a year out of the Association, I have decided to give it another try. In my first year out I was a member and was greatly disappointed in the poor average on the members of the Class of '39, '38 and other classes whose members I knew.

I believe much more of the space of the magazine should be devoted to short items about many of the graduates rather than long, too highly specialized, technical articles by just a few of the more fortunate, or in some cases more "long-winded" graduates.

There seemed to be far too little mention made of the fellow actually out "doing something." The usual '39 Class news read something like this:

"Pete ——— has enrolled at the Harvard School of Business.

"John ——— writes he is enjoying the Harvard School of Business.

"Don ——— is at the Stanford School of Business.

"John Doe, Jr. has just been promoted to assistant engineer. He is employed by the John Doe (Sr.) Construction Co.

"Bill ——— flew back to the coast for the Christmas vacation after a term at the Harvard School of Business." . . . and so on far, far into the night.

Are we just a Business preparatory school — or an engineering school? One would think the former by reading the Alumni Review!

Certainly a few of the real points of interest could be brought out. Why with this National Defense Program and you didn't even get in the news that Al Guillou '40 is with the Army Air Corps.

Also I have failed to see a lot of old school chums of mine because of failure of the Review to report either their or my changes. When I came here I felt it my duty to write a brief note giving a few details on my new position and location—never a word in the Tech Review. My mother reports an occasional Tech fellow still drops by at Bell (Calif.) to "see if I still am with Sterling Electric Motors."

Wish you'd try to see what you can get in the way of news for the Review on such fellows as Jack Black, Devirian, Herb Strong, Lawson, Russ Anderson, Axtman, Crozier, Green, Matthew, Richey, Richards, Norton, etc.

In case it's just your inability to get

the news I'll start you off by telling briefly about McClung and myself. We're both still at Savanna Ordnance Depot as operating and plant engineers of this very large ammunition loading and storage depot. Our work consists of developing ammunition loading tools, bomb and shell bundling equipment as well as the engineering in connection with plant layout and production methods. Our Engineer Division has grown considerably from the day in November 1939 when I reported as the Civilian post engineer to today where we have four engineers and eight draftsmen and other employees in addition to 7 N.Y.A. student-draftsmen. Mac has been directing the division since April when the Chief engineer left. I have been in charge of N.Y.A. training and ammunition tool design.

Our new shell loading line will probably be the first of the ones of its type in operation in the country. Part of the program of the depot consists in training explosive operators for the bomb and shell loading lines at the new plants such as Wolf Creek, (Miss.), Burlington, (Ia.), Elwood, (Wilmington, Ill.), and Kingsbury, (Ind.), and Ravenna, (Ohio), all of which will be doing the type of work on which we have pioneered.

Sincerely yours,  
Frederick C. Hof, '39.



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## Commencement

(Continued from page 20)

everything else is secondary to these considerations; for on your answer to them depends what you do with your life and what your life does to the world.

"Do not forget or neglect these spiritual values which are basic in the world of men: Without them all your learning is of nothing worth. Put your native talent, your intellectual equipment, your ambition, your strength under the control and direction of these intangibles: good will, honor, integrity, truth and justice and you can rid our civilization of the evils which plague it; poverty, disease, inequities, and war. Intelligence and religion together can remake the world.

"And enduring civilization must be based on spiritual values: truth, honor, righteousness, justice and goodwill. These are the qualities on which democracy and freedom are built. Unless they undergird our individual lives and the life of our nation, we perish. We can not laugh off that statement today as the raving of a preacher; that is the verdict of history and the voice of experience. It is time we gave heed."

Degrees were presented to the 297 recipients by Dean Frederic W. Hinrichs of upper classmen; Dr. W. R. Smythe, chairman of the committee on the course in science; W. W. Michael, chairman of the committee on the course in engineering; Dr. William V. Houston, acting dean of the graduate school.

The parchments were presented to each graduate by Dr. Millikan.

## CHAPTER NEWS

### New York

A group of about twenty men of the California Tech Club of New York had the privilege of meeting with Dr. Linus Pauling at an informal luncheon held in his honor at Pappas Restaurant on March 9th. It was also their pleasure to have the company of Mrs. Pauling who accompanied her distinguished husband.

