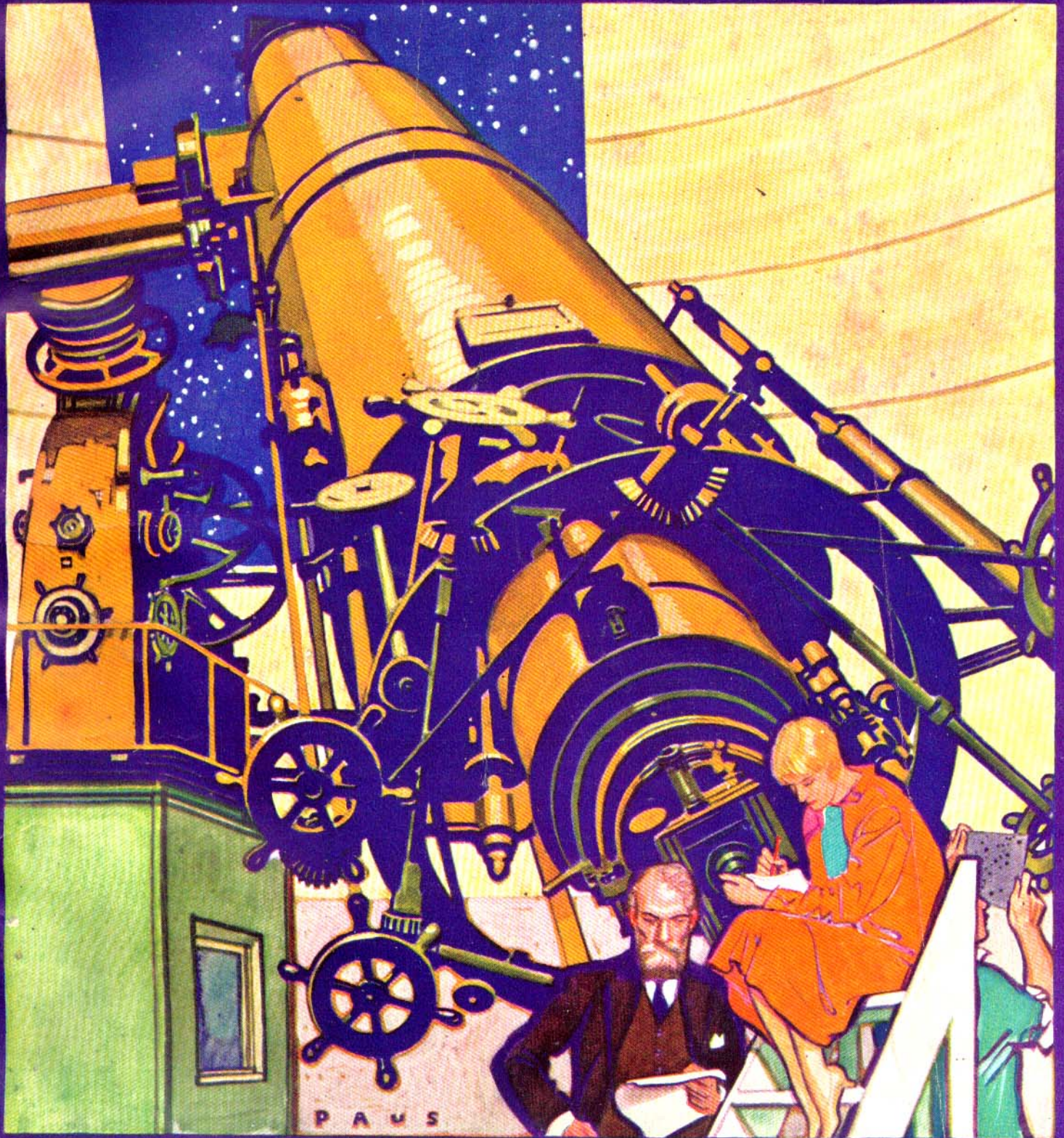


Popular Science

MONTHLY Founded 1872

January
1928
25 cents



In this Issue "Has Prohibition Affected Our Health?"
All the New Discoveries and Inventions

Death Hides in Your Garage!

Gus Rescues a Victim of Carbon Monoxide, and Tells How to Guard Against This Deadly Peril of Motoring

By MARTIN BUNN



"One bit of luck, anyway," thought Gus as he dragged Ensley outside. "Perhaps he is not out too bad"

and Gus dashed quickly toward his car.

"But what's all the hurry about?" Joe demanded. Gus's reply, if he made any, was drowned in the roar of the motor. He shoved the lever into first and a shower of sparks flew from the tire chains on the concrete floor. The car shot out of the garage, skidded on the ice, straightened out, and roared down the road.

