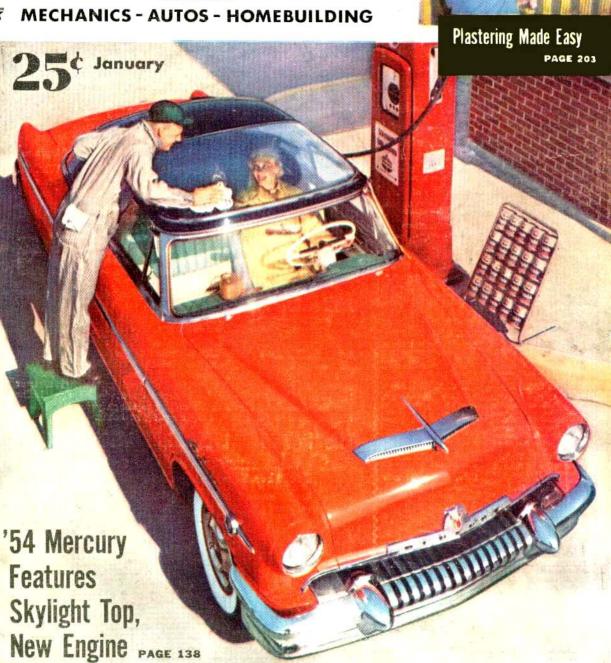
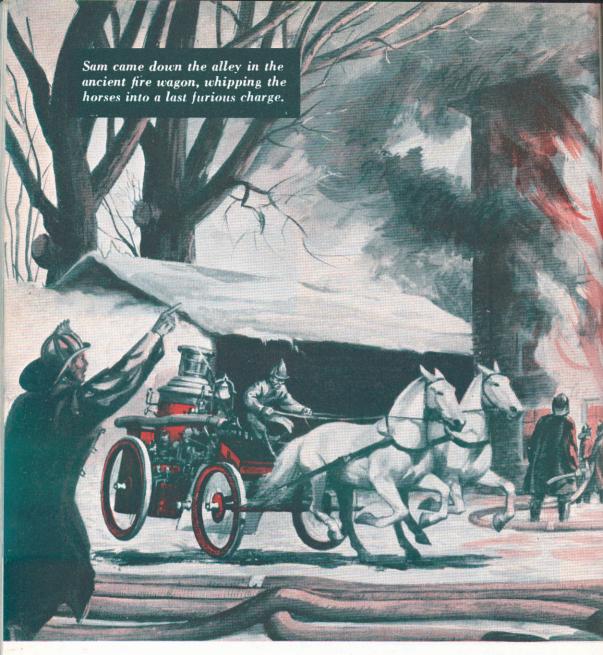
POPULAR SCIENCE

MONTHLY





An old smoke-eater with a two-horsepower fire wagon

Gus Answers By Martin Bunn a Fire Alarm



makes things plenty hot for the Model Garageman.

THERE was an aroma about Sam Boise, and it had always been there as far back as anyone could remember. It was the smell of harness dressing and brass polish, a clean-scented reminder of the man's one love, his past and profession in a brawling, brightly colored time that is dead forever. The aroma belonged with the fierce mustache of 60 years' cultivation, with the remnants of brass-buttoned uniform, and with the pride and nostalgia in the faded blue of his

eyes. If it hadn't been for Sam Boise, the town might not have remembered the old firehouse and the horse-drawn steam pumper that used to answer the bell sounding the alarm from the church tower.

Sam stood now in Gus Wilson's Model Garage staring with an expression of distaste at the modern fire truck that Gus was busily working on.

"Never had to give horses an overhaul! Keep 'em in hay and rub 'em down with burlap, and they'd always answer the bell."
"You're right, Sam. But trucks are faster."

"Faster!" Sam snorted. "We had two dappled grays, Harry and Old Dad, that could get to a fire as fast as any of these gas-belchers! I'd even say those two whites I got now would show a good race."

Gus grinned. Good old Sam. The old firehouse still stood, just a few blocks away. The fire wagon was still there, gleaming brass and wood, and bright red paint. Sam managed, too, to keep a pair of horses.

