

# POPULAR SCIENCE

MONTHLY

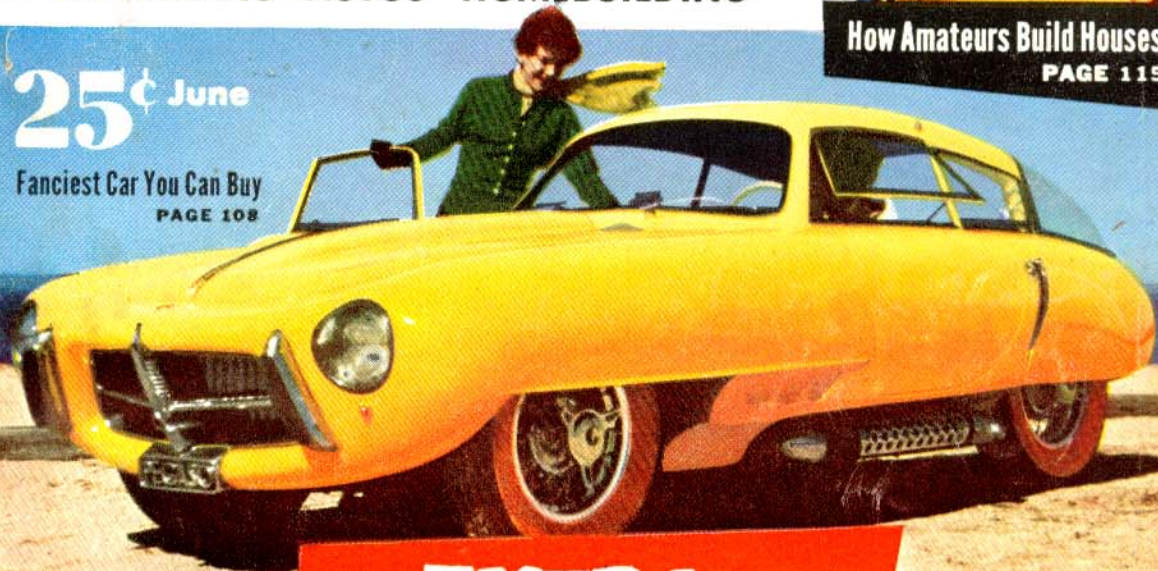
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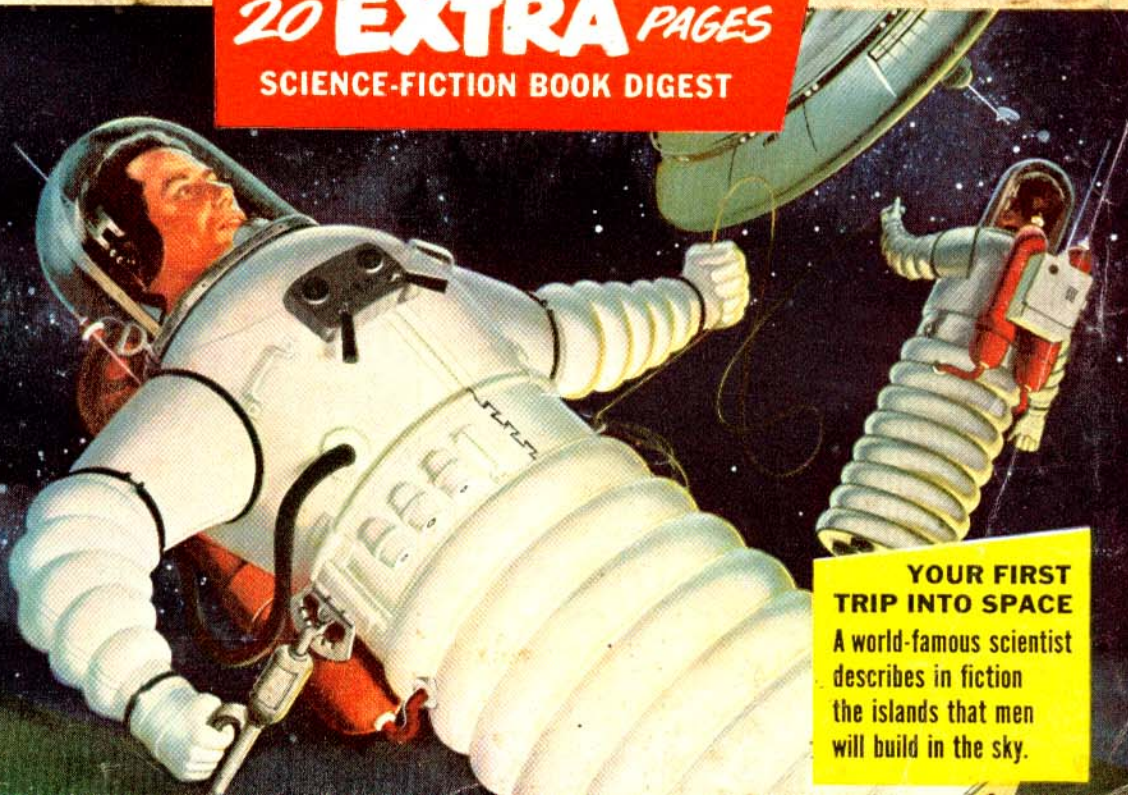
