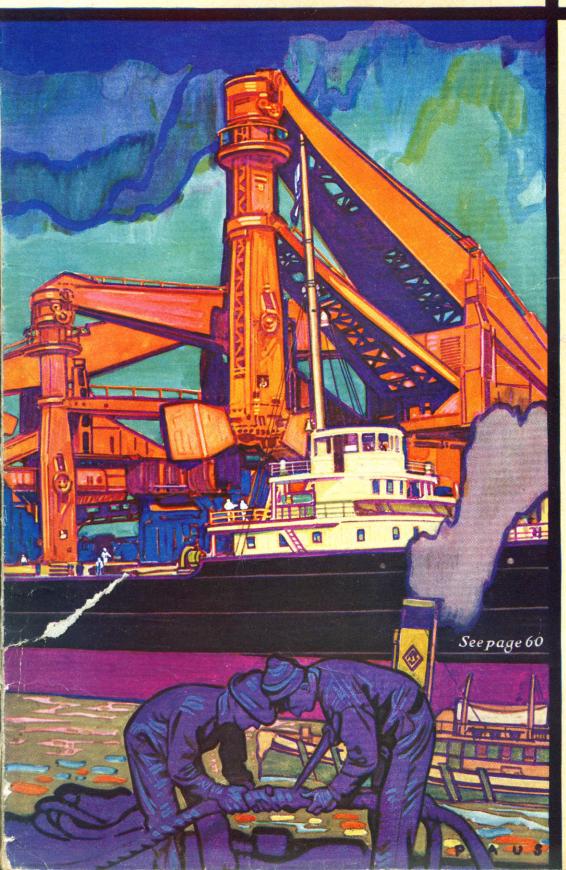
# Popular Science Monthly Founded 1872

May 1930 25 cents



Where America Gets its Booze

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How I Do
STUNT FLYING
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Radio
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Home Workshop

Stop That Fool Honking!

Gus Reads a Lecture on Use of Horns and Tells When to Blow Them and When to Let Them Alone

MARTIN BUNN

HIS is the third trip this week to get odd-sized tires," Gus Wilson grumbled disgustedly as the red light flashed on at a crossing and he brought the Model Garage service car to

Joe Clark, his partner in the garage business, grinned cheerfully.

"Never mind, old-timer," he said, "it won't be long now before most of the old crocks that use freak sizes go to the junk dealer. It's a good thing not so many sizes are used on the new cars.

Gus merely grunted as he watched for the green light. It flashed on a second or two later, but just as he started to let in the clutch the traffic officer held up his hand to allow another car to make a left turn. The driver in the car behind immediately thumbed his horn button for a

series of aggravating toots.

"Must be Honking Harry," Gus
snapped to Joe as he stuck his head out to

see who was doing the tooting.

"That's a swell horn you've got, mister," he grinned, "but it won't get you anywhere with the traffic cop that's holding up this parade. He's hard-boiled,

Gus forgot the incident until a few days later when a car pulled up in front of the

Model Garage.

"Bet you Honking Harry's busted his tooter again," Gus whispered to Joe as the owner of the car approached the two garagemen.

"How about fixing my horn, Gus?" he asked. "Can you do it now? I feel lost without a horn."

"That's how any motorist ought to feel, Mr. Blainfield," Gus agreed, as he lifted the car's hood. "I guess we can take care of you right away."

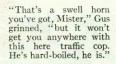
"A horn is mighty important," observed Blainfield as Gus got out his tool kit and started to take the horn mechanism apart.

"Sure, a horn is important," Gus agreed, "but you don't have to blow it all

the time."

"Yeah?" grunted Blainfield. "How else are you going to tell people what to

"That's just the point," said Gus. "A horn isn't to tell people what to do. It's



really only a warning signal to let other people know what you are going to do, and to me it's a sign that you are a good driver if you know when not to use a horn as well as when to

MAYBE so," admitted Blainfield, "but it seems to me that it is always better to blow the horn if there's any doubt about it. Then you are on the safe side."

"Not always," Gus maintained. "There's nothing safe about blowing your horn and expecting that the fellow trying to cross the street is going to stop because he hears you tooting. Maybe he won't, and then if you slam him, the knowledge that you blew the horn is kind of cold comfort.

