DECEMBER 1963  35 CENTS

Popular Science

The REAL Causes of Death by Car
A startling new report by Harvard University
What's New at the Hardware Show

Are Drag Racers Really Crazy?

180+ in a quarter-mile!

Complete Guide to Portable Power Tools

C... D... E... F...

How the Wright Brothers Learned to Fly

Supercharger

Jackiefer-Roller cars
Gus Picks Up a Package of Trouble

By Martin Bunn

“HUSH, Tommy. We’ll go as soon as the nice man fixes the car.” Red-haired young Mrs. Fennel turned again to Stan. “I’m taking him to see Santa Claus at the County Shopping Fair. Will it take long?”

“Can’t say till I know what to do,” said Stan, who was in charge of the Model Garage while Gus Wilson was out on a road call. “You say the seat belt squeaks, but I never heard tell of that, Ma’am.”

“Mine does. You’re saying the same as they did where I bought it, when I went back to complain. Then they tried to tell me it was bad shock absorbers, so they could sell me new ones.”

“It just could be,” admitted Stan.

“Only it isn’t! I had the seat belts put in three days ago. That’s when the squeaking began. So it’s the seat belt.”

Helpless before this kind of logic, Stan shrugged. “Best thing is for me to road-test the car, if you don’t mind waiting a few minutes.”

Mrs Fennel didn’t mind, and after ejecting Tommy from the car with some difficulty, Stan drove it around a few blocks. A rasping squeak at once made itself evident he could understand why Mrs. Fennel wanted it stopped. The noise was like the one he’d tormented schoolgirls with as a kid—the agonized squeak of chalk rubbed hard on a blackboard.

Thinking it might be the door weatherstripping or a hinge, Stan opened the door a bit and kept driving. The squeak kept on. He drove back to the shop. Gus had returned.

“Everybody’s installing seat belts these days,” Mrs. Fennel was telling Gus. “So when this store had a sale I thought I’d get them there. But when they couldn’t stop that awful noise, I knew I’d better come here, as my husband always does.”

“We’ll sure try to fix it,” promised Gus as Stan checked the belt anchorages.

“I’m ashamed of that hole Fred—my husband—cut over the back seat,” said Mrs. Fennel. “It’s for a new kind of rear-seat speaker he ordered but hasn’t got yet.”

Gus glanced at the oval opening in the rear-deck panel. “Well, it beats carrying a slew of packages up there, as some people do. In a quick stop, they can fly off and hurt passengers. The hole is harmless.”

Gus was to remember that speech wryly later in the day.

“Can’t we go now?” put in Tommy.

Stan had removed the anchorage bolt of the left-hand strap which screwed into a threaded hole in the car floor. He looked through the hole at a frame member under it, then examined the end of the bolt. On it was a small shiny spot. The trouble light, maneuvered over the hole, revealed a like, though darker, spot on the frame member.

Putting a washer on the bolt, he screwed it back tightly; the washer would raise it enough to clear the frame. “If it squeaks when you drive out, Mrs. Fennel, come right back.”
“Let’s go!” wailed Tommy, tugging at his mother’s arm.

Some hours later, Gus left on a turnpike call. Following a cold snap in November, there had been low temperatures until the last two days. Now a thaw had set in, but the air had a raw, wet edge to it.

The road call proved to be nothing but a broken ignition wire. Gus installed a new one, turned the wrecker around, and headed home.

In his mirror Gus saw the car come up, none too steadily. It skinned past his rear bumper with little to spare, stayed abreast of him longer than it should have. The red-headed young woman driving it stared straight ahead, a cigarette hanging from her mouth, hands rigid yet twitchy on the wheel. She reminded Gus of Mrs. Fennel, but there was no child beside her. He eased off the gas to let her pass.

It was well he did, for suddenly the sedan swerved sharply in front of him, so close it would have ripped into his fender had he maintained speed. Back in the right
lane, it roared on at turnpike speed. The trunk was partly open, its lid tied down over a package too bulky to permit it to close.

Simultaneously Gus realized several things. The car was wandering in a series of overcorrected lurches. And the driver was Mrs. Fennel. Remembering the hole in the rear deck, he made a quick decision.

Throttling down, Gus swung into the passing lane. He overhauled the sedan and blew his horn. Side by side with the car, he saw Mrs. Fennel glance at him through her closed window with no sign of recognition.

Gus made urgent signals for her to pull over. The sedan lurched closer, nearly sideswiping the truck. Staring at the pretty, vacant face, Gus sounded the horn again in staccato bursts. Something finally broke through the woman's inattention. She looked at Gus with startled recognition—and the car slowed, wavered off the road onto the shoulder.

Stopping in front of it, Gus jumped out and ran back. The driver's door was locked. He rapped on the window. Seconds crawled by as Mrs. Fennel slowly unlocked the door. Gus flung it wide, unsnapped the seat belt and hauled her out.

"Where's Tommy?" he demanded, switching off the engine.

"I—I left him—with Mother, after shopping," she said thickly. "What happened? Did I faint?"

