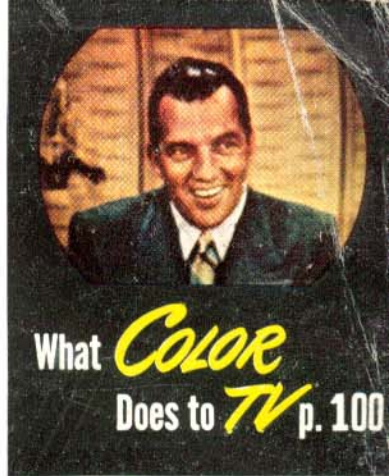


# POPULAR SCIENCE

MONTHLY

MECHANICS AND HANDICRAFT S&H

25¢ September, 1951



What *Color*  
Does to *TV* p. 100

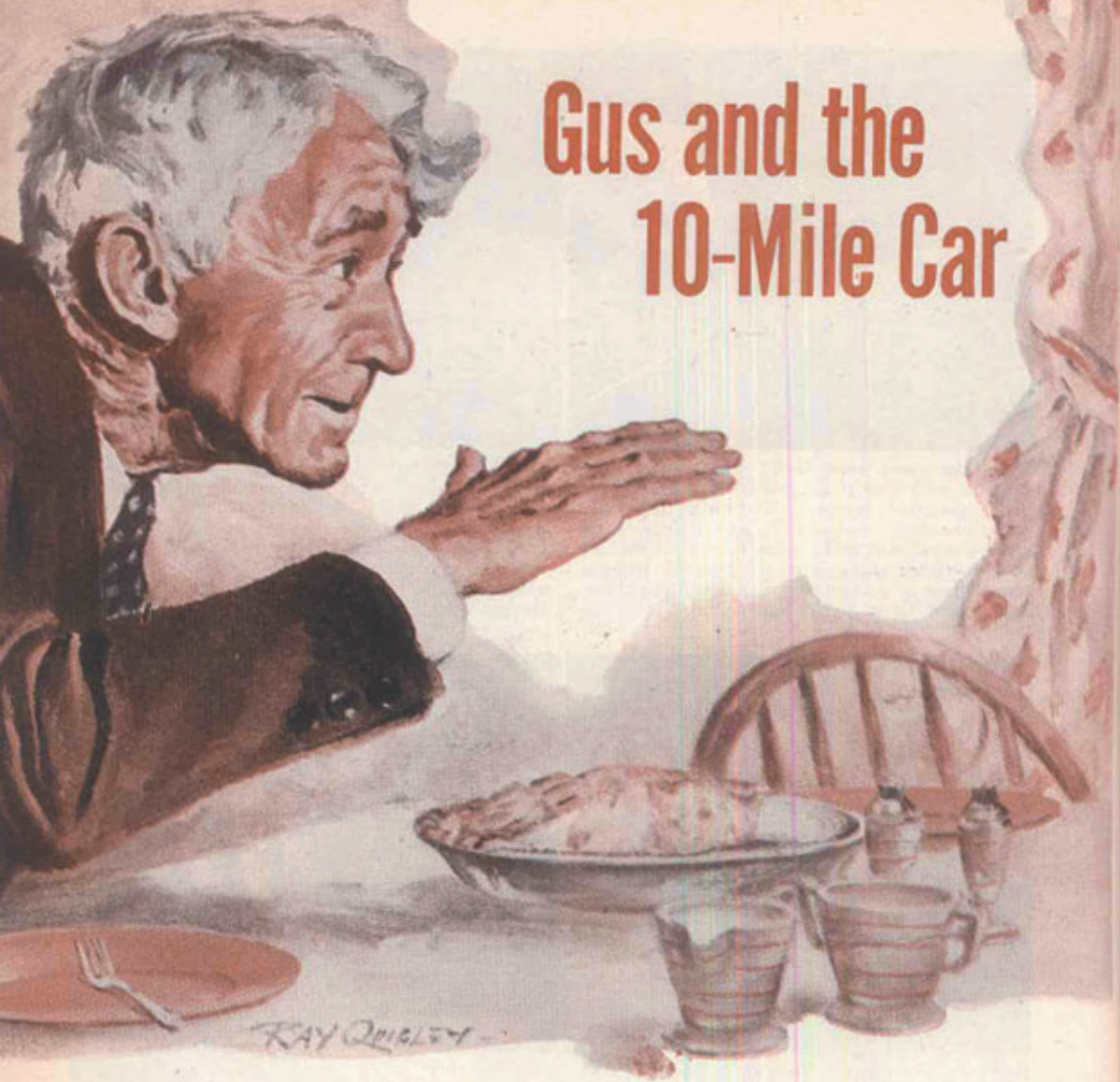


*Wilbur Shaw Reports on*

## NEW SPORTS CARS

PAGE 84

# Gus and the 10-Mile Car



**Gus spends the night at a fisherman's motel and finds he can't get away from ailing autos—even on vacation.**

**By Martin Bunn**

**W**AS it the sign, "Fisherman's Motel," or the raised hood of a car parked beside the motel office? Gus Wilson wasn't sure which caused him to apply his brakes and swing off the paving onto the gravel shoulder.