Dr. Pauling, head of the Division of Chemistry and Chemical Engineering at the Institute, came to New York to receive the 1941 William H. Nichol medal of the New York section of the American Chemical Society. He was chosen for the honor for his distinguished and pioneer work on the application of quantum mechanics to chemistry in the determination of the size and shape of chemical molecules. Dr. Pauling spoke about recent developments at the Institute. Both the Alumni and invited guests found his remarks highly informative and inspiring.

The annual meeting of the California Tech Club of New York was held Friday, June 13, at Frances Lynn Restaurant. The program included films and sound recordings made at the Alumni Seminar at Pasadena last spring and was greatly enjoyed by the members, some of whom did not recognize the campus with all the recent changes and improvements which have been made. The closeups of Alumni members at the Seminar was also greatly enjoyed. Ed Thayer got quite a kick out of seeing himself billed as the "Alumnus from the most distant point". Both recorded talks aroused much interest from the whole group and the hope was expressed that a similar recorded program from the Institute will be prepared at the Seminar next year.

The following officers were elected for the coming year:

Paul Ames '22	President
Herb Ingham '31	Vice-President
James Davies '35	Secretary-Treasurer
Chester Carlson '30	Director
Frederic Moore '38	continues as a director for another year.

Yours very truly,  
Chester F. Carlson '30.

### San Francisco

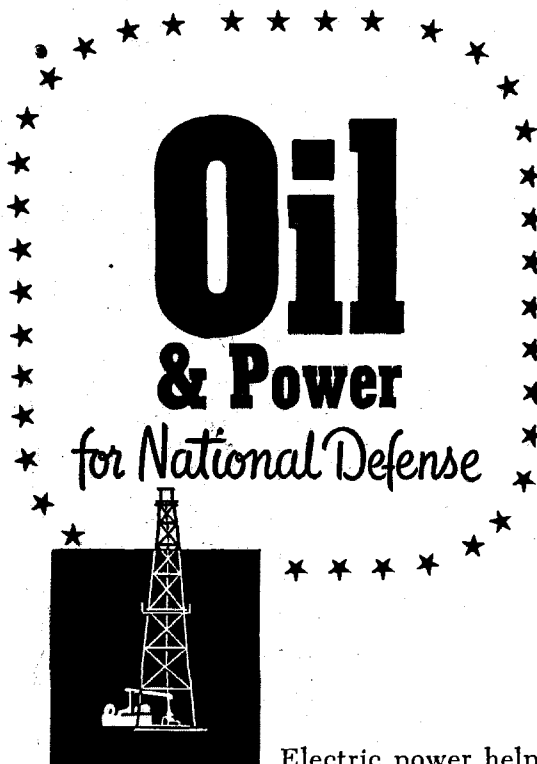
On March 31, 1941, our secretary, Francis Wyatt was transferred to Los Angeles and I was asked to assume the duties of secretary-treasurer of the San Francisco Chapter.

This is a rather late report of our activities; however I hope it will be received in time for use in the next Alumni Review.

On March 7, 1941, the San Francisco Chapter, under the leadership of the President, Louis Erb, enjoyed a double feature: a Swedish dinner preceded by cocktails, and lively chatter. After dinner, Dr. J. Scherer gave a talk on the Far Eastern situation, on which he is an authority. The talk was followed by questions and lengthy discussion.

A group of fifty-four members and their ladies, met on May 10th at Howard Vesper's lovely home "Cactus Rock," in the hills of Oakland for an afternoon, supper and evening, the most enjoyable event this Chapter has experienced this year. The soft ball game was the main athletic event of the day, resulting in a score of fourteen to ten in favor of the young grads.

After a fine supper, served in the patio and in the house, the group gathered in



Electric power helps transform crude oil into the many petroleum products required by modern machines of defense. Electricity drills oil wells, pumps oil from wells and through miles of pipe lines to refineries, and aids many precise refining processes. Delicate electrical instruments help discover new oil fields, hidden far underground. Ample provision has already been made for both present and future needs for low-cost electric power by the vitally important industries of Central and Southern California.

A Community Enterprise

