# Popular Science Monthly Founded 1872

October 1927 25 cents



The Latest in Radio and Aviation Commander BYRD Tells How to Get into the Flying Game... Page 9

## Don't Be a Back-Seat Driver!

Gus Helps a Husband Who Was Nagged into a Smash and Gives Some Advice for Passengers

By MARTIN BUNN

TOW Horace," nagged the cross looking woman in the back seat, "are you sure we don't need oil? You'd better have the man look over that back tire while we're here. Is the radiator full of water? Remember what I told you-

"Yes, my dear," the solemn faced man behind the wheel mumbled mechanically as he received his change from Joe Clark, threw the ignition switch and kicked the starter button. Meanwhile the flow of advice and commands from the woman

on the back seat continued.
"Be careful not to grind the gears. Horace! Don't let in the clutch too fast, you jarred me terribly the last timelook out! There's a car coming! You'll

it it sure as I'm alive—"
"Yes, my dear," floated back to the
garageman's cars as the car rolled away.
"How'd you like to be tied to that for
the rest of your life?" grinned Joe Clark
to his partner Gus Wilson, who was
working on a car in front of the Model

"HUMPH!" grunted the veteran auto mechanic. "Every time I hear a magging woman like that I'm glad I'm a bachelor. She's a 'back-seat driver' for

"Look! Quick!" Joe interrupted with a shout. "Whatever is that bird trying to do! He's heading straight for that parked car. If he doesn't head out pretty soon—by Jinks, he woke up just in time-and now look at him skid! That's no trick to be playing on a wet road-twice around and going straight at the telegraph pole!

But the car's speed slackened con-siderably before it hit the pole and luckily for the occupants, it was traveling backwards at the moment so the impact came directly on the center of the rear bumper. The latter cushioned the blow to some extent, but Gus and Joe distinctly heard the snap as the spring steel gave way.

Even before Gus and Joe could reach the scene of the accident, it was quite evident no one was seriously injured for they could hear the woman rasping on interminably.

Now, see what you've done, Horace! Why didn't you pay more attention? I never saw anyone so careless! The whole trip is ruined, and it's all your fault!"

The car owner had been aimlessly puttering around, muttering "Yes, my dear," but this last remark suddenly got his goat.



"Yes, my-Aw, rats!" he snarled savagely. "Lay off me! How the dickens can I drive a car with you jawing all the time? If you know so much about it, you can do it yourself, from now on. I'm through!" And with that he dashed a wrench on the ground, glared at his wife defiantly, spun on his heel and stalked off down the road.

"Here's where I cure one back-seat driver of a mighty bad habit," whispered Gus to his partner.

"Most unfortunate accident, madam," he said, stepping up to the side of the car. 'Can we help you out?"

"You're the men from that garage we stopped at," the woman said. "Well it's a good thing that fool husband of mine had sense enough to have this accident where it could be fixed. He doesn't pay any attention to what I sayjust goes along and drives to suit him-self. I'll give him a piece of my mind all

"Can you drive the car to the garage?" asked Gus after he and Joe had freed the spring that had caught around the pole. "I don't know how to drive," she

snapped.
"Oh," said Gus, with an odd smile. "Then I'll drive for you. I can make a temporary repair on the bumper, and there isn't much else to fix.'

Horace had marched down the road and perched on a stone wall where he was calmly smoking a cigarette.

"Don't bother with him!" rasped his wife. "He can stay there forever for all I care! Drive to the garage.

As soon as Gus had stopped the car in

the garage, he and Joe set to work.
"What's the matter with the car,
anyway?" the woman inquired.

"Well, madam," replied Gus, "this car has a broken rear bumper. The gas tank is dented, a mud guard is bent out of line. That's what's wrong. But as for

what caused it, I'd say it was—you!"
"Me!" she gasped indignantly. "Ridiculous! How could I be to blame when I wasn't even driving the car?'

"Maybe you didn't actually have your hand on the wheel," Gus growled, "but from what I heard while you were getting gas you do all your driving from the back seat. No man can drive a car and do a good job of it with somebody pouring advice into his ear all the time. You probably kept telling your husband how to drive until he got so flustered he didn't know what he was doing. Take it from me, if you want to avoid trouble let your husband drive in peace. You admit you don't know how to drive so your advice couldn't be worth much anyway!