He glanced down at the mileage on the speedometer and told himself it was the sign. Gus was on his way back to the Model

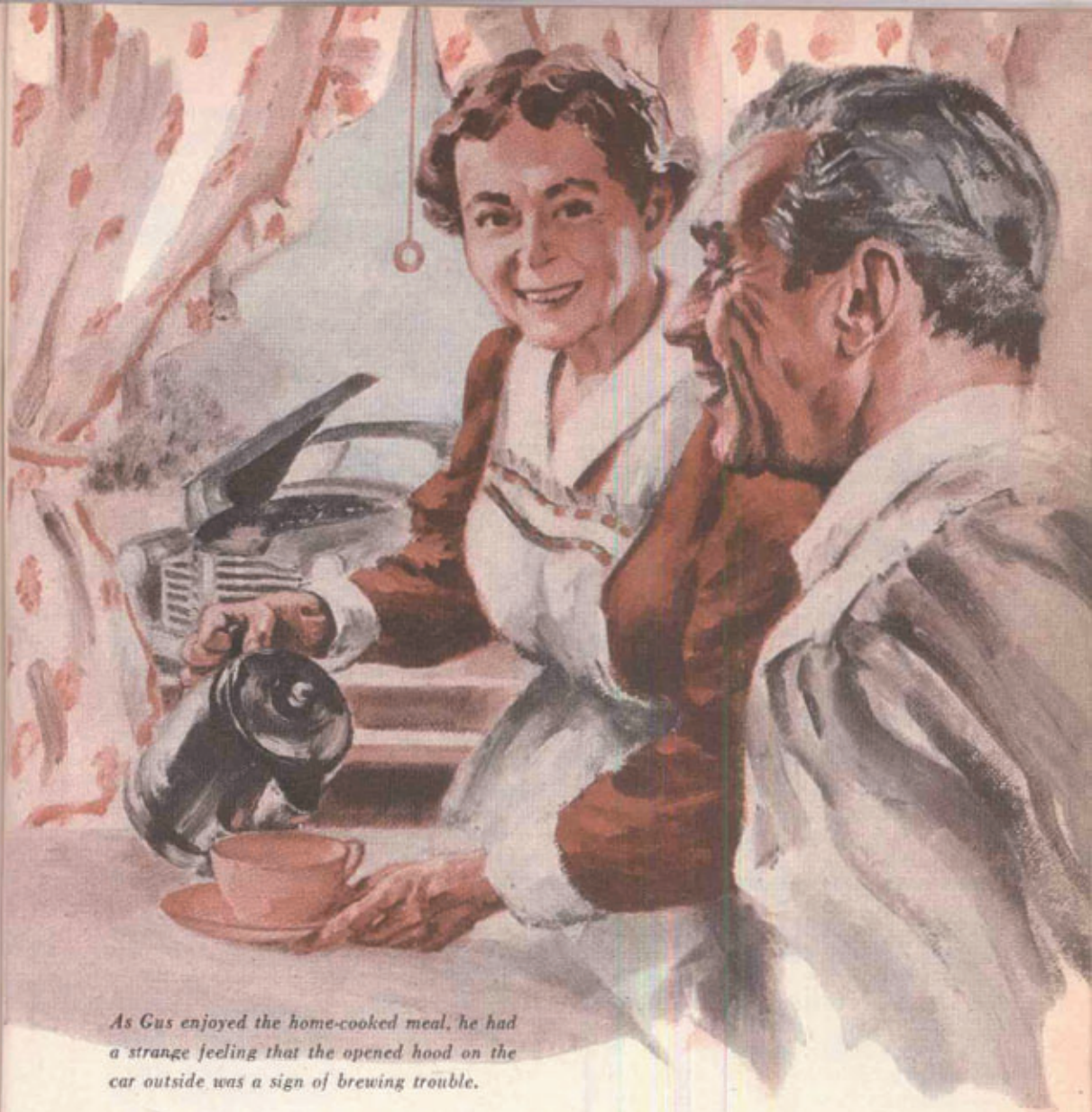
Garage from a week's fishing trip, and he was still 200 miles from home. With the sun going down fast, he decided he better stop for the night and get some rest.

