

# POPULAR SCIENCE

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**Are You  
Wasting Money  
on Premium Gas?**

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**First  
1959  
Cars**



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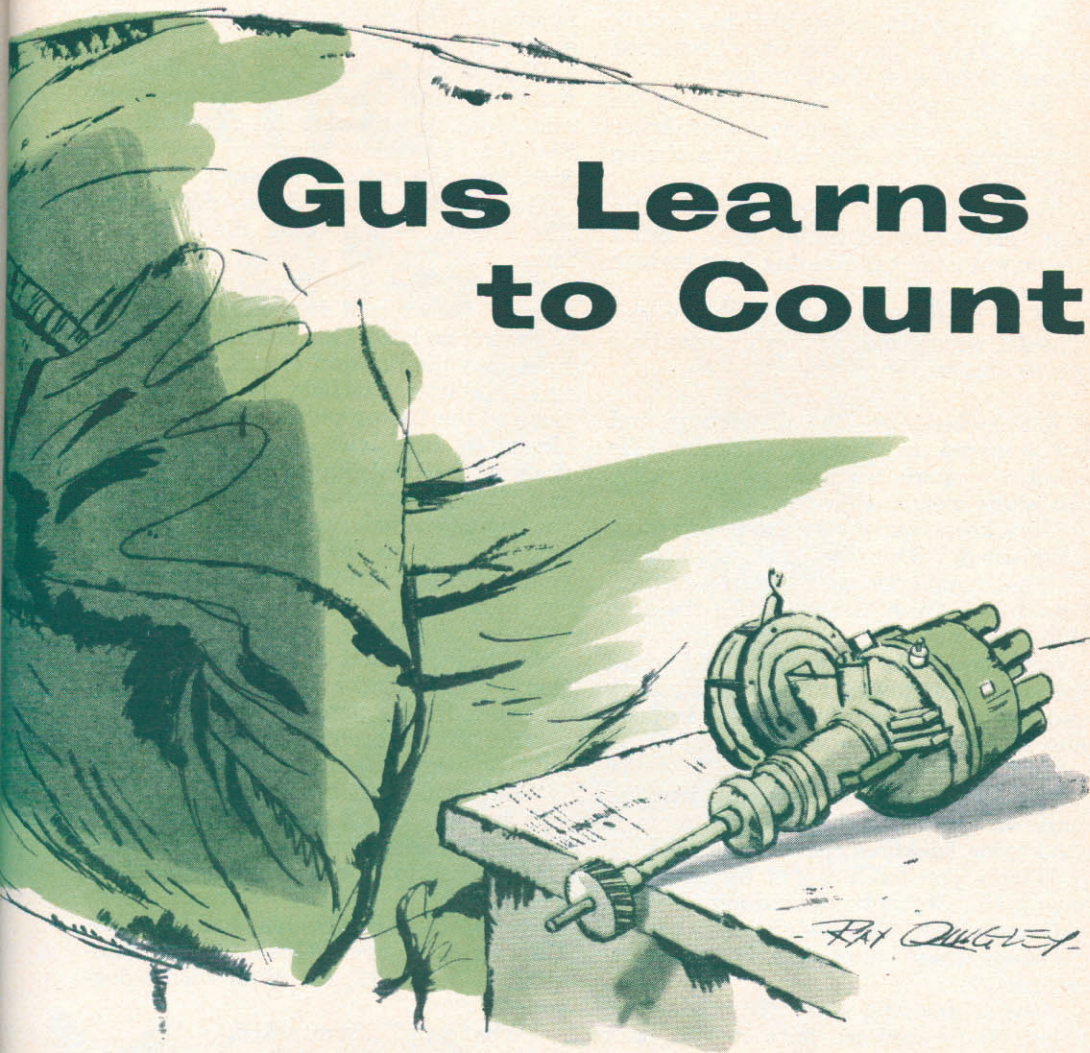
**By Martin Bunn**

**“YOU’RE** no better’n the others, Gus Wilson!” Silas Barnstable stormed, shaking his fist at the proprietor of the Model Garage.

“Just because I bought a big car, you ain’t gonna gyp me into buying high-priced parts. Big car, little car, the parts are all the same. You mechanics just give ’em different numbers so’s you can charge more!”

Gus sighed. He knew that many people believed, like Silas, that manufacturers gave identical parts different numbers and descriptions so they could be sold at higher prices.

# Gus Learns to Count



"I don't know why I even come here, Gus. I can do lots better at that new auto-parts store in Brownville."

