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PAGE 120





Gus Stops the Music

Tracking down the weird whistle that outraged Mr. Adamus' delicate ear was the toughest tune-up Gus ever tackled.

By Martin Bunn


WHEN Jolmathan Adamus drove up in his flashy new Chrysler convertible, Gus Wilson couldn't help but grin at the contrast. Adamus looked as if he had stepped out of a tintype. He still wore a high stiff collar, an old-fashioned suit that pinched him and high-button shoes. For some reason or other he always reminded Gus of Ludwig van Beethoven. Possibly the reason simply was that Adamus led the high-school orchestra, gave piano lessons

and talked constantly of "music appreciation."

Adamus was pale when he rolled past the pumps and stopped. His hands shook, and he had the frenzied look of a musician involved in a Rachmaninoff concerto.

"Mr. Wilson! Mr. Wilson, you must help me! I'm losing my mind, my sanity, do you hear? My position at the high school, my reputation, everything!" He peered at Gus closely with pale blue eyes. "Something is bound to snap."

Gus stepped back a little.



*Placing the slender instrument
to his lips, Adamus blew
one piercing note.*

"What you need is a doctor, Mr. Adamus. I'm just a mechanic."

"No no no! You don't understand! It's my car, my new car. You must realize that I drive a great distance to school each morning, and home again in the evening. Listen . . ."

Engine Whistles While It Works

Johnathan Adamus depressed the accelerator slightly, and winced.

"I hear a slight whistling noise, if that's what you mean."

Adamus shuddered like someone who had just stepped barefooted on the remains of a jellyfish.

"It doesn't sound serious. Could be a—"

"Not serious! Do you realize that the whistle is a *quarter-tone* below A-flat? Quarter-tone, flat, nasal. It grates on my nerves. It drives me to complete and utter distraction! I'm useless by the time I reach my music-appreciation class, my absolute pitch twangs like a Mexican guitar! And

the school board has noticed I'm falling down in my work of late. Three mechanics have looked for the trouble with this car and can't find it!"

Gus didn't know anything about absolute pitch, and not too much about music, but whatever was wrong with the car certainly had Adamus walking up the walls.

"Well, I don't know why that noise should be so hard to cure."

Gus left him sitting nervously on the shop bench. He lifted the hood on the Chrysler. Any number of malfunctions could cause a whistle or a canary. Sometimes it was lack of lubrication in the distributor, a bad gasket in the intake manifold, the fan-belt pulley, or some loose piece of metal setting up a high-pitched vibration.

Trouble Looks Easy to Fix

A similar complaint the week before had revealed a piece of paper inside a carburetor air cleaner—one of those mysterious little happenings nobody could explain. But none

of it should send a man into near-hysteria. It was really very simple—or should be.

Gus pulled up on the accelerator arm and raced the engine. He bent his ear toward the sound, found its location, turned off the engine and smugly unfastened the air cleaner on the carburetor. He carried it to the workbench, and began taking the top off so that it might be cleaned.

Noise Begins to Get on Gus's Nerves

"This is the guilty party right here, Mr. Adamus."

Adamus looked at him with a baleful eye.

"If you're going to immerse that in some sort of volatile fluid, the other three have already done so."

"But—"

"It didn't do any good."

Gus took the lid off anyway, and looked closely at the cleaner. He shook it, and nothing rattled. He dipped it in solvent, and nothing dissolved. Gus shrugged and put it back in position over the carburetor. When he started the engine, the whistling was there as before.

"Did they look at anything else?"

"I suppose so, but I don't know anything about engines. I couldn't tell you. All I know is that if this thing goes on much

longer, the school board will ask me to resign. They'll let that young upstart of a clarinetist take over."

Gus gritted his teeth and stomped over to the Chrysler again. It was getting ridiculous, and that flat sound was beginning to grate on his nerves.

He tightened up the bolts on the intake manifold and the sound didn't change. He then poured light oil around the intake gasket. None of it was drawn in, removing the possibility of a leak there. Something in the carburetor itself?

Gus attacked the carburetor with new fervor. Something small and mischievous was causing it all. The noise should have

been simple enough for a juvenile Tinker-Toy artist to find. Instead, it was behaving like some sonic will-o'-the-wisp!

He didn't expect to find anything inside the carburetor, since it wasn't likely that foreign matter would be jammed in there without upsetting the running of the engine. But it never hurt to look and make sure. The net result was nothing.