The old volunteer brigade had long since faded into the land of yellowed photographs, but Sam had stayed on. Not that he ever answered the alarm any more. But he turned the old firehouse into a sort of museum, something for people to look at and remember. And the mayor saw that a dribble of civic funds kept Sam from running the place on

"So you don't care for the gasoline age?"

pride alone.

"You know the old saying, Gus."

"Sure: 'Get a horse!"

"It still goes. If the department still used horses, you wouldn't be breaking your back over that machine."

"Hey, old-timer, I've got to make a living! And besides, I

don't get a fire truck in here very often. They've got their own mechanic over at the firehouse. Just don't have the equipment to do a major overhaul, that's all."

Gus was fitting new rings to the pistons when the sound of a fire-engine siren wailed over the noon quietness of town.

"There goes one now," Gus said.

"It's a bad day for a fire. Dry wind. No rain in a long time."

"Yeah, looks that way. But they got that other truck to use while this one's out of commission."

An Old Fire Horse Never Forgets

Sam Boise fidgeted in the doorway for a moment. It was hard for an old fire horse like him to sit back and do nothing. He was near 80, but there are some things a man never forgets.

"I can smell it," Sam said.

Gus sniffed but got only the odor of the

grease in the garage. He continued his work, thinking about lunch.

A moment later, the phone rang.

The voice at the other end was Fire Chief Joe Insley's. Gus listened for a minute, and then hung up with a bang.

"I've got to run, Sam. That engine just quit at the fire, and she's not pumping

water!"

"What's burning?"

"The warehouse in back of Johnson's Hardware."

Gus jumped into his truck and barreled out of the garage.

The fire was only a short distance away, in an alley just off the main street. He knew the warehouse. It was loaded with piles of linoleum, furniture, plastics, fabrics. And almost jammed against the warehouse on three sides were wooden frame buildings.

When he was only a block away, Gus slowed up at the police line thrown around the area to keep people from under foot. A huge cloud of smoke was billowing up, dimming the sun.

"Let him through," he heard a voice shout, and saw Officer Billy Ryan waving him on.

He stopped at the

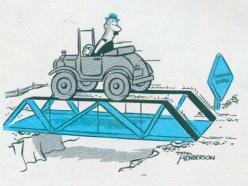
entrance of the alley. A long ribbon of hose stretched from a hydrant on the main street, through a building to the great water tanks in the truck, but it was of no use without the powerful pump to boost the pressure lost over the distance. Joe Insley came up to him with desperation in his face.

"Glad you're here, Gus. The engine just acted up all at once. She'll idle all right, but we have to lock the throttle at a higher speed for the pump to work fast enough. As soon as we try to go over an idle, she quits. There isn't much time. The fire isn't burning too fast now, but if it spreads to those stores of fabrics and plastics . . ."

Gus lifted the hood and took in the engine layout with a quick look.

It wasn't easy, trying to diagnose engine trouble with smoke stinging his eyes, standing in a shower of ashes and sparks. One minute's delay might mean one spark too

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Gus Answers a Fire Alarm

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many, one extra gust of wind . . . the whole block was threatened.

First he unclamped the distributor cap and checked inside. The points were fine, the blade-spring intact, and the works moved freely without sticking.

"Your mechanic tried everything, Joe?"
"Yes. He couldn't find a thing, though."

Gus Hears the Thunder of Hooves

He made sure there were no air leaks around the intake manifold, that the fuel line was not spilling gas somewhere aft of the carburetor.

Gus stepped back and slapped at a spark on his neck in disgust. As he groped back through his mind for other ideas, he suddenly heard a bell. A bell growing louder and then the thunder of hooves.

He saw the men in the alley scatter and hug the sides of the buildings. And then came a sight the town hadn't seen in over 40 years—Sam Boise in all his glory, coming down the alley in the ancient fire wagon, whipping the horses into a last furious charge, and then the spark-shooting clatter of metal wheels, as he wrestled it to a stop. The firemen gaped as the old man spryly jumped to the ground.

Sam Mans the Spouting Hose

"All right, you young monkeys, hop to it—this ain't no wienie roast! Uncouple that hose on the truck tank and keep my tank full!" Sam Boise pulled the spouting hose to the doorway and began working his way in. A cheer went up.

