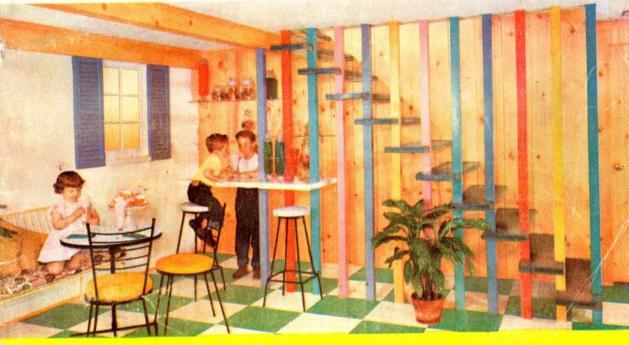
MECHANICS . AUTOS . HOME IMPROVEMENTS

OPULAR CIENCE September



Make Your Home a Show Place







Gus Defends a Woman Driver

By Martin Bunn

US Wilson, genial proprietor of the Model Garage, found himself drawn into the touchy argument about the comparative driving ability of men and women when Mr. and Mrs. Henry Whipple came to him. Henry Whipple, a portly, excitable man with piercing eyes behind thick glasses, slipped out of the family sedan to start the ball rolling. Frieda Whipple, pretty

and plump, sat in the car and regarded her husband with an air of disdain.

"Gus," Whipple pleaded, "will you please check over this car and convince my wife that there's nothing wrong with it?"

"Don't ask the man to perform miracles," Mrs. Whipple said. "There's something wrong with it and you know it. The trouble with you, Henry, is that you're just too stubborn to admit it."

"Women!" Whipple groaned, clapping

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his forehead in disgust. "Gus, I drive this car every day and it runs like a watch. She drives it at night and has all kinds of trouble. But will she admit it's her driving? No, it's the car. Or maybe the night air or the heat of the moon that makes it get hot."

"Do you mean to tell me," Gus asked, "that this car heats up at night, and doesn't in the heat of the day?"

"Exactly," Whipple said triumphantly.

"And not only that, it loses power, won't pull the hat off your head, and gets poor gas mileage—that is, according to my wife's story. Probably she drives with the parking brake on or rides the foot brake."

"I do not," Mrs. Whipple declared. "Mr. Wilson, please prove to my husband that there is something wrong with this car."

Gus glanced at his helper, Stan Hicks, who stood a few feet away, and showed both elaborate unconcern and suspiciously shaking shoulders.

ASSUMING his best professional attitude, Gus said, "I'll do my best. Now if you'll just give me some of the details."

"I drive the car every day on my job," Whipple said firmly. "I work for Roberts Brothers selling dairy machinery, milking machines, everything for contented cows—that's our motto."

"How could a cow possibly be contented with you in the barn, Henry?"

Mrs. Whipple giggled.

"Don't interrupt, my dear," Whipple said. "Now, Gus, I drive this car every day over rough country roads, up hill and down, calling on dairymen, and it runs fine. I get home around five. Then, about seven-thirty, three nights a week, my wife drives it to Stanfield, where she teaches a night class in home economics. She has all kinds of trouble. You know, Gus, that it could be nothing but her driving."

"Gus knows nothing of the kind," Mrs. Whipple said heatedly. "I've been driv-

ing since I was a girl, and I've never had anything like this."

AT THIS juncture. Gus wisely took refuge under the hood. He felt that it was Mrs. Whipple who would most likely be put out, since it seemed impossible for a car to heat up in the cool night air and run cool in the heat of the day, unless the driver was at fault.

Perhaps Frieda Whipple had been driving with the parking brake on. But it seemed to be unworn, and there was

no drag from either the parking or service brakes in the released position.