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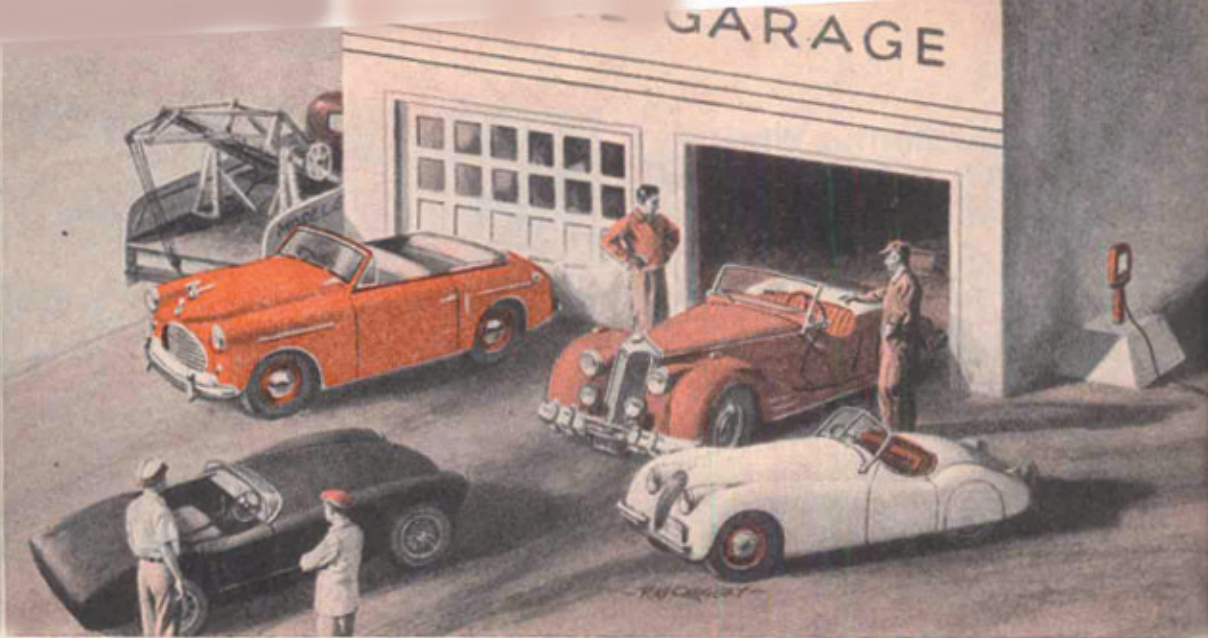
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## GUS PUTS THE HEAT

