

# ALUMNI REVIEW

ALUMNI ASSOCIATION, INC.  
CALIFORNIA INSTITUTE  
OF TECHNOLOGY

VOL. 5 No. 3 APRIL, 1942  
PASADENA, CALIF.

Published four times a year — September, December, March and June by the Alumni Association, Inc., California Institute of Technology, 1201 East California Street, Pasadena, California. Annual Subscription \$2.50, Single Copies \$0.65. Entered as second class matter at the Post Office at Pasadena, California, on September 6, 1939, under the Act of March 3, 1879.

All Publishers' Rights Reserved

Reproduction of material contained herein forbidden without written authorization.

## STAFF

Hugh Colvin, '36 . . . . . *Editor*  
2425 West Blvd., Los Angeles

John Rubel }  
John Miles } . . . . . *Associate Editors*  
Calif. Inst. of Technology

David Hill . . . . . *Business Manager*  
Calif. Inst. of Technology

George Langsner '31 Fred S. Scott '30

Albert Atwood '32 William H. Mohr '29

Theodore C. Combs '27

## CONTENTS

APRIL, 1942

THE PRESENT STATUS OF OUR RUBBER SUPPLY . . . . .	4
PROGRESS REPORT — THE 200-INCH MIRROR . . . . .	8
THE ELECTRON MICROSCOPE . . . . .	11
EDUCATION FOR VICTORY . . . . .	13
BOOK REVIEW . . . . .	21
- - - OF INTEREST . . . . .	22
NEWS OF CLASSES . . . . .	29

April, 1942

## EDITORIAL

The national emergency having put more and more claim on your Editor's time, we have deemed it expedient to appoint two Tech seniors, John Rubel and John Miles, as Associate Editors of the Review. The appointment of these two men has been accompanied by many other changes in the publication procedure. All correspondence and copy is now handled by the Alumni office at the Institute, and much of the copy, including all the personals and many of the news articles, is written directly in the office. For this purpose, and for stenographic work, a stenographer has been hired on a part-time basis, the rest of her time being devoted to employment work.

The noticeable increase in size of this issue is due largely to the enterprising nature of our business manager, David Hill, who has been quite successful in convincing advertisers what potential markets lie dormant in our alumni. However, we still need more news about alumni, and that depends on you fellows who are reading the Review. May we urge you to send any and all news about yourself and alumni friends to the Alumni Review, in care of the Alumni Office at Tech.

THE DEADLINE for entries to appear in the June issue will be May 25.

The following is the official statement regarding the widely publicized explosion which occurred on the Tech campus Friday, March 27. "A few minutes after 9 this morning, there was an explosion in the Kellogg Radiation Laboratory on the California Institute campus. This laboratory is in an area of the campus restricted in view of the work being carried on there. The explosion would appear to have been caused by an industrial accident in the powder vault of that building. The possibility of sabotage seems to be definitely ruled out.

**Deceased:**  
Raymond L. Robey (an Institute employe) age 22.

**Injured:**  
S. C. Snowden (graduate student) — second degree burns on face, hands, neck, and chest, but it is expected that he will recover completely.

Eleanor B. Speer (secretary, age 30) cuts, mainly on hands, not serious.

Frank F. Crandell (an Institute employe: age 33) not serious.

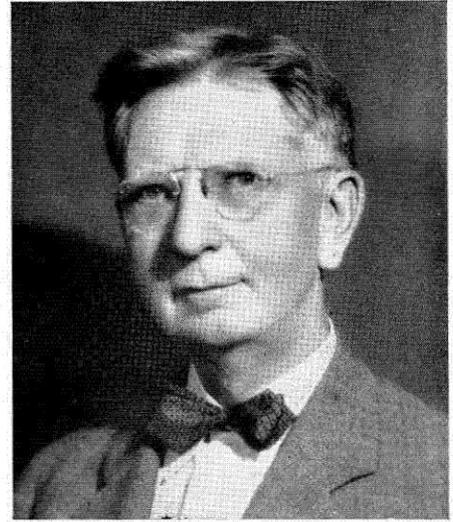
The following three are all employes of the telephone company, who happened to be engaged in some installation work nearby:

Charles Cummings—fractured leg.

Alfred Harris—very minor lacerations and cuts.