At that moment a white thatch of hair rose up from behind the open hood of the car. "Fine weather, ain't?" the man called. "You lookin' for a cabin?"

"Yep, got anything open?"

Gus's feet started toward the car the man had been puttering with, but he stopped them. He had promised himself before he set out on this trip that he wouldn't touch an automobile except to drive it.

"Reckon you can have Number Six," the



*As Gus enjoyed the home-cooked meal, he had a strange feeling that the opened hood on the car outside was a sign of brewing trouble.*

little man squeaked. "Mighty nice little cabin, right down by the lake."

When Gus had signed the guest book, the gnomelike proprietor helped him carry his gear. "See you been doin' some fishin', Mr. Wilson."

"That's right, up at the Cherry Lakes." But Gus' tone indicated that the fishing had not been all it might have.

#### *Gus Gets an Invite*

The little man jerked his thumb toward the lake. "Ain't bad anglin' right here. Well, if you'll be needin' anything just give a holler."

Gus had taken off his fishing jacket and had begun to clean up. "Just one more thing. Any place around here where a man can get something to eat?"

"Well, there's a place of sorts up the road, but it ain't much when it comes to choice vittles. Most folks," he said, nodding his white head in the direction of the stove, "cook their own meals. Buy the stuff in our store and serve it up themselves. Got some mighty fine cuts of beef hanging."

"I think I've had enough of my own cooking for awhile," Gus laughed.

The little old man, halfway out of the cabin door, paused for a moment and



rubbed his chin. "Well, if you don't mind eatin' country style, how about havin' supper with us?"

"Thanks, that's mighty nice of you, but I don't want to butt in on a family meal."

"Ain't no family. Just Clara and me. Children all married."

"Well, I'll do it on one condition, Mr. . . ."

"Norton, Ed Norton."

"I'll do it under one condition, Mr. Norton," Gus repeated, "and that's if you'll let me buy the steak—and make it a nice big thick one."

#### *Now Comes the Trouble*

After some arguing, Ed Norton finally agreed, and half an hour later Gus found himself seated at a large kitchen table facing a slab of juicy porterhouse, country fried potatoes, fresh corn on the cob, garden tomatoes and Ed and Clara Norton.

"Eddie," Clara said as the three sipped large cups of coffee, "did you get the car fixed today?"

Ed Norton just looked down at his cup and sheepishly shook his head.

"Oh dear," sighed Clara. "We'll never make it to the hospital tomorrow. The way that car's been acting up we won't get more than a few miles before something happens."

"Someone sick?" asked Gus.

"It's our youngest daughter," Mrs. Norton said, visibly upset. "We have a brand-new grandson three days old now and we haven't been to see him yet. We'd planned going over tomorrow if the car was fixed."

#### *He Wasn't Going to Touch a Car*

Curiosity about the car plus the warm glow caused by good food and pleasant people were fast breaking down Gus's firm resolve to keep this trip strictly a vacation. Finally he asked, "What seems to be the matter with the car?"

"Blamed if I know, and blamed if I've been able to find any mechanic around here who can tell me and fix it. She just won't perk for more'n about 10 miles."

"Ten miles?" questioned Gus.

"Yup. Runs fine when you first start off,

but about 10 miles further on she just ups and dies like somebody reached down and turned off the key."

"We've got to do something," said Clara. "I promised Bess we'd visit her and the baby tomorrow, and I aim to get there if I have to walk the 23 miles."

#### *Gus Gives In*

"Now hold on folks," Gus said with a grin. "Maybe I can help out a bit."

The Nortons looked up in surprise.

"I hadn't planned to tinker with any cars on my vacation, but it happens that that's my business. Let's go take a look."

Ed and Clara just stared.

Ed recovered enough to lead the way, and when the two men reached the car Gus slid into the driver's seat and pushed the starter button. The engine took hold easily.

"Now tell me," he said as he headed the car down the road, "what's the story?"

"It started acting up a few weeks ago. I was driving along when all of a sudden the engine just quit. Luckily I was on a hill. I just let 'er roll to the first garage I came to. Man there said the timing was probably off and messed around some. She started right up, but then about 10 miles further along she just quit cold again."

"How did the engine act?" put in Gus as he eyed the instruments on the dash.

#### *Not Enough Gas?*

"Acted like she wasn't gettin' gas," said Ed thoughtfully. "And that's what the man at the next garage thought, too. He put in a new fuel pump."