"Well, maybe you ought to try them, Silas."

"Don't think I didn't! But they don't have the part I needed. Burglars cleaned them out yesterday. 'Sides, I'd have to put the thing on myself."

"How about Stafford's Garage out near the shopping center?" Gus offered, playing up to the old character.

"Hmmp! Likely as crooked as you."

Gus grinned. "Sure would like to show you the facts about parts interchangeability, Silas, but Bert Wheeler is bringing in one of his motel guests who has car

trouble. In fact, here they come now."

As Wheeler pushed a 1954 Lincoln into the shop with his station wagon, Silas went over and peered in at the thin-faced driver of the first car. "You watch this here Wilson. He's out to clip anybody with a big car!"

The driver's eyes narrowed. "Look, Dad, you mind your business, I'll mind mine."

"Young whipper-snapper!" Silas whirled and headed out of the shop.

Big Bert Wheeler laughed. "Same old Silas, eh, Gus? Oh—this is Bill Carver. Looks like his do-it-yourself auto repair got him in trouble."

"What seems to be wrong, Mr. Car-

ver?" Gus asked, eyeing the big sedan.

"Well, it just won't run since I replaced a worn distributor this morning."

"Timing, maybe?" said Gus, lifting the hood. "Just putting in a new distributor isn't enough. Now if you'd had a timing light . . ."

"Got one, mister." Carver pulled out a fancy pistol-gripped timing light. "But I couldn't get the car running long enough to use it."

"Well, I have to get back to the motel," Wheeler announced. "Stop in next time you're around, Mr. Carver."

GUS looked over the distributor and prepared to check the timing. He noted new spark plugs, a new fuel pump and shiny new carburetor.

"You keep your car in good shape," he commented. "This shouldn't be tough."

"That's good, because I'm in a hurry." Carver lit a fresh cigarette with the stub of the old one.

Bent under the hood, Gus positioned the crankshaft pulley to the timing mark and jiggled the distributor rotor in position to fire number-one cylinder.

"Hit the starter, Mr. Carver."

The engine caught instantly. But the smile on Gus's face changed to a frown as the engine backfired, jerked and died.

"That's just what it did for me," the man said. "Better try something else."

Gus nodded. "If I hadn't just set it up, I'd swear it was out of time. Hit the starter again."

After a grinding start, the engine ran about 50 revolutions, only to spit back through the carburetor and die.

Gus gave Carver a puzzled glance. "This sort of thing happen before you put in the new distributor?"

"No, it ran just fair. Good as it could, I guess, with a worn unit."

Gus hauled out his pipe, filled it, struck a match and began puffing deliberately. If the timing gear had somehow jumped a tooth, it would be a little out of time—*always*, he reasoned.

He checked the fit between the distributor neck and the hole in the block. No play there. Peering through the open hole, Gus had Carver run the starter as he watched the slow rotation of the camshaft pinion. The gear looked perfect, the rotation smooth. There must be something wrong with that distributor, Gus

figured, if the car had run even reasonably well with the old one.

Picking up the new unit, Gus fingered the drive gear, watching the points open and close. Crankshaft to camshaft, he thought, camshaft gear to distributor drive gear. Distributor to plugs. Hold on!

Gus quickly replaced the distributor. The engine caught, then died, true to form.

"Doesn't look like we're getting anywhere," Carver said impatiently.

Paying no heed, Gus hooked the timing light into the ignition circuit. As Carver ran the starter, Gus held the flashing tube close to the timing pointer on the engine block. In the light of each successive flash, he watched the mark on the pulley creep up toward the pointer. Suddenly the engine started, ran roughly, smoothed out, and died as the timing mark disappeared. Two more trials proved his curious hunch.

Gus frowned. It was like a cycle—a definite cycle. That could mean only one thing. Sounds crazy, he thought, but . . .

Inspired, Gus removed the distributor again. "Have to check my service manual," he said, walking into his office.

"Maybe the old man was right about you and big cars," Carver called.

But instead of looking at his manuals, Gus reached for the phone and dialed.

AS STAN HICKS, his assistant, entered the office, Gus hung up, mumbling ". . . 12, 13, 14. Well I'll be dog-goned!"

"What's up?" Stan asked.

"Monkey business, Stan—and I just learned to count!" He scribbled a number on a piece of paper. "Drive over to the Lincoln-Mercury Garage and pick up this part. And hurry. Use the side door and don't let that fellow in the Lincoln see you bring it back."