*Barnes was a big wheel at the local bank, but he was banking on Gus to cure his MG in time for the road races.*

GUS WILSON was just finishing up a brake adjustment when Stan Hicks, his young helper, came back into the repair shop.

"The foreigners sure are taking over," Stan said.

"Foreigners?"

"Yeah, those snazzy foreign cars. Bet I've gassed up half a dozen this morning."

"Oh, sure. Didn't you know about the road race the sports-car boys are holding out on the Mill Road Saturday? They'll probably be coming to town from all over."

During the next few days, the Model Garage looked almost like a petrol station on the Continent. By the time Friday afternoon came around, Gus had poked his head under the hoods of more Healeys, Allards, Romeos, MGs, Jaguars and Ferraris than he had ever seen before.

It wasn't until late Friday that Gus was able to take a breather. "Well, Stan," he said, "looks like the rush is over. I'm going to call it a day."

But Gus had no sooner got the words out of his mouth than he heard a car pull up.

"Sounds like another foreigner," said Stan.

It was a trim little black MG with the top down. The big man driving it made it look even smaller.

"Something we can do for you?" Then Gus did a double-take.

The man at the wheel bore a remarkable resemblance to J. B. Barnes, president of the local bank. Of course it couldn't be Barnes. Gus looked closer and his jaw dropped. Maybe it couldn't be, but it *was*.

Gus had banked at Barnes's institution for several years and he serviced the financier's



*Gus did a double-take when he saw who was driving the little sports car.*



# ON AN MG

BY MARTIN BUNN

imposing limousine regularly, but he never expected him to turn up in a leather wind-breaker and old cap, driving a midget car.

Grinning, J.B. was extricating himself from the driver's seat. "No, you're not seeing things, Gus," he announced jovially. "And it's not as funny as you might think. Used to be a scorcher in my younger days. Drove a Stutz Bearcat—there was a car for you! Even did a bit of dirt-track racing."

"No kidding," Gus said admiringly. Things began to add up. "Say, I'll bet you're going in that road race tomorrow."

"You guessed it, and that's why I'm here. I had a chance to pick up this MG at a bargain the other day and couldn't resist it. Doc Tandy says I ought to get my mind off business once in a while anyway and—well, I thought I might as well try my luck tomorrow, just for fun."

"Good for you. But what's wrong with the car?"

"Well, this afternoon when I made some trial runs over the course, I couldn't coax much more than 65 out of her. On the

straightaways, the rest of the boys were going by me like I was anchored."

"Drive her into the shop," said Gus, "and we'll have a look."

When Barnes had parked his little MG in front of Gus's bench, Gus climbed into the driver's seat and pushed down slowly on the gas pedal. At low speed it ran fine, but when Gus gave it the throttle, the engine seemed to get sluggish and mushy, as if it didn't want to take the gas.

"Could be the timing's off, or you may have a bum carburetor," said Gus as he checked the ignition system carefully. But a timing check showed nothing out of line. Then he went to work on the carburetor.

Again he found nothing. The fuel pressure was up, the float level was right, and nothing seemed to be blocking the jet or the fuel lines.

## *Gus Questions Barnes*

"Any other symptoms, besides that sluggishness?"

Barnes thought for a moment. "Well, she seems to run a little on the warm side," he said finally, "but I don't think she overheats enough to cause any trouble."

"How is she on gas?"

"Well, it's hard to tell in the short time I've had her, but offhand I'd say she uses more than she should."

Gus said nothing as he climbed back into the car and started the motor again. After tromping on the accelerator several times he climbed out, put his head close to the

engine block and began racing the motor by working the throttle lever on the carburetor.

"H-mm, that's funny. Sounds like there's a trace of a spark knock." He turned off the ignition and loosened one of the plugs.

"Save your knuckles, Gus, if you're aiming to check for carbon," said Barnes. "That engine had a complete carbon job before I bought it. And those plugs are brand-new."

"Hey," Gus said, with a grin, "you're knocking down my hunches even before I hatch 'em. Well, let's see if the vacuum analyzer can turn up anything else wrong."

Stan wheeled out the portable analyzer panel and connected the vacuum tester.

At idling speed, the needle on the gauge held steady at just about the right spot to indicate a fairly healthy motor. However, as Gus pushed down slowly on the accelerator, the needle began to get nervous. It would go up to a high reading, snap back to a low reading, and then climb back up. As Gus increased the engine speed, the needle snapped back closer and closer to zero and didn't climb back quite so far.

"Well, you can chalk up one against Wilson," muttered Gus as he watched the needle's gyrations. "Unless that gauge is as screwy as my last few hunches, about all that ails this car is a partially clogged exhaust system."