"HERE!" interrupted Horace, who "THERE!" interrupted florace, who had silently entered in time to hear most of Gus's remarks. "That's just what I've been telling you all the time, and you wouldn't listen to me! Now you get exactly the same thing from somebody that really knows something about automobiles!

Horace settled with Gus, climbed into the car and stepped on the starter. His wife started to speak and then gulped

back the words with a quick look at Gus.
"By Golly!" exclaimed Joe. "It al-

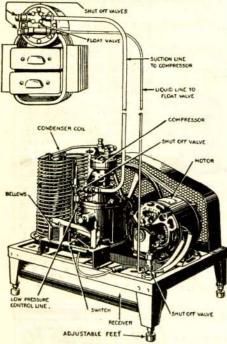
most looks as though you'd shut her up."
"Maybe," replied Gus, "but I doubt
it. Takes a lot more than that to cure a woman who's in the habit of bossing her husband.

"A lot of people don't seem to realize that driving a (Continued on page 18.2)

### Get in on the Ground Floor of ELECTRIC REFRIGERATION

You have seen the fortunes that have been made by the men who got in on the ground floor of the automobile . . movies . . radio. Electric Refrigeration is going to be another tremendous money maker for the men who get in on it early in the game.

#### NOW is the Time!



#### Electric Refrigeration Offers You a Brilliant Future

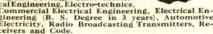
3 LEARNED IN In 3 months only—just 90 days you can be one of the new group of trained experts who will guide and develop the most lucrative and newest of America's gigantic industries.

Experts Needed Electrical refrigeration needs men, men and more men—with positions—big, responsible, well-paid positions open—waiting for them.

Special Training Essential Training ained and service these new machines—they need refrigeration experts of which there are but a pitiful few.

#### A Complete, Practical, Electrical Education

Learn by the thorough, approved scientific methods which our twentyscientific methods which our twentythree years of specializing enable us
to give you. In addition to Electrical Refrigeration, the following complete courses are given: A. C. and
D. C. Armature Winding, Wiring and Testing, Junior Electrical Engineering, Electro-technics,
Commercial Electrical Engineering, Electrical Engineering, B. S. Degree in 3 years), Automotive
Electricity, Radio Broadcasting Transmitters, Receivers and Code.



#### FREE BOOKLETS

PREE BOOKLETS

Don't miss this fortune-making opportunity. Let us prove what we say. Let us send you our literature on the course you are most interested in. It's free—no obligation—the coupon will bring it to you—no fuss—no trouble. Be sure to mention course interested in, age and education.

New Class Or	ganizing Sept	ember 1st	Act at Once
, <b>5</b> CHO	Lof EN		RING
C.	Founded	1905	77
163 East Wells	Street	Milw	aukee, Wis.
your course in	EE, with no of	Milwaukee, oligations, mo	ore details on
*******			
Name		Age.	
Address			
City		State	
Tidescation			

#### **Back-Seat Driving** Real Peril

(Continued from page 69)

car really does require the undivided attention of the party doing the job. Something may happen any second. Suppose, for instance, you are bowling along on a straight, wide road and no cars or crossroads in sight-a pretty rare combination in these days of crowded roads!"
"That's the kind of a trip you dream

about," Joe interrupted with a grin.
"It is," agreed Gus, "but just look at the number of things that can happen. Suppose your head is turned halfway round to catch a remark by someone on the back seat. At that particular instant a front tire decides to blow out. Maybe you'll get your attention back in time to keep the car from plunging into the ditch and maybe you won't.

THEN there's always a chance of a car coming out of a side road that you didn't see, or perhaps a kid on a bicycle. What chance would you have?

"According to the nerve experts, it takes the average man about a tenth of a second to react to any kind of a stimulus. That means that at least a tenth of a second goes by between the instant your eyes tell you that you ought to put on the brakes and the instant when your foot starts pushing on the brake pedal. If you're only going thirty miles an hour, the car travels nearly nine feet during the time that it takes you to realize that you should put on the brake, and it goes a few feet more before you get the brake on.

"With a handicap like that you can't afford to let your attention be diverted while you're

driving."
"Maybe you're right, on paper at least, "but have a sarcastically, "but have been a sarcastically between a sarcastically between a sarcastical between a sarc Joe commented somewhat sarcastically, "but you can't make me believe that every fellow that's driving a car ought to sit there with his hands gripping the wheel like grim death and his eyes glued to the road. What fun would there be in driving?"