"Maybe I'd better go," Adamus suggested hopelessly.

"No, not yet. Let me fool with it for a while. The darn thing is beginning to grab me by the hair!"

"Look, Mr. Wilson, I'd be perfectly happy

if you'd fix it so it played just plain A-flat. Anything but that quarter-tone. Here, I'll show you—" Like a man possessed, he reached a skinny arm into the car and snatched something from the rear seat.

When he straightened, Gus saw that it was a flute. Placing the slender instrument to his lips, Adamus blew one piercing note. "There! That's A-flat! Make it whistle that, and I'll say no more."

"If I find it at all," Gus returned grimly, "I defy it to make so much as a peep."

The thing was growing to preposterous proportions, and Gus considered the situation.

Sound sometimes performed peculiar antics. A noise could seemingly come from a certain spot, when actually it originated on the other side of the engine.

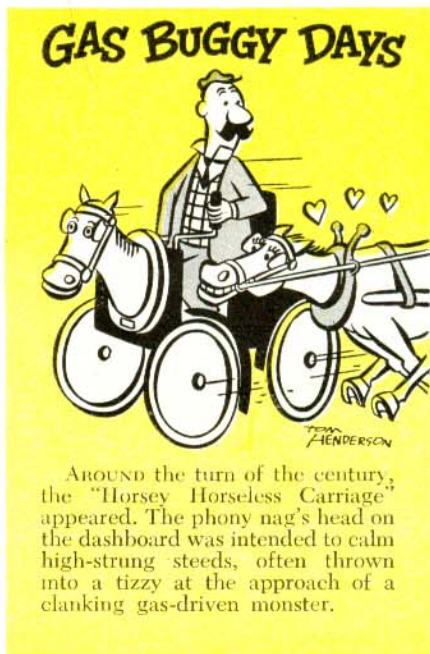
The Canary Continues to Sing

Gus took an oilcan and fed a few healthy squirts to the fan-belt pulley, lubricated the rotor in the distributor and searched for loose metal that might be vibrating. Yet the whistle persisted, like a one-note, tone-deaf canary.

Gus turned in disgust and sat down on the bench beside Adamus.

"Once a month, sometimes twice, just

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AROUND the turn of the century, the "Horsey Horseless Carriage" appeared. The phony nag's head on the dashboard was intended to calm high-strung steeds, often thrown into a tizzy at the approach of a clanking gas-driven monster.

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like clockwork, I get a customer with a bug that defies location—for a while. People have brought me twitters, squeaks, howls and moans, but this is the first time I haven't been able to find it!"

"Maybe I'd do well to sell the car."

"No, you don't have to go that far. That noise isn't anything that's going to cause it to stall on you."

Adamus Explains His Strange Gift

"Mr. Wilson—" Adamus no longer looked like a character, but like a serious, saddened little man under a great nervous strain—"Mr. Wilson, it's either fix the car or sell it. Maybe you think I'm odd, like all the rest, and it's probably true. But it isn't artistic temperament that causes me to behave like this over a small noise. I believe I mentioned it before. It's my absolute pitch. I am able to identify notes, or name individually the notes in a complex chord of music, merely by the sound. Therefore, when an instrument or a singer drifts off key by only a hair, I can spot it immediately. Most people with the gift are not overly bothered by a note that's a fraction above or below what it should be. But with me, it's as distressing and painful as an allergy. I become nervous and irritable, and can't concentrate on my job properly. For a minute or two it doesn't bother me, but when I have to listen to it for 40 minutes while I drive to school every morning . . . Well, how can I make you understand?"

Gus Gets Back to Work

"I do understand." Gus smiled sympathetically. "A rough-running engine will get my nerves to hopping after a while, too. But just relax and let me work on it. We're bound to spot the trouble soon."

Gus got up. The words were far more confident than the way he felt, but he couldn't quit yet.

He started the motor again, locked the throttle at an engine speed just sufficient to start it whistling, and began looking.

Gus went over the engine inch by inch, probing, testing, until as far as he was concerned, it was still the air cleaner. He felt sure now that he had been right in the first place, and that taking other causes and the deceptiveness of noise into consideration

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Gus Stops the Music

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had merely led him on a wild-goose chase. The air cleaner had to be it. He removed the suspect without turning off the engine. The whistle stopped.