Gus shut off the motor, walked to the rear of the car, knelt down, and squinted into the end of the tailpipe. Then he probed around with a long-handled screwdriver.

"You see," said Gus, "it's badly coated with carbon and the muffler's probably even worse. These MG tailpipes are pretty small anyway, so the carbon's been building up back pressure."

Gus walked over to the corner, got his creeper and rolled it over to the car.

"Whoa, boss. You'll never make it," said Stan. "And it won't fit on our grease rack

either. Wait a minute and I'll have her up on screw jacks."

When Stan had the jacks in place, Gus slid under. About a minute later he reappeared with a rather glum look.

"That blamed exhaust system is all in one piece from the manifold right down to the tip of the tailpipe. No way of taking it apart. I'd hoped maybe we could clean it out."

"How about cutting it apart?" offered Stan.

"No. I tell you what you do, Stan," Gus said after a glance at the shop clock. "Get

right on the phone and call the Davis boys down in the city. They handle some parts for foreign cars. If they have an MG exhaust assembly tell them to stay open a little longer and I'll pick it up."

Stan disappeared into the garage office as Gus slid under the MG again.

"Anything I can do to help?" Banker Barnes sounded as worried as if a million-dollar investment had gone sour.

"Nope," came back Gus's muffled voice. "I just thought I'd get a head start by disconnecting the exhaust from the hangers."

Gus was working away at the last rusty bolt when Stan's face

appeared under the car. "No luck, boss. They haven't any in stock and claim it'll take at least a week to snag onto one."

"Well, I guess that scratches me from the race," the big man said glumly as Gus reappeared from under the car.

"Now hold your fire a minute," Gus kidded. "Stan, roll the acetylene welding rig out back while I unlatch the front end of this exhaust system."

A few minutes later, standing in the open lot back of the garage, Barnes and Stan watched while Gus propped the MG's one-piece exhaust up on an old metal drum so that the manifold end was high in the air while the tailpipe was on the ground. Then

[Continued on page 248]



The first agitators for improved roads in the U.S. were the cyclists. In 1900, the bicycle brigade was 10 million strong. At that time only 8,000 automobiles were registered in this country.



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### **Gus Puts the Heat on an MG**

*[Continued from page 196]*

he lighted the oxyacetylene torch, adjusted it to a medium-hot flame, and pushed the flaming tip into the end of the tailpipe. In a few seconds, dark gray smoke started to stream from the manifold end. Finally, when the tailpipe started to get cherry red, Gus reached down and shut off the acetylene and turned the oxygen full on. The smoke continued to stream from the other end of the pipe.

### **Gus Burns Out the Carbon**

"If I'm lucky maybe we'll be able to burn the carbon out," explained Gus.

As the three watched, the cherry red section seemed to travel up the tailpipe, along the muffler and finally to the manifold section. In about 20 minutes there was no more smoke. Gus shut off the oxygen.

About a half-hour later, the MG's exhaust was back in place. Gus started the motor and it took the gas well. Evidently Gus's burning-out process had worked. Then came the final proof—a road test. The motor responded beautifully. On a deserted stretch of highway, Gus got the little car up to 85 without any urging.

And on Sunday morning, at breakfast, Gus got his thanks. An item in the local Sunday paper read:

### **LOCAL BANKER WINS IN ROAD RACE**

J. B. Barnes, president of the Empire Bank & Trust Co., took first place in his division of the sports-car road race held here yesterday. Mr. Barnes, virtually unknown in national sports-car activities, astonished a field of seasoned veterans by skillful maneuvering of his well-tuned MG around the sharp curves and 90-degree turns of the Mill Road course. Hitting a fast pace right from the start, Barnes took an early lead . . .

END

*Next month: Gus calls a close one.*

### **Shutter Nut**

AT A recent eclipse of the moon a college freshman arrived at the observatory with her camera. She said she was going to take a picture when the moon was entirely eclipsed. Someone remarked that she wouldn't get much of a picture, but she was unperturbed.

"Oh, don't worry. I have a flashlight attachment."—*The Wiggatt Way.*