You don't get me at all," Gus replied. didn't mean anything of the kind. But the driver ought to consider driving his main job keep that thought in the front of his head at all times. Of course if he can talk to the other passengers, kind of casual like, with the part of his brain that isn't concentrated on driving, there's no harm done, but if it distracts his mind at all he certainly ought to cut it out."

"Seems to me that drivers ought to keep their feet on the pedals all the time," Joe suggested.

Sounds good," replied Gus, "but you can't do it unless you operate the throttle by means of the control on the steering wheel. You can't very well have your foot on the accelerator pedal and the brake pedal at the same time and if you keep your foot on the brake pedal and work the throttle by hand the chances are you will get into trouble unless you're mighty familiar with that way of doing things. In a sudden emergency you are likely to jam on the brake without closing the throttle and the drive shaft or some other part

may give way under the strain."
"Maybe you're right," Joe agreed. "And now that you've added mental treatment to your list of accomplishments, how about working up some way to throw a scare into my wife? She's developing back seat driving

tendencies, too!

Suggestive of the mythical unicorn of early tradition, a four-footed creature with a single spiked horn, was a freak deer recently observed at Yosemite Valley National Park, in Yosemite, Calif. Otherwise like a normal deer, this young buck had a single curious horn projecting through the roof of its upper jaw halfway between its nose and eyes.

# Do You Make these Mistakes in ENGLIS

ANY persons say "Did you hear from him to-day." They should say "They should say today?" They should say today?" Some persons spell calendar "calender" or calander." Still others say, "between you and I" instead of "between you and me." It is astonishing how many persons use "who" for "whom," and mis to one of the simplest whether to spell recome know whether to spell recome know whether to spell recome know whether to spell recome should be suffered to make their meaning absolutely clear, Most persons use only common words—colorless, flat, ordinary. Their speech and their letters are lifeless, monotonous, humdrum. Every time they talk or write they show themselves lacking in the essential points of English.

WONDERFUL NEW INVENTION



#### WONDERFUL NEW INVENTION

For many years Mr. Cody studied the problem of creating instinctive habits of using good English. After countless experiments he finally invented a simple method by which you can acquire a better command of the English language in only 15 minutes a day. Now you can stop making the mistakes which have been hurting you. Mr. Cody's students have secured more improvement in five weeks than previously had been obtained by other pupils in two years!

#### LEARN BY HABIT-NOT BY RULES

LEARN BY HABIT—NOT BY RULES
Under old methods rules are memorized, but correct
habits are not formed. Finally the rales themselves are
forgotten. The new Sherwin Cody method provides for
the formation of correct habits by calling to your attention constantly only the mistakes you make.
One of the wonderful things about Mr. Cody's course
is the speed with which these habit-forming practice drills
can be carried out. You can write the answers to fifty
questions in 15 minutes and correct your work in 5 minutes more. The drudgery and work of copying have been
ended by Mr. Cody. You concentrate always on your
mistakes until it becomes "second nature" to speak and
write correctly.

#### Free Book on English

A new book explaining Mr. Cody's remarkable method is ready. If you are ever embarrassed by mistakes in grammar, spelling, punctuation, pronunciation, or if you can not instantly command the exact words with which to express your ideas, this new free book, "How to Speak and Write Masterly English," will prove a revelation to you. Send the coupon or a letter or postal card for it now, Address SHERWIN CODY SCHOOL OF ENGLISH, 1810 Searle Building, Rochester, N. Y.

## Sherwin Cody School of English 1810 Searle Building, Rochester, N. Y.

Please send me your Free Book "How to Speak and Write Masterly English."

Nar	e
Add	ess
City	State
	You can now Own a
	Typewriter/
	nown guaranteed for 5 years
	Tour por 5 years
-	hink of it! You can now get
8	Genuine Underwood for only \$3
C	own and small monthly payments.
	pecial FREE TRIAL Offer
f	on't send any money now, just mail in the upon for full information about our special se trial offer and special prices and terms.
	Any One Can Operate a
	Typewriter
V	ou can learn to write on this machine in a cek's time! We will give you FREE
i	typist's manual and a FREE course touch typewriting! Write at once,
	n't delay, send the coupon NOW!
2	dipman-Ward Mfg. Co., 47 Shipman Bldg., Chicago

Address