Popular Science

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INVENTIONS DISCOVERIES RADIO **AUTOMOBILES** AVIATION HOME WORKSHOP



JANUARY

How to make the new and thrilling winged toboggan. Page 72

Inventions I Hope to Make-Edison

"YOU don't have to be an expert to make the old bus shine like new," says Gus. "All you need is good brushes, good paint, and the right dustproof place to do the job"



In a dustproof corner of the Mode Garage, Gus dem constrates to Jowhy a high gradebrush is important if you expect to do a fine painting job. "A 39-cent bargain sale brush simply wcn't flow the paint on smoothly and you have to spend half your time picking off the bristles"

How to Paint Your Own Car

Gus Tells Why It Pays to Be Fussy about Dust and Your Brush

"HAT in blazes are you going to do with all that paint?" exclaimed Joe Clark, half owner of the Model Garage, to his partner as the latter pulled can after can out of his car and arranged them in a neat row on the workbench.

"Do you suppose I'm going to drink it?" Gus Wilson grumbled. "Read the labels on the cans if you're so durn curious!"

Joe stooped over to look at the labels more closely. "'Body Filler'—'Best Pigment Ground in Oil'—'Fine Coach Varnish'—" he read.

"I'm going to doll up this old bus so she looks like new," announced Gus. "Any objections?"

Joe smiled broadly. "It's a fine idea, all right. Your old boat looks like the moths have been making a meal out of it. But where did you get the notion that you're an auto painter? Takes an expert to do a good painting job. Just because you can fix the mechanical part of an automobile is no sign that you know how to paint the thing too. I'll bet it'll look like the dickens when you get through with it!"

"Is THAT so?" Gus growled scornfully. "Well, you just keep your eye on me now and you'll learn something."

He cast his eye appraisingly over a partly walled-in corner of the garage and then proceeded to pull out a large roll of cheap cotton cloth.

"You see, Joe, the first thing you have to figure on," Gus began, "is a place to do the job. That's more than half the battle because you can't do good painting in a cold, dusty room. I'm going to start by

By Martin Bunn

closing in that corner so I can work without you or the customers shuffling up a lot of dust all over the fresh paint. Tomorrow I'm going to bring down a couple of oil stoves to keep that corner good and warm so that the paint and varnish will flow easy and dry as quick as possible."

"HUMPH!" said Joe, rubbing his chin reflectively. "Maybe you do know what you're about, after all. Come on —I'll help you put up the dust wall before I get busy with those bills."

But there were interruptions in the form of emergency repair jobs, and it was two days before the last piece of cotton cloth was tacked into place and Gus was satisfied with the arrangement.

Gus always had been in the habit of keeping his car pretty clean as well as in perfect order mechanically, but as soon as the paint room was complete he set to work to give the machine a washing so thorough that it was not finished until every speck of grease and mud had been removed from the body and running gear.

"There you are," said Gus with satisfaction. "That car is what you could call chemically pure! If you can find any dirt on that boat, Joe, I'll eat every grain of it.

"I kind of hoped I wouldn't have to take off the old paint, but now that I have it perfectly clean, I notice that it is checked and cracked in a lot of places. There are some spots, too, where the paint has chipped off and rust has started. I guess I might as well begin at the beginning and take all the paint off, right down to the bare metal."

"Phew!" gasped Joe a few minutes later as he came coughing out of his little office. "That's a gosh-awful smell you're making, Gus! What brand of paint remover is that? I never smelt anything so rank."

"You'll get used to it," grunted Gus. "I mixed it myself—half benzol and half acetone. It is kind of whiffy, I'll admit; but if you leave it on for about an hour, you can rub the paint off with an old rag or scrape it off with a putty knife."

By the next night Gus had removed the paint down to the bare wood and metal. Then he went over the car with steel wool and fine sandpaper, scraping the rust spots until the surface was smooth and even. After that he dusted it off with a piece of cheesecloth on which a few drops of varnish had been poured. This he allowed to dry till it became tacky. This process removed even the invisible dust, so Gus said.

"You see, Joe," he remarked, standing back and regarding his work with pride, "there's one sure thing about painting. You can't do a good job unless you put the paint on the right kind of a surface. One oily spot, or even a greasy finger mark, may cause the paint to peel off a few months later and ruin the whole job. And now I'm ready to put on the priming coat," he concluded as he busied himself with his array of cans. "Gosh!" exclaimed Joe. "Looks as

"Gosh!" exclaimed Joe, "Looks as though you were setting out to do a real honest-to-goodness professional job—about 17 coats of paint."

"Not as many as that," Gus replied.
"Four coats will be all that I'll have time

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How to Paint Your Car

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for-one priming coat, then two coats of paint and a finishing coat of varnish. The first three coats have to be rubbed down with pumice stone or fine sandpaper and the car gone over with a tack rag. If I tried to do a real high class 'coach job' with many thin coats, we'd be snowed under with the spring repair work before I could get it finished. Besides, I'd get tired of leaving the car here while I walked home every day.'

THE bookkeeping end of the business at the Model Garage, which Joe took care