

# POPULAR SCIENCE

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# GUS CALLS

*With two strikes against him  
before he starts, Gus goes to bat  
for three old codgers in a wheezy sedan.* **BY MARTIN BUNN**

GUS WILSON'S rugged features lit up with a broad grin as he spotted the three old codgers pushing the battered sedan down the street toward his garage. Pete Blinstock was shoving on the rear, while Tom Hanratty bent a shoulder to a flapping fender. Ezra Hendricks, his gray beard thrust out belligerently, was at the wheel.

Stan Hicks, Gus's helper, ran out from the grease rack to give the three farmers a hand. Hendricks spun the wheel and the sedan rolled into the Model Garage.

"You boys out for a little exercise?" Gus asked, innocently.

"Exercise!" Ezra Hendricks' beard fairly bristled with indignation as he popped out of the car. "Pete and Tom, here, have been accusing me of busting up my own car. The old fools."

Pete Blinstock was puffing as he came around the car.

"Everybody knows," he wheezed, "that our team is going to beat the pants off Stanfield Corners today. Ezra insisted on taking us to the game in his car. Then he pulled something loose so we wouldn't get there."

## *The Old Car Gave Out*

"We couldn't coax another pop out of her," put in Tom Hanratty, tugging his watch from his pocket. "Hendricks tramps on the starter until the battery's dead, and here we are. If we miss that game—Gus, you've got to fix this thing up!"

Gus wiped the grin from his face as the seriousness of the situation dawned on him. This might be just another Saturday to some folks. But it was "the" day to these old codgers. The local Little League baseball team was about to play Stanfield Corners for the county championship. On the Stan-

field nine was Ezra's grandson, Frank. Stacked against him were Sammy Blinstock and Clyde Hanratty—grandsons of Pete and Tom. The three proud old rooters were

*Stan Hicks ran out to give the three old farmers a hand, and the battered sedan rolled into the Model Garage.*





# A CLOSE ONE

taking the game as a personal matter, and they had very little time to make it to Stanfield, 40 miles away.

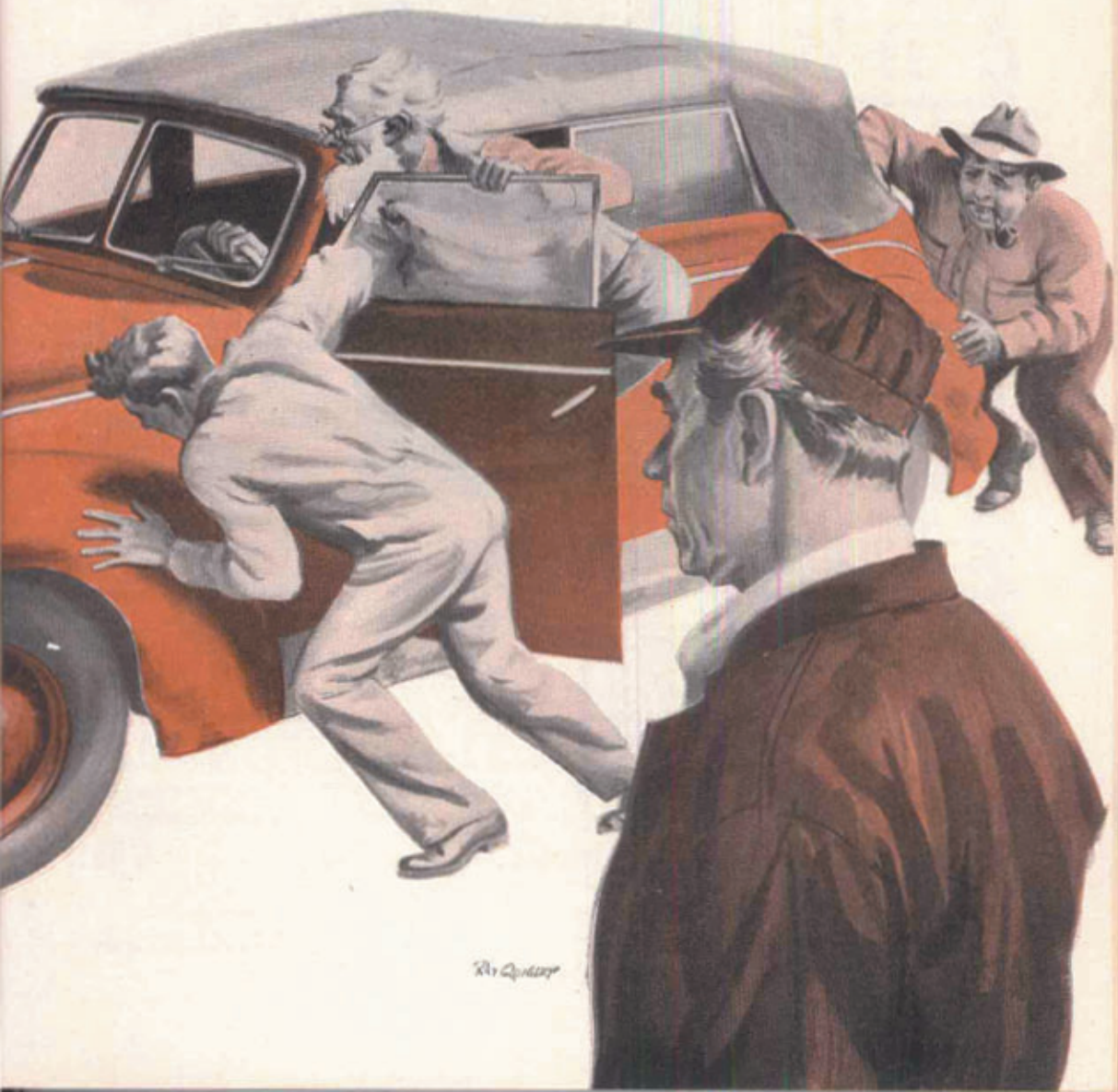
Gus glanced at the clock and made a rapid calculation. He knew this old car like the palm of his hand, and the trouble shouldn't be hard to find. Yet a feeling of apprehension ran up his spine. Baffling situations had a way of cropping up at times like this.