Methodically Gus went over the car, checking ignition, timing, carburetion, gas pump, compression and cooling system. As he worked it occurred to him that even if he did find something

wrong it wouldn't solve anything. The problem here wasn't whether there was or wasn't a flaw in the car. The problem was, what could be wrong with a car that would cause the difficulties Mrs. Whipple reported, at night, with the same car performing perfectly in the daytime? Or was Henry-Whipple playing a game with her by claiming that he wasn't having the same troubles with the car that she was?

HENDERSON

"The brake! Put the brake on!"

PUTTING this night-and-day business from his mind, Gus concentrated on what would normally cause a car, day or night, to lose power, get poor mileage, heat up. His thoughts turned to the manifold heat valve and he checked it. The counterweight showed that the valve in the cross-over pipe was open, as it should be with a warm engine.

"This engine feels warm," he said to Whipple, knowing that the couple only lived a few blocks distant. "How far has it just been driven?"

"We came right over when I got home

from my route," Whipple told him. "Didn't even stop to eat. I wanted to settle this thing once and for all before my wife drove to Stanfield tonight. You'll notice that the temperature gauge is normal. So you see, it must be my wife's driving."

"Don't put words in Gus's mouth,"

Mrs. Whipple said.

"I'm sorry, Mrs. Whipple," Gus said apologetically, "but your car seems to be in excellent condition—so far, I haven't found anything wrong."

"You see, my dear," Whipple said, triumphantly snatching off and polishing his glasses, "I'm right. Now perhaps if you would take some driving lessons..."

"Just a minute,"
Gus said, holding up
a protesting hand. "I
didn't say your car
was in fine shape.

I said, it seemed to be. I think that the thing to do is for you two to go home and have your dinner. Then, at the usual time, Mr. Whipple and I will ride to Stanfield with you. Stan Hicks will follow in my car, to bring us back while you attend your class."

Mrs. Whipple beamed. "Mr. Wilson," she said, "you are the nicest man. That's just what I've been trying to get Henry to do."

Stan Hicks chuckled after the couple had gone. "Gus, it looks like you've let yourself in for a hectic evening. I'll drive far enough behind so that I won't get hit by flying objects."

GUS and Stan found the couple waiting and eager to go when they drove up to their home at seven-thirty. Mrs. Whipple took the wheel, Gus beside her, Whipple in the back seat. Gus noted that the engine had cooled off and the heatgauge needle was down on the pin. The motor ran sweetly.

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Gus Defends a Woman Driver

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"Drive just as you always do," Gus

told Mrs. Whipple.

She picked up speed to a steady 50 miles an hour after they struck the smooth, open highway to Stanfield.

"Runs sweet," Gus commented.

"Relax," Mrs. Whipple told him. "It's 40 miles to Stanfield. It never cuts up until I'm at least halfway there."

"Probably won't tonight," Whipple grumbled. "You won't have the emergency brake on or ride the brake pedal."

Mrs. Whipple grimaced but didn't reply. She just drove. There was no sound save the hum of the motor, the swish of tires on pavement. They were fully 25 miles out before Gus suddenly jerked erect, his keen ear detecting a change.

"It's started," Mrs. Whipple said delightedly. "From here on we'll have hot

water and less power."

"What!" Whipple exclaimed from the back seat. "In this car? Impossible. Watch her, Gus—she may be riding the brakes on the sly."

GUS looked down at trim ankles and up to check the instrument panel. Yes, the heat-gauge needle had moved up slightly. There seemed to be a little less power.

"It's got to be her driving," Whipple protested, feeling the power loss now himself. "I drive this car every day.

I tell you, Gus . . .

"It isn't her driving," Gus said flatly.
"She drives well. Now with the same car
and equally efficient drivers, we've got
to look beyond these identical factors.
We've got to look at variable factors."

"Equally efficient drivers!" Whipple

exclaimed in protest.

"Get the chip off your shoulder, Henry," Gus said, "and let's get our heads together on this. What difference is there in your driving, Henry—distance, speed, route, load?"