"Did that help any?" asked Gus.

"She started up without a fuss, just like before, but she didn't purr for long after I got back out on the road. That time I decided I'd go to one of the big service stations in town."

Gus was trying his best to listen to Ed with one ear and to the engine with the other. "How'd you manage to coax her that far?"

"'Bout that time," Ed said, "I discovered she'd start up again if I just let 'er set awhile. Puzzlin', ain't it?"

Gus agreed with a nod.

"The fellows in town gave 'er the works. Said they'd cleaned the air filter, put in a new condenser, checked the carburetor and replaced the gas-tank cap. Claimed the old one had a plugged vent."

*[Continued on page 264]*

Right at that moment the engine gave out with a gasping noise, caught on again and died. Gus glanced down at the speedometer—they'd driven just 10.2 miles.

"What do you think, Mr. Wilson?"

Gus was smiling confidently. "From all the symptoms, I'd say you had a vapor lock. You see, when the fuel gets too hot, like when the engine heats up on a warm day, it begins to vaporize—change from a liquid to a gas. The fuel can't reach the carburetor properly, and the engine dies."

"I see," said Ed doubtfully.

#### **Gus Makes a Mistake**

Gus quickly lifted the hood and began running his hand along the line leading to the carburetor. Then he straightened up. "That's funny. The line isn't hot at all—not nearly hot enough to cause a lock."

Ed Norton sighed. "Well, I'm much obliged to you, Mr. Wilson, for tryin'. I've got some friends down the road a piece that'll be glad to get out their pick-up truck and push us home."

Gus winced. He had been overconfident, like a greenhorn grease monkey, and now the old man probably wouldn't believe he could fix a kiddie car. "Hold on a minute, Ed. Let's give it another try."

The light was failing, and Gus had to work fast now. Although he suspected that it might be dirt in the gas tank clogging the fuel line or a carburetor jet, he decided to look for the simple things first in the hope that a lucky hit might save time. So, with Ed watching, he checked the distributor, the coil, and the connections to the generator, battery and ignition switch.

#### **Hunch Pays Off**

Drawing a complete blank at each, Gus was about to start checking the carburetor when he remembered what Ed had said about the new gas-tank cap. Quickly he walked to the rear of the car and began twisting the cap to loosen it. Suddenly he stopped, stooped down, and started moving his hand around underneath. Then he began wriggling his way in under the car.

"I think maybe I've found your trouble Eddie," came back Gus's muffled voice. "If you've got friends nearby, how about seein' if they'll lend you a 10-inch square of sheet tin and some baling wire. And borrow a pair

of pliers, too, while you are about it."

Before long, Ed was back with the tin, wire and pliers and handed them to Gus.

"There, I think that'll do it," Gus said when he finally emerged from under the car. "Let's try her now."

The trip home was uneventful, and Gus even insisted on driving an extra five miles.

"What was it?" asked Ed.

#### **Knew It All the Time**

"Just like I thought," said Gus, trying to sound as if he had known it all the time. "Vapor lock. You had a hole rusted through the top of your exhaust tailpipe, and it was spraying hot gases over the bottom of the tank and the fuel line. The heat vaporized the gasoline in the fuel line and caused a vapor lock. When you'd let her set awhile, the lock would disappear."

"How'd you ever think of that?"

"I got my hunch when I decided to check that gas-tank cap you said the boys in town put on. When I touched it, it was warm. Then I felt the bottom of the gas tank and it was even warmer. That gave me the tip-off to look for a rusted-through tailpipe."

"And you fixed it by wiring on a tin sleeve to cover the hole?"

"Right, Eddie, but that's just a temporary repair. I'd suggest you take your car into town Monday and put in a new tailpipe."

#### **Gus Passes Up the Pie**

When they pulled up in front of the motel office, Clara was sitting patiently on the front porch. Ed hopped out of the car as if he were jet-propelled. "Clara, the car's fixed. Mr. Wilson found the trouble."

Clara Norton was overjoyed. "Mr. Wilson, I don't know how to thank you."

"Well, we might at least invite him in for a wedge of pie and a glass of milk," suggested Ed.

Gus wasn't one to turn down food very often, but an idea had suddenly come to him. "Thanks a lot," he said appreciatively, "but if you folks don't mind I think I'll turn in right now so I can be up early. I want to try out this little lake of yours before I start headin' for home. From the looks of those lily pads out there, I've a hunch I can reel in a few pickerel. I'd like to catch something before I have to get back to tending ailing cars again." END