"Slap in a rental battery, Stan," he told

his helper, "while I start checking the ignition."

Gus moved fast. He removed the distributor cap, put the car in gear, and rocked the points up on one cam of the distributor rotor shaft, to open them wide.

The points were slightly pitted. He smoothed them with a point file, and checked the gap with a gauge. A little off. He loosened the lock screw on the movable point, wiggled the eccentric screw back and





forth until he had the right gap, and tightened the lock screw again. As he stepped back to see how Stan was getting on with the battery change, he collided with the three anxious grandfathers.

"Find it, Gus?" Hendricks asked hopefully.

"Of course he didn't!" Hanratty snorted.

Gus Wilson's eyes twinkled.

"Give me room, boys," he chuckled. "Is the battery in, Stan?"

"All bucked up, Gus."

"Turn on the ignition switch."

Gus rocked the points back off the rotor cam, jerked the high-tension wire from the center of the distributor cap, and held it a quarter-inch from the engine block, snapping the points with his thumb. Spark flame arced across the quarter-inch gap. Gus frowned. The blue color of the flame, its husky width, and the audible snap it made, told him that coil and condenser were right. This wasn't ignition trouble, unless it was a matter of timing.

"How'd she act when she quit?" he asked. "Did she backfire?"

"No," grunted Hanratty. "She just sort of wilted and died."

"She'd perk up a mite," Hendricks added, "when I pulled out the choke."

"That," declared Blinstock, "was before she conked out for good at the edge of town."

Gus stroked his chin for a moment. "Step on it, Stan," he told his helper.

While Stan ground the starter on a motor that was as dead as last Sunday's pancakes, Gus loosened the clamp on the air filter and lifted it off. Taking a squirt can of gasoline from the bench, he shot a thin stream of gas down the carburetor throat. Instantly the motor sprang to life. It died as Gus put the can back on the bench.

"Gas trouble," Gus breathed.

The gauge showed full. The trouble must be in the fuel pump. Gus disconnected the

copper tubing from the pump outlet to the carburetor, removed the two cap screws that held the pump to the side of the engine block, and pulled the pump clear. This exposed the pump arm that worked on the eccentric on the camshaft, yet left the pump attached to the gas line from the tank. When he pumped the arm back and forth by hand, a stream of gas shot forcibly from the pump outlet.

Gus grunted, and twisted the pump around so he could see the bottom of the pump arm. In the past he'd been fooled by pumps that threw gas when worked by hand, yet failed to do so when attached to the engine, because arm wear had shortened the stroke. The pump arm showed no wear. It didn't add up. No gas to the engine. Yet the fuel line was clear, and the pump arm was working perfectly.

"Maybe," Blinstock said, "we ought to hustle out and hire a car to take us on to Stanfield."

"That," declared Hanratty, "is what we should have done in the first place."

"We've still got an hour," Hendricks said weakly.