"Same load," Whipple said. "One person. I drive farther, maybe faster. I drive during the day, of course, and she drives only at night."

"I know about where you go in calling on the various dairies," Gus said. "I know most of them. But I can't see why night and day, or route, should make any difference."

Gus was thinking about Henry, driving around, selling equipment for contented cows, when the headlights lit up a white sign, which indicated a road turning from the highway.

"Pull up a minute," he said to Mrs. Whipple, and when she had stopped he got out, lifted the hood, flashed his light

on the motor and got back in.

"Take the branch road," he told her. "Why?" she asked. "It isn't paved."

"Neither are the roads your husband drives on," Gus told her. "It might make a difference. Roll it. Don't worry about chuck holes. We're grabbing at straws, ma'am."

MRS. WHIPPLE looked into Gus's face searchingly—and she rolled it. As the car bounded over the rugged country road, Gus felt it gradually regain its lost power. The heat gauge, which had stood at 190, dropped slowly to a normal 180.

"Ah," Gus breathed. "Pull up at the first turnout."

When they had stopped, Gus got out, took a piece of wire from his kit, worked under the hood a few moments and got back in the car.

"It's all right now," he said. "Your heat valve was causing the trouble after all. A defective bimetallic spring."

"Impossible!" Whipple exclaimed.
"How could anything possibly cause a car to act up at night and not during the

dav?"

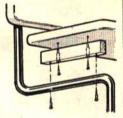
"Impossible?" Gus said, smiling.
"That's what I thought until I satisfied myself that your wife was a good driver and began to think of the variables. This heat valve is a tricky little gadget, installed in the manifold. A counterweight holds a valve closed on a cold engine, so that the mixture from the car-

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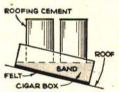
Blocks Raise Child's Seat

WHEN a youngster outgrows a high chair, shim up a metal kitchen chair with wood blocks like this. Unscrew the seat and screw two one-by-two



pieces under it. Put the original screws back through the tubing into the blocks.

Sand Levels Roofing Cement



While repairing a pitched roof, a farmer I know places open cans of roofing cement in a cigar box half-filled with

sand to keep them level. Two holes in the lid receive the cans. Felt cemented to the box bottom keeps it from sliding. -William B. Eagan, Floyds Knobs, Ind.

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buretor will be heated quickly by exhaust gases. A bimetallic spring opens this valve when it warms up. If the valve doesn't open after warm-up, you get overheating, restriction of exhaust gases, and inefficiency from the too-hot fuel mixture. It reduces engine power and causes poor gas mileage. I thought of this right away in the garage, but the valve seemed all right then, open as it should be on a warm engine."

"But how about this day-and-night

business?" Whipple spluttered.

"Remember," Gus said, "that your trouble is a faulty spring that is supposed to open this valve. The engine is cold when you start in the mornings, and the valve is closed by the counterweight. When your motor warmed, the spring, being defective, wouldn't open the valve, but by that time you would have hit country chuck-hole roads, and it would be bounced open. Mrs. Whipple, driving only on pavement, didn't have that kind of luck."

"You're only guessing, Gus," Whipple declared. "How do you know that it doesn't bounce open for Frieda and does for me?"

"On this one," Gus chuckled, "I had to be sure. That's what I got out for, back there. It was closed on a warm engine before we left the highway, and it was open when I looked at it here. I tied it open with wire. Bring it in tomorrow and I'll make a permanent repair."

M R. and Mrs. Whipple looked at each other. Slowly they began to smile, then broke into laughter.

Whipple roared, waving his glasses and wiping laughter tears from his eyes, "How could a cow be contented with me in the barn? Oh, my sacred aunt!"

The Whipples seemed so delighted with each other that Whipple didn't move to change cars when Stan Hicks drove up. Whipple, for this evening at least, seemed quite content to wait for his wife in Stanfield.

NEXT MONTH: Gus saves the livestock.