LETTERS

Bellflower, California

Sir:

I believe you will be interested in some of the material developed as a result of the 25th reunion of the class of '32 last spring-particularly this summary of returns to a questionnaire mailed to all members of the class in March, 1957. Replies were received from 66 men-exactly 70 percent of the class of '32.

Howard Finney, Class Secretary

- (1) Weight gained since '32? 23.1 lbs (total: 2,171 lbs.)
- (2) How much hair lost? 99%
- (3) How many wives acquired? 127 total (3.1% never married) (84.6% married once) (12.3% married twice)
- (4) How many children? 192 total
- (5) How many grandchildren? 17 8/9 (10 grandfathers)
- (6) Of how many organizations are you now, or have been, a member?

	Professional	289	
	Civie	68	
	Fraternal	45	
	Social	69	
	Religious	56	
	Charitable	54	
	Educational	-68	
	Recreational	62	
(7)	How many offices held?		
	In organizations listed		
	in (6)	275	
	Political	- 7	
	Other	- 6	
(8)	How many years of		
	Military Service?		
	Active duty (18.6%)	102	yrs.
•	Inactive (Reserve, National		
	Guard, etc.) 18.6%	154	yrs.
(9)	Did you own an automobile	2	
	while an undergraduate?		
	Yes	64	70
	No	35.	4%
(10)	How many automobiles have	2	
	you owned since leaving		
	college?	7.	33

- (11) How many automobiles do you now own? 1.77
- (12) Do you own your own home?



7 Seconds From Nothing Flat!

It takes only seven seconds for the new 00 Brown & Sharpe Automatic Screw Machine to produce the brass part shown above. That's a 42% increase in rate of production over the previous B&S model.

One of many new features that contribute to the remarkable performance of the 00 machine is a chain driven ball bearing spindle (diagram). Fafnir engineers worked with Brown & Sharpe in selecting bearings for this application, involving some 208 spindle speed combinations ranging from 34 to 7200 RPM. To assure absolute spindle rigidity and running accuracy, Fafnir super-precision ball bearings are mounted in the positions indicated.

Thousands of similar bearing success stories help explain why design engineers turn to Fafnir for help with bearing problems. The Fafnir Bearing Company, New Britain, Connecticut.

50 YOU WANT A CAREER IN A GROWTH INDUSTRY

Since the advent of the automotive age, Fafnir's record of growth has been inseparably linked with the over-all mechanization and phenomenal growth of industry itself - right down to present-day advances in automation and instrumentation. Fainir's field of operations is, moreover, industry-wide . . .



The New Brown & Sharpe No. 00 Automatic Screw Machine with Automatic Screw Machine Fafnir-equipped spindle,



LINE IN AMERICA

little affected by momentary ups and downs of individual companies or industries. Find out what Fafnir offers you in the way of professional chal-lenge, diversity, and stability in a "growth indus-try" with a future as promising as the future of America. Write today for an interview.

	Yes	89.2%	
	No	11.8%	
(13)	Do you have a swimming		
	pool?		
	Yes	9.2%	
	No	91.8%	
(14)	How many different com-		
	panies have you worked for		
	since graduation? (Count		
	self-employed and present		
	employer)	4.9	
(15)	How closely does your pre-		
	sent position match your		
	major field as an under-		
	graduate?		
	Same field	38.5%	
	Closely related field	33.8%	
	Remotely related field	15.4%	
	Unrelated field	12.3%	
(16)	What was your approximate		
	gross annual income in the		
	first year after leaving		
	school?		
	Mode-\$1,000 Avg. \$1,308	\$1,090	ł
(17)	Present gross annual		
	income?		
	Mode-\$12,000 Avg\$22,620	\$15,000	
(18)	What was your political con-	-	
	viction upon graduation?		
	Republican	64.0%	
	Democrat	25.0%	
	Other	9.4%	
	None	1.6%	
(19)	What is your political		
	conviction now?		
	Republican	90.7%	
	Democrat	6.2%	
	Other	-	
	None	3.1%	
(20)	Publications—Books	11 tot	
	Papers	70 tot	
1015	Articles	132 tot	
	Patents	23 tot	al
(22)	Honors-1 Nobel Prize wir		
	2 Fulbright Fello		
	1 Fullwight Last.		

- Fulbright Lectureship 1 Guggenheim Fellowship
 - 1 Visiting Professorship
 - 2 Foreign Exchange Fellow
 - ships

Warren, Michigan

I have managed to round up a bevy of talent (see page 10) which originated at the California Institute of Technology and is now with General Motors Styling.

Sir:

Since your magazine has indicated interest in automotive affairs. I thought it might be interesting for you to show to your readers that. if

> CONTINUED ON PAGE TEN ENGINEERING AND SCIENCE

they are not satisfied with their automobiles, the Caltech educational method is partly to blame.

> Peter Kyropoulos Executive in Charge of Technical Development General Motors Styling



Standing, left to right: Peter Kyropoulos, MS '38, PhD '48; H. J. White, ID '48, chief designer, Frigidaire studio; C. C. Whittlesey, ID '48, executive in charge of fabrication, program planning and service. Kneeling: Roy Stake, BS '57, jr. engineer; Robert F. McLean, BS '43, executive in charge of research, product planning and analysis; and R. P. Brinkman, ID '48, staff engineer, product and exhibit design studios. A model of the Firebird, which was tested in the wind tunnel at Caltech, is in the foreground, and in the background is the Olds F-88, an experimental car.

Sir:

Washington, D.C.

There are one or two points that I thought you would want me to note in regard to the IGY articles in Engineering and Science for June, 1957. The introduction to the articles contains an expression or two and an omission which may leave the reader with an erroneous impression about the IGY program.

. . . In terms of the responsibility of our Technical Panels, the verb "controlled" appears strong to us.

The Academy, through its IGY Committee and its subject-matter panels, *plans* and *directs* the IGY program from an over-all scientific and program point of view.

There is also the reference to the fact that the Technical Panels are under the administration of the National Science Foundation. The Technical Panels report to the Academy's U.S. National Committee for the International Geophysical Y e a r and not at all to the National Science Foundation.

And here occurs the matter of an omission: neither in this introductory section nor in the lead paragraphs identifying the authors are there any references to the Academy and its Committee.

Knowing the complexity of the ICY program, it is understandable that the organization of the program can not be known everywhere, but the facts are these. The IGY, both nationally and internationally, is a civilian, non-Government scientific program.

The pattern almost everywhere is similar to that in the United States. Here the National Academy of Sciences is responsible for the planning and direction—as well as seeing to the execution—of our efforts. In this program the National Science Foundation has had a very important role, and the Academy and the Foundation have worked jointly and most closely together.

Government support has been obtained for the effort by the National Science Foundation; in particular, Congressional appropriations of \$39 million have been secured through the Foundation.

The Academy has also obtained the cooperation of many institutions and agencies so that the total effort. from a scientific point of view, is much greater than the effort made possible by the special appropriations.

> Arnold W. Frutkin, Director Office of Information U.S. National Committee, IGY National Academy of Sciences

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ENGINEERING AND SCIENCE