R. Pierce—hospitalized, but not seriously injured."

## CONTRIBUTORS



PROF. J. A. ANDERSON

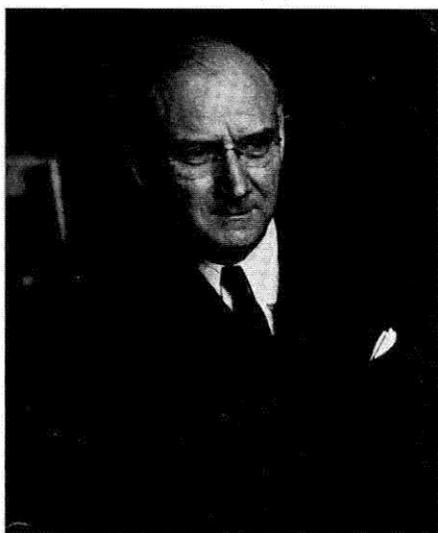
John August Anderson received his B.S. from Valparaiso University in 1900 and took his Ph.D. at Johns Hopkins University in 1907. From 1908 to 1915 he was an Associate Professor of Astronomy at Johns Hopkins. Since 1916 he has been a member of the staff of the Mount Wilson Observatory of the Carnegie Institute of Washington. In 1928, by special arrangement with the Carnegie Institution, Dr. Anderson came to Tech to assume the responsibilities of a Research Associate in Astrophysics and to serve as an Executive Officer of the Observatory Council. He is now in charge of the 200 inch mirror to be used in the new Palomar Observatory.



PROF. WILLIAM V. HOUSTON

William V. Houston received his B.A. from Ohio State University in 1920, his M.S. from the University of Chicago

in 1922, and returned to Ohio State to receive his Ph.D. in 1925 to 1927 he was National Research Fellow at Caltech and in 1927-28 was a Foreign Fellow of the John Simon Guggenheim Foundation. Since 1931 he has been a professor in the Physics department at Tech and, in the absence of Professor Tolman, now acts as Dean of the Graduate School. At the present time Professor Houston is in Washington with the National Defense Research Council and will probably remain there for the duration of the war.



PROF. FRANKLIN THOMAS

Franklin Thomas graduated from the University of Iowa in 1908 with the degree of B.E. and received the degree of Civil Engineer in 1913. He has also been associated with McGill University in Montreal and the University of Michigan. From 1909 to 1910 Professor Thomas was Construction Foreman for the Mines Power Company in Cobalt, Ontario, while from 1912 to 1913 he acted in the capacity of Designer for the Alabama Power Company in Birmingham. In 1913 he joined the staff of the Institute and is now Head of the Civil Engineering department. Since that time he has also been with the U. S. Reclamation Service and has served as Vice-Chairman of Board of Directors, City of Pasadena, Vice-Chairman of the Board of Directors for the Metropolitan Water District, and as a Director of the American Society of Civil Engineers.

## Alumni Seminar

Sunday, April 12



DR. J. NORTON WILSON

J. Norton Wilson received his B.A. from the University of British Columbia in 1934 and his M.A. in 1936. He then came to Caltech and obtained his Ph.D. in 1939. Since that time he has served as a Research Fellow and Instructor in Applied Chemistry at the Institute.

### NEWS SHORTS

#### CALTECH GEARED TO WARTIMES DEMANDS

The California Institute faculty has decided the Institute could most effectively do its part in supplying the present need for trained men by devoting the summer to special courses designed to answer pressing war needs, and by continuing the regular curriculum on a three term basis.

The regular enrollment of the Institute necessarily is limited. This means that the number of engineers and scientists graduated each year is relatively small. Accelerating the program by adding a fourth regular term in the summer would, of course, hasten the time when these men would receive their degrees, but the number involved would be small compared to the number who are needed.

Special summer courses, however, can take men who already have some background in engineering or science, and by short, intensive courses, equip them to fill the particular needs of government services and defense industries. This will produce a far larger volume of trained men, and at the same time it will permit the Institute staff to continue its ever increasing program of research and development of the instrumentalities of war.

## in other words

by JOHN CLINTON



I'm handy around the house. I can fix the refrigerator so that it takes a service man only half a day to repair the damage. I do handy electric wiring that often lasts until the fire department arrives.

\* \* \*

But whenever I raise the hood of the Hispano-Plymouth, I sort of give up! I know there are a million mysterious things under there that are probably wearing out or needing adjustment. But me...I can't tell which!

\* \* \*

But then, I don't have to, on account of the Union Minute Men do it for me. And they'll do it for you, too, if you just utter the simple words, "Stop-Wear! Lubrication."



\* \* \*

For Stop-Wear is no ordinary "grease job." Far from it. For one thing, it's guaranteed in writing 1000 miles against faulty chassis lubrication. Besides you don't have to keep track of your mileage, the Minute Men do it for you—even the 3000 and 5000 mile checkups are automatically called to your attention.

\* \* \*

And even though they use factory specifications, 9 different lubricants, and a whole bench full of special tools, the big thing to me is—they check all the mysterious things that worry me—fan belts, battery cables and terminals, spark plugs, wheel bearings, and that sort of thing.

\* \* \*



So, give up your nail biting and worrying over car maintenance and let the Union Minute Men give your car Stop-Wear Lubrication, too. For the Minute Men give you "Expert Care To Save Car Wear."