The Case of the Baffling Baffle

"I don't care what those three mechanics told you. This is what does it, but I don't know why. It's not a complicated gadget. This copper mesh, coated with oil, filters dirt out of the air before it goes into the carburetor. And to deaden the sound made by the carburetor, a couple of resonance chambers inside act as . . . whoops!" Gus grabbed at the air cleaner as it bobbed in his hands—he had almost dropped it. "They act as a baffle. Not much could happen to it unless some foreign matter got inside somehow, or if it was dropped . . ."

He stared at Adamus with a sudden light in his eye.

Gus turned the cleaner over and looked at the bottom. It was coated with a layer of grease and dirt, where the mechanics' rags had not reached. Gus wiped it clean. There were no cracks or holes to catch his eye, but there was one small dent. It was no bigger than the nail of his little finger. He showed it to Adamus.

"That? I'm only a musician, but how could that little dent cause all that hideous noise?"

"I don't know for sure, but let me check."

Gus Goes By the Book

Gus pulled out a manual on the new Chrysler and turned to some diagrams. He studied them for a while and inspected the air cleaner critically. He shook his head.

"I don't think I ought to try removing the dent. I don't think we'd get the best results that way. It would be quicker and more certain to try a new air cleaner. I don't have one here, but I can run down to Martin's and pick one up. Won't take long—want to wait?"

"Oh sure." Adamus' tone was resigned, though not too hopeful. "I'll wait."

In a quarter of an hour, Gus was back. He unpacked the shiny new air cleaner and installed it on Adamus' car.

"Now we shall see."

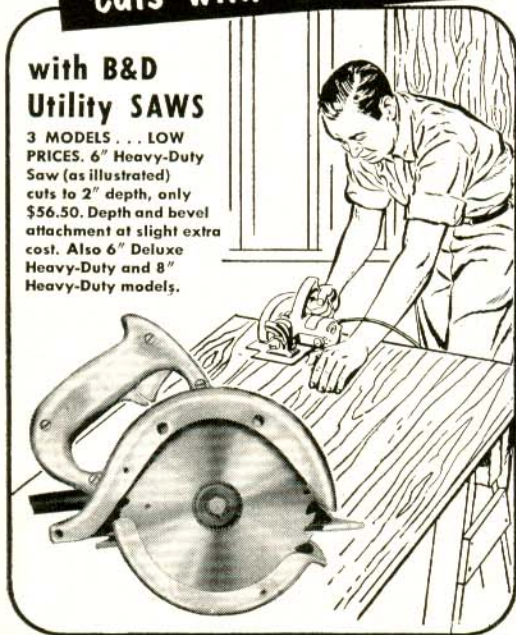
Gus and Adamus listened in breathless suspense as Gus started up the engine and

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Gus Stops the Music

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slowly raised the speed. The engine reached close to its peak r.p.m. without a whistle.

"Thank heavens!" Adamus exulted.

"That dent was it, all right. I guess someone dropped it while it was being cleaned."

"Mr. Wilson, I congratulate you. But I still don't understand about the dent."

"Well, I wasn't too clear on it myself. It was merely a hunch until I looked in the book here."

Gus got the original cleaner and showed Adamus how the thing worked.

Just a Little Dent Did It

"Remember before, I told you this thing acts as a baffle? Well, to begin with, you have a felt pad in here, just under the cover, that absorbs the hissing noise produced in the carburetor as air strikes the throttle blade.

"Now, there's also quite a bit of noise down here in the intake manifold, and to quiet that down there are two resonator chambers, one of high frequency and one low. These chambers neutralize the noise by reflecting sound waves exactly out of phase with the original sound waves. What I had never considered before is what might happen if a dent changed the shape and volume of one of those chambers. That little dent was enough to cause the frequency of those sound waves to be *in* phase with the original sound, instead of the opposite as it should be. Just a quirk of chance, I guess.

"But at any rate, it would be too difficult to remove that dent to the perfection needed. The new unit isn't expensive."

Johnathan Adamus ran a glad hand through his hair and grinned.

"Mr. Wilson, I don't care if that gadget is made of platinum—the noise is gone." He leaped into the driver's seat like a steeplechaser mounting his favorite steed, raced the engine and cocked an ear. "Just listen to that rhythm. Not a whistle or squeal. It's music to my ears!" **END**

A Matter of Breeding

"**BUT** officer, you can't arrest me. I come from one of the finest families in Virginia."

"That's all right, buddy, I'm arresting you for speeding—not breeding purposes."—**ENKA Voice**