Going into the shop, Gus spoke to Carver. "This will take a while."

"How long?" Carver snapped, looking at his watch.

"An hour, maybe."

"I'll grab a bite down at the diner," Carver said, pulling a bill from his pocket. "I'll be back in 20 minutes, and here's 20 bucks that says you'd better have it done by then."

Gus moved fast. Ignoring the engine compartment, he jumped on the rear

bumper. Then, with an expression of satisfaction, he took the distributor to his bench arbor press and went to work.

Stan came in with a small package.

"Wish you'd tell me what this is all about, Gus. Something wrong with that new distributor?"

"About as wrong as anything could be."

When Carver came back, Gus was fin-

"What's the story, Mr. Wilson?" the reporter asked.

Gus told how Carver had come to him for help. "I was stumped. All the clues pointed right to the brand-new distributor. This screwy run, not-run sequence was a definite cycle. Then it hit me. The only thing it could be was gearing, a wrong gear ratio somehow.

"I called the local Lincoln dealer. The part number I gave them was for a Mercury, not a Lincoln distributor. They also told me Lincoln uses a 15-tooth drive gear. The Mercury one is almost identical, but uses a 14-tooth gear. Although the difference wasn't enough to keep the gear from meshing, the fast ratio made the engine repeatedly run itself out of time."

The reporter was taking notes as Gus continued.

"Then I remembered hearing about the Brownville auto-parts burglary. Things began to add up—new parts on his car, sagging rear springs. The distributor made me still surer."

"How so?" Jerry asked.

"Well, I figured nobody in his right mind would sell a Mercury distributor for use on a Lincoln. But a person could steal one—it looks identical. Then I sent Stan for the right 15-tooth drive gear, put it in, let him go, made a fast call to the Brownville store to ask if a timing light and a Mercury distributor were among the missing items—they were—and figured you'd still be able to nab him."

"And that we did," Jerry said as O'Shea focused his camera.

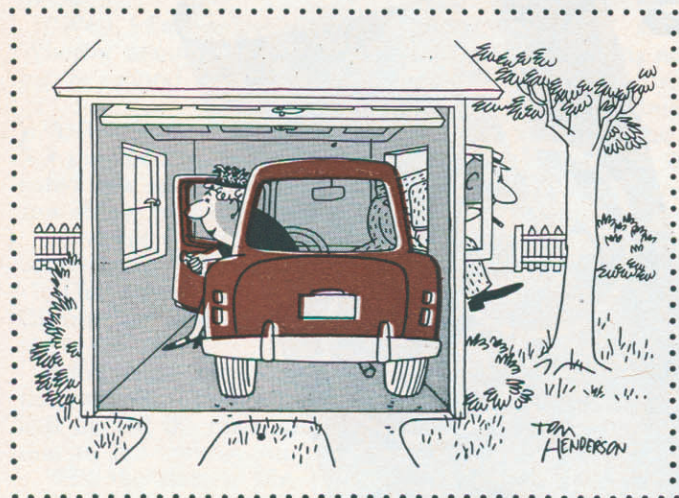
"Hold it, you two. And Mr. Wilson, pick up that wrong gear, will you? I'll make the front page with this."

"Okay," said Gus, taking up the pose. "But how about sending a clipping of your story to a friend of mine?"

The bulb flashed. "Sure. A relative?"

Gus grinned. "Nope. Just a thorn in my side who should learn what can happen to a fellow who thinks all auto parts are alike—Silas Barnstable."

*Next Month: Gus faces the music.*



ished and the car was running. Without a word the man got behind the wheel, backed out and took off.

Gus dashed into the office and picked up the phone. Stan followed him and heard his boss conclude, "... that's all I wanted to know."

Gus dialed another number. "Police Barracks? Officer Corcoran there? . . . Jerry? This is Gus Wilson. There should be a 1954 Lincoln, dark blue, heading out of town on the east highway. License is 16-3390. Driver is blond, in his mid-twenties. Name's Carver. I'd suggest you pick him up for questioning about that auto-parts burglary over at Brownville." Gus paused and listened.

"Sure I'm sure. If you don't find enough evidence in the trunk to convict him, I'll eat an inner tube."

**A**BOUT an hour later Jerry Corcoran and a young man carrying a press camera walked into the Model Garage.

"Gus, this is Dan O'Shea, a reporter from the Brownville Times. He was at the barracks when we brought Carver in. The fellow had enough stolen auto parts and accessories in his trunk to start a garage."