"You're going to be all right." Spotting a blanket on the rear seat, Gus wrapped it around her and made her sit on the door sill, then opened all the other doors.

Cars whizzed by. Except for a curious look or two, nobody paid them any attention.

"I'd like a cigarette," said Mrs. Fennel after a few minutes.

"Not yet," said Gus. "Right now you need lots of fresh air—to counteract that carbon monoxide you've been breathing."

"Monoxide?" She seemed to take the word in slowly. "But Fred's so careful about that. Didn't he have you put on a new muffler last week?"

"Yes, but this didn't happen because of a defective exhaust system," explained Gus. "It was partly due to that hole I said couldn't do any harm."

"The one Fred made in the back? How could that let in exhaust gas?"

"Your trunk was open. Monoxide would have seeped in through the rear seat back anyway. Through that hole, it got in faster. How do you feel now?"

She shuddered. "I have an awful headache, but I don't feel as sick as I did."

"The car's been aired out enough. Better get in to keep warm, but don't drive off. I'll be right back."

Gus's efforts to raise Stan on the two-way citizens-band transmitter in the wrecker failed. That wasn't surprising, as Stan listened for calls only every hour on the hour. Gus sent out a general "anybody-listening" call.

"This is 2W7673," announced a voice.

"Anything I can do?"

"This is mobile 2W4233," said Gus. "Would you phone the state police, and tell them I stopped to help a sick woman north of turnpike milestone 274? Ask if they can spare a man to drive her home. No ambulance needed. Over."


He found Mrs. Fennel more alert and apparently recovering nicely. Untying the trunk lid, Gus lifted the huge package out and loaded it onto the wrecker. He closed the sedan's trunk and saw that it was securely locked. For good measure he crawled underneath and checked the muffler and tailpipe joints. All were sound.

In 12 minutes a state police car arrived. After brief explanations, the second trooper
in it undertook to drive Mrs. Fennel to her home. With relief Gus let both cars pull away.

A late repair job claimed all his attention when he got back to the Model Garage. Only when closing up did Gus remember something important.

Today was Christmas Eve, and Mrs. Fennel’s package—which he suspected was a present for Tommy—was still on the wrecker.

Pushing it through one of the wide doors of his sports coupe, he drove to the Fennel home. Fred Fennel answered the bell.

“Oh, it’s you,” was his comment.

“Seems we all forgot this,” said Gus, lifting the heavy package over the threshold. “I figured Tommy would miss it.”

Fennel swung the door wide. “Guess he would—it’s his big gift. He’s spending Christmas Eve with his grandmother, but she’ll bring him here tomorrow. Gives him two Christmases—and us a chance to trim the tree.”

“Is Mrs. Fennel feeling all right?”

“Just about.” Fennel paused. “Look, I’m grateful and all that, and if it hadn’t been so late I’d have come to see you.”

“What’s on your mind?”

“I just don’t understand how it happened.” Fennel burst out. “So the trunk was open and there was that hole for the speaker. Where did the exhaust come from?”

“From the car’s own tailpipe.”

“I don’t buy that. Here’s a car doing 60, running away from its own exhaust. If there weren’t a leak under it—from a defective muffler or a bad joint, monoxide couldn’t have got in. What kind of job did you do last week that would have killed my wife—if you hadn’t spotted her by sheer luck?”

Gus took a deep breath.

“Let’s save the question while I explain what your wife was in no shape to hear. A moving car creates a low-pressure area behind it, a sort of suction drag. A car does not run away from its own exhaust. It pulls some along with it. Station wagons are especially prone to do this. Some people leave the rear window of a wagon open for ventilation. That sucks in exhaust.

“With that package holding your trunk lid open, fumes were sucked into the trunk—and then through that hole in the deck. If there’d been no hole, they’d have seeped through the seat back, but more slowly. As for your question, I checked the exhaust system on the spot. It’s tight.”

Fennel swallowed in obvious embarrassment. “Instead of asking dozy questions, I should be thanking you over and over. Anything I can do to make up for it?”

Gus smiled. “Sure is. Tell me what kind of toy comes in that sassy box?”

Fennel began to rip open the carton.

“A kid’s electric drive-it cart. Look.”

His face fell as he hauled out a collection of wood, wheels, and hardware. “Omigosh! It’s one of those ‘easy-to-assemble’ things. I’ll be all night putting it together.”

Bemused, Gus picked up two parts and fitted them together. Fennel looked at him with sudden hope.

“Say, any chance you would—Lucy’d put on an extra plate for dinner. I know it’s asking an awful lot, but...”

“It’s Christmas, isn’t it?” Gus dug out more parts. “Besides, I always did have a hankering to work on a car this size.”

Belgian police cars use smokeless fuel

Police in Brussels are running English Ford zepphrys on liquid petroleum gas. LPG reduces air pollution from exhausts, gives longer engine life, and is much cheaper than highly taxed gasoline in the Benelux countries. Cylinder heads are modified, raising compression ratios. A cylinder in the trunk replaces the normal gasoline tank.