Joe watched the departing car in amazement. "Holy smoke!" he gasped. "The old boy's certainly gone nutty."

The distance to Ensley's was close to three miles over a rutty, ice-covered road. In four minutes Gus roared into Ensley's driveway, slammed on the emergency brake, leaped from his car before it stopped sliding and raced toward the closed garage door.

He swung it open at once and a vast cloud of blue vapor welled out behind it.

GUS darted around the rear of the big truck and there, slumped down beside the old desk, lay Ensley unconscious. Gus's hunch had been right.

"One bit of luck anyway," thought Gus as he dragged Ensley outside. "His face was right close to that hole in the wall and maybe the air coming in diluted the carbon monoxide from the exhaust of the truck enough so that he isn't knocked out too bad."

Evidently no one was home in Ensley's house, for there was no response to Gus's call for help, but he was able to carry the victim through the kitchen door. He placed him on a couch beside an open window and proceeded to apply the usual first aid for suffocation.

Perspiration stood on Gus's forehead before Ensley stirred feebly and opened his eyes. "Where am I? What're you doing here?" he murmured.

"You came darn near not being here at all, you crazy dumb-bell!" snorted Gus. "You haven't any more sense than a billy goat! Don't you know better than to run a motor with the garage doors closed? You stay quiet now, while I go out and shut off that truck motor."

"Was it still boiling?" Ensley asked weakly when Gus returned.

"Like a teakettle," Gus replied. "What else do you expect when all the blades have been busted off the water pump? The pump must have frozen last night, and when you started it, the ice just naturally sheared off the blades.

"If you feel up to the mark this afternoon, run down to the garage and I'll put in a new pump impeller. Got a lot of work to do—I'll (Continued on page 131)

"HEY, Joe!" Gus Wilson shouted to his partner in the Model Garage. "What do you think this is, a cold storage plant? My fingers are so cold I can't tell whether I've got hold of a monkey wrench or a screw driver! It's your turn to manicure the furnace this week. Get busy before I turn into a lump of ice."

Joe poked his head out of the office. "Gosh!" he exclaimed. "It sure is cold out here. I'll tend to it right away." And he headed for the heating plant in the pitlike cellar.

The comforting rumble of the furnace grate reassured Gus, and he picked up his tools to resume work, but just then the telephone rang insistently.

"Drat it!" the veteran motor car mechanic grumbled as he clamped a greasy hand around the receiver and pressed it to his ear.

"Hello, is that you Gus?" inquired a faint voice.

"Right here, John, what can I do for you this cold morning?" said Gus, his frown giving way to a smile as he recognized the voice of John Ensley, a young fellow who had recently started out for himself in the trucking business. Ensley apparently was speaking from his "office," which consisted of a broken-down desk

and a telephone instrument in one corner of his tiny garage.

"There's something wrong with my engine, Gus," Ensley explained. "I had an awful time getting it started and now after it's been run only a little while it's boiling to beat the band. I thought maybe the water was frozen at the bottom of the radiator, so I've been running it to get it thawed out, but I just felt the radiator and it's fairly warm right down to the bottom, but still she keeps boiling. What—would you—er—"

The voice trailed off as though the speaker were moving away from the phone, and Gus could hear only the gentle rumbling of the truck motor.

GUS waited a few moments. "Hello!" he called, but there was no answer. A startled expression suddenly came over his face.

"By Golly!" he gasped. "It's got him!" And with that cryptic remark Gus slammed the receiver into the hook and tore out of the office as though seven devils were after him.

"Door stuck again?" Joe Clark called casually. He had come up from the furnace in time to see Gus struggling to open the frozen door.

"Shut up and help me," Gus snarled. Their combined weight broke the ice

Death in Your Garage

(Continued from page 73)

be running along back to the garage now." Gus poked his nose out of the door and then drew back shivering. "Certainly is cold. Where the dickens is my coat? Funny I can't seem to locate it. I'll have to borrow one of yours."

"Right there in the closet, Gus," said Ensley. "Take anything you want. I'm sure grateful to you for pulling me out of this mess, but still I can't figure out how you knew what the matter was."

"Don't worry your head over that," Gus growled as he went out.

"Where was the fire?" Joe Clark inquired facetiously when Gus got back.

"It wasn't any fire," replied Gus. Then he explained what had happened to young Ensley.

"I didn't know gas worked that quick," said Joe.

"Any kind of poison gas works quick," explained Gus, "but most kinds have a smell that acts as a warning. Carbon monoxide is practically odorless. That's what makes it so deadly. You don't realize you're being gassed until you feel a trifle weak, and then you pass out cold."

OF COURSE as far as the carbon monoxide that comes out of a motor exhaust is concerned, you have plenty of warning in the smell of burned oil, but everybody is so used to the smell of an exhaust that nobody pays any attention to it any more."

"What I can't understand," Joe interrupted, "is why there are so many cases of carbon monoxide poisoning now when there weren't before, when I was a youngster."

"Well, in the first place," Gus explained, "the gasoline they sold in those days was high test stuff. It burned so easily you didn't need hot spot manifolds or even a hot air supply pipe to the carburetor. Of course carbon monoxide gas was produced, but in much smaller amounts than nowadays, when the stuff you get for gasoline is so hard to burn that until the motor is fully warmed up there is a whole lot of carbon monoxide produced."

"Of course," Gus continued, "these gas poisoning cases happen mostly in winter, because in summer doors are just naturally kept open, and the hot weather lets the motor heat quickly to the point where the carbon monoxide isn't so serious."

YOU can get gassed without running a motor indoors in winter. A fellow nearly got killed last week by carbon monoxide driving along the road. He had one of these exhaust type car heaters on the floor just behind the driver's seat. The pipe worked loose and the gas leaked out so gradually that he didn't notice the smell. He had the windows all closed because it was cold. Luckily he succeeded in stopping the car and opening the door and then he did pass out, but the cold air brought him around."

"The same thing must happen when there is a leaky joint in the exhaust manifold," Joe suggested.

"But that isn't nearly so serious," Gus said. "Most auto dashes are so tight that not much gas can get through from under the hood into the driving compartment. Still, some does get through, and to be on the safe side it's always well to make sure the exhaust manifold gaskets are good and the bolts are tight. Many a mysterious headache probably could be traced back to gas from a loose exhaust manifold connection."

"Seems to me keeping one of the windows open a bit ought to take care of that," said Joe.

"Sure," Gus agreed. "It's better to risk a cold in the head than gas poisoning if you begin to smell exhaust fumes inside the car while you're driving."



Step Into Aviation

The Game for Daring Young Men

GET away from the dull, prosaic grind of humdrum work—the narrow restrictions of petty, uninteresting jobs! Break into one of the most fascinating, most thrilling occupations since time began—Aviation—the virile, exciting, romantic game for men of sporting blood!

Many of the big men of the coming generation will be men with the foresight to get into Aviation now—while opportunities abound. They can see that the Golden Age of Aviation has just begun—that the future is almost too stupendous to be imagined.

What other occupation offers you more amazing opportunities? Thrills such as you never had before—the praise and plaudits of the multitude—and a chance to get in on the ground floor where rewards may be unlimited.

Aviation is growing so swiftly that one can hardly keep track of all the astonishing new developments. The skies are dotted with daring young men—from every country come stories of new feats—new victories—new heroes! Everything is set for one of the greatest booms in history. Big fortunes came out of the automobile industry and out of motion pictures. Big fortunes will also come out of Aviation! The development of Aviation as an industry is bringing with it a call for trained men. Those who qualify quickly should find themselves on the road to undreamed of money—success—popularity—and prominence!

Easy to Become an Aviation Expert!

Get into this thrilling business at once while the field is new and uncrowded. Now—by a unique new plan—you can quickly secure the preliminary training necessary to get a start in the Aviation Industry, either flying or ground work, at home during your spare time. Experts will teach you the secrets—give you the inside facts that are essential to your success. And, the study of Aviation by our method is almost as fascinating as the actual work itself. Every lesson is chock-full of interest—and so absorbing that you actually forget you are studying. But best of all are the ultimate rewards you are fitting yourself to gain!

Send for FREE Book

Send the coupon for our new, free booklet—*Opportunities in the Airplane Industry*. It is vitally interesting, reads like a romance and tells you things about this astonishing profession you probably never even dreamed of. You owe it to yourself at least to read it. We offer you a free copy now, no obligation. Mail the coupon for yours, today.



**American School of Aviation, Dept. 1361
3601 Michigan Ave.
CHICAGO, ILLINOIS**

American School of Aviation
Dept. 1361, 3601 Michigan Ave.
Chicago, Ill.

Without any obligation please send me FREE booklet *Opportunities in the Airplane Industry*. Also information about your Course in Practical Aviation.

Name..... Age.....

Address.....

City..... State.....

PICK YOUR JOB!

- Flying
- Airplane Instructor
- Airplane Engineer
- Airplane Repairman
- Airplane Assembler
- Airplane Mechanician
- Airplane Inspector
- Airplane Builder
- Exhibition Salesman
- Airplane Manager
- Airplane Contractor
- Airplane Motor Expert
- Airplane Designer