"To my way of thinking a horn is an emergency signal. If you're a good enough driver you'll handle your car so that the occasions when you'll have to blow the horn are few and far between. Just the other day I made a fifty-mile trip and just for fun I counted the number of times I blew my horn. The total was only three. Once was when a fellow started to cut in on me. Another time was when some kids were playing in the street and that time I blew it while I was still quite a way off so as to tell them I was coming. The third time was to warn a fellow who was backing into the space ahead of me

"I never looked at it that way before," said Blainfield. "Don't you blow your horn when you pass cars? What do you do when you come to a crossing?"

that he was coming back too far.

"SOMETIMES I give one quick toot if I have to pass a car and he's too far out on the road," Gus answered, "but I never pass a car at a crossing nor just before a crossing. It's a good idea to give a long toot before you reach a crossing if it's a bad one, but it's a lot safer to slow down so you can stop in time if there is another car coming.

"I don't claim that blowing a horn is always foolish," Gus went on, "but a lot of it certainly doesn't get you anything. The silliest honking is when you get tied up in traffic. The fellow at the head of the line is just as anxious to get on as you are. Blowing your horn doesn't clear the traffic. Of course, there are times when the fellow at the head of the line doesn't notice the green light. One short toot from the car right behind him ought to be enough without the whole line giving an

imitation of Armistice Day."

"That's right, too," agreed Blainfield.
"While you're fixing that horn can't you make it sound better?"

"What do you want to make it sound better for?" (Continued on page 150) (Continued on page 150)

### GUS SAYS-

OU can't insult an auto driver by telling him his brains are in his feet—if he's wise he'll take it as a compliment. Plenty of brains in your feet will make clutch facing and brake lining last about twice as long as usual. Your right foot ought to know enough to get off the accelerator in time to let you coast to a stop and save wear on the brakes. Your left foot, boss of the clutch, should know enough to let in the clutch gently and not try to control car speed by slipping it. And brains in your feet will make 'em work to-gether when you start the car right foot keeping the motor running just fast enough without racing and left foot making the motor take the load without stalling.



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### Sugar from Sunflowers

(Continued from page 55)

But it was one thing to find it and another to get it out by a cheap process. The Bureau of Standards experimenters knew they must find a way to extract it with water instead of with alcohol, as had hitherto been done. This had long been considered impossible.

Bates himself took charge of the task. Into a laboratory filled with expensive crucibles and retorts he brought a small common ice cream freezer. First, in a vacuum, he boiled down artichoke juice until only about ten percent of moisture remained. Then he poured the thick

syrup into the ice cream freezer.

Instead of freezing the hot syrup, the ice cream machine was arranged to cool it gradually to room temperature. The solution was "seeded" with a few crystals of pure levulose to help along the crystallization of the rest. A sample observed through a microscope showed that more crystals were forming. temperature had dropped from one hundred and thirty to about eighty degrees, the cylinder was opened. It was full of crystals of levulose. The impossible had been done.

N THE strength of that experiment and others that followed, the Bureau built its small-scale plant which until recently has been the scene of the tests. One of the first achievements was the production of 100 pounds of pure, hard, refined levulose. Of this feat, Bates says: "Probably no development in many years has opened up such possibilities for pro-foundly affecting man's food supply."

In the new plant which the Bureau is erecting, an attempt will be made to carry out a "continuous flow" process of mass production such as present-day sugar factories use. It will make hard, refined fruit sugar or levulose. This new sugar can also be prepared in syrup

## Stop That Honking!

(Continued from page 74)

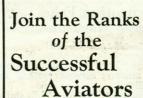
asked Gus. "An auto horn is a warning signal and a warning signal ought to warn and not play pretty music. Of course, there's no sense in having a horn so loud and rough that it scares a man half to death, but we've got to remember that when the difference between hearing the horn and not hearing it may be the difference between life and death, there's no sense in taking a chance on a soft sounding

horn."
"There's something in that," admitted
Blainfield. "Tell me, Gus, which kind of horn is better, the motor-driven or the buzzer type?

SIX of one and half a dozen of the other if they're both kept in good condition," said Gus. "Of course, any horn ought to be quick on the trigger. It ought to start making a loud noise the instant you thumb the button. A fraction of a second delay may be just enough to cause a crash. The buzzer horn starts instantly, though there isn't much difference, nowadays, because motor-driven horns are built so that the armature jumps into action real fast."

"Why wouldn't it be a good idea to have two orns? Then if one broke the other would

horns? Then if one broke the other would work," Blainfield suggested. "There's only one objection to that," Gus replied. "If you had the two horns working from the same button a break in the wiring would put them both out of commission. If you had them work from two different buttons on different wiring, you'd probably forget to press the other button if the first horn didn't work. Anyhow it sure is bad medicine to drive so you have to depend on the horn to keep you out of







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