"An hour for 40 miles!" exploded Blinstock. "Why you old faker, you know your

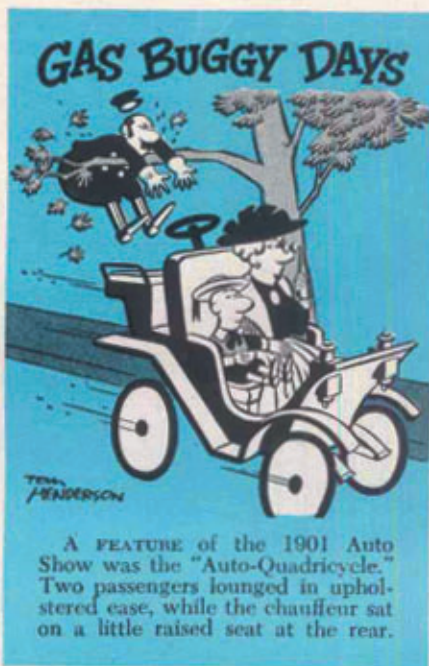
car won't do 40 miles an hour."

Hendricks flushed.

"Now look here, Hanratty," he sputtered. "My car'll do 60, once she sets her mind to it."

Gus kept his head discreetly under the hood. It wouldn't look well for the Model Garage if the three old fellows had to hire a car to take them to the game. But this thing was getting bad. No water showed in the sediment bowl of the gas pump. He checked the screen at the gasoline inlet of the carburetor. Gas line clear, screens clean, pump in good working order. Yet no gas was reaching the carburetor.

Gus's mind went back over each check



A FEATURE of the 1901 Auto Show was the "Auto-Quadricycle." Two passengers lounged in upholstered ease, while the chauffeur sat on a little raised seat at the rear.

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## Man-Made Meteors to Spy on Space

[Continued from page 97]

Observers were set up around the rocket firing field and stationed in observatories in neighboring states to photograph the trails of the artificial meteors with a series of telescopes.

But the experiment didn't pay off. At the crucial moment the firing mechanism for the meteors failed.

Neither the necessary funds nor the firing facilities have been available for further high-altitude experiments with artificial meteors. Meanwhile Dr. Zwicky is experimenting with various charges to find the most suitable size and shape, and various inserts—both solid and liquid—to find the most efficient. If he can get the money, charges will be released at ever-increasing altitudes—from planes, anti-aircraft shells, high-altitude balloons and rockets.

### Could Explore Moon's Surface

In time, Dr. Zwicky believes, we will not only produce artificial meteors which act as satellite missiles or pioneer in interplanetary flight; we may well be using them to bombard the moon. By observing the flash made by a meteor on impact, and by analyzing the flash spectroscopically, the moon's surface can be explored for its chemical constituents.

"In trying to find a master key to space travel," as Dr. Zwicky puts it, "we must first throw a little something into the skies, then a little more, then a shiplod of instruments and finally ourselves."

Today we know only that beyond our reach there is an enormous physics laboratory where great experiments are constantly in progress. We've got to find out a lot more about what goes on there before we ever put space travel on a commutation schedule. **END**

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### Off Key

Soprano: "Your accompaniment certainly doesn't suit my voice."

Pianist: "Madam, I've tried all the white keys and all the black keys, but you sing in the cracks."—*The Wyatt Way*.

## Gus Calls a Close One

[Continued from page 148]

he'd made on the gas line. Had there been something queer in the feel of that pump when he had held it in his hands, or was he just imagining it? Tantalized by the thought, he disconnected the fabric-covered synthetic-rubber hose that connected the pump to the gas-tank line. The five-inch length of hose hanging limply to the pump outlet had a spongy feel.

Gus glanced at the clock, then at the waiting, expectant faces about him. He took a roll of friction tape from his pocket, wound several turns firmly about the full length of the hose, and replaced the pump.

"Try her now, Stan," he said.

Stan stepped on the starter, and pumped the gas. Suddenly the motor came to life.

### Gus Gets Them Started

"Hop in and get out of here, you old coots," Gus grinned. "But be sure to stop in on your way back, for a permanent repair. I've only fixed you up temporarily."

"What the heck was wrong?" Stan Hicks inquired as the car roared away.

"That flexible connecting hose. It looked all right, but it wasn't. The synthetic lining was so weak that the pump action flattened it. Just like when a kid sucks too hard on a wet soda straw—no liquid gets through. The tape will stiffen it for a while."

"But," protested Stan, "that couldn't be. You got gas through that hose by working the pump by hand."

"Sure I did," Gus agreed, as he moved into the office and snapped on the radio. "That's what had me fooled. But when I was holding the pump I had the hose stretched tight, not in its accustomed bend. So the suction of the pump didn't flatten it."

Gus twisted the dial and the roar of the crowd in the Stanfield stadium filled the office. "I can just see Ezra now," he chuckled, "with his foot down to the floor boards and Tom and Pete razzing him from the rear seat. To hear those fellows yammer you'd never guess they were friends. Wonder who'll be razzing who, tonight." **END**

*Next month: Gus gives Cupid a hand.*

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### Times Change

IN THE good old days people turned over in their graves. Now they turn over in their cars first.—*Processing Equipment News*.