There was no miracle in the way the old wagon came to life after all those years, not when you knew the loving soul of Sam Boise. It worked, and it worked well. The horses stood in quiet discipline as if the old brigade had never died.

Joe Insley came back to see how things were going. "Found anything, Gus?"

"Not yet." He winced. "The way this darned smoke gets in your eyes! I don't know what to say, Joe. I've checked everything I possibly can."

He started up the engine again, and let her idle. The idle, just as Joe said, was good. He lifted the accelerator arm to feed her more gas, and immediately it died. Gus started and killed her again several times, trying to see what caused it.

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Gus Answers a Fire Alarm

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"Say, Gus. I don't know anything about engines, but is this distributor supposed to move every time you give it the gas?"

Gus left the engine idling and came around to that side.

"Yes, that's normal. Your distributor moves back and forth with the retarding and advancing action of your timing apparatus. See, as soon as I lift the accelerator arm and give it gas, the engine speeds up and the ignition advances, the distributor turning with . . ."

Engine Speeds Up and Dies

Gus broke off and stared at the distributor as the engine speeded up and died.

"Well for crying— This makes me feel like an oil spot and twice as silly! Turn the ignition off, Joe, so I won't get jolted into next week!"

Gus loosened the bolts holding the coil and moved it closer to the distributor, tying it to the brace that ran from top of the radiator to the bottom of the fire wall.

"How's Sam doing?" he asked over his shoulder.

"He hasn't put the fire out, but by golly he's got it under control!"

"Well, you can add your own hoses to the fight in just a minute."

Pump Settles Down to Work

Gus slammed the hood down, jumped up behind the wheel and hit the starter. The engine cranked for a moment, coughed and then burst into even, throbbing power. He saw the firemen jump for the hoses and when they were ready, he pulled the pump lever and saw the heavy streams of water begin slamming into the fire.

An hour later, the fire was out, and Gus got ready to go. Insley stopped him.

"Just for the record, what was wrong with the truck?"

"Not much. See this short wire leading from the coil to the distributor? It's not the kind that's supposed to be there. You see, not all distributors turn as a whole with the advancing and retarding of the ignition. A lot of them do the turning internally and separately from the outside covering. And this wire was meant for that kind. See how rigid it is? Well, the constant flexing of the distributor body kept working on it until it snapped every little strand

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Gus Answers a Fire Alarm [Continued from page 252]

in the wire. It broke right here at the terminal nut on the distributor.

"The weird part about it is that when the engine is idling, and the distributor is at its full-retarded position, the wire is rigid enough to hold its position and maintain contact. When you give it the gas, the distributor pulls away from the wire, and the wire still standing up makes contact with nothing but air. I didn't see it, because when I checked over that section, it was touching and looked perfectly all right. And the cap can be removed easily without even disturbing the wire. Anyway, I brought the coil closer to the distributor because there wasn't enough slack in the wire to make a new connection. As soon as you get back to the station, get your maintenance man to locate a new wire, and the right kind . . . Say, where did Sam go?"

Gus Visits a Hospital Patient

"I guess you were too busy to notice. Not long after you got the engine started, the old codger collapsed. Little too much smoke in his lungs. He's down at the hospital getting treatment and rest."

Gus walked down to his truck, turned it around and headed for the hospital.

Sam Boise was somewhere on the outskirts of sleep when he saw Gus's face at the foot of the bed. The old boy did look pretty well bushed, but the nostalgia in his eves was brightened with happiness.

"Well, Sam, you got your wish after all

these years."

"Sure did. It was just like the old days. The old rig worked pretty good!"

"It sure did, Sam. If you hadn't come along, the block would have gone up."

"It all goes to show you," the old man

chuckled.

"What's that, Sam?"

"The fickleness of engines. Get a horse!" Gus grinned and watched the old man drift off into a happy sleep.

"You just might be right at that, Sam." Gus turned and tiptoed out of the room. END

Definition

Motorist: A person who, after seeing a wreck, drives carefully for several blocks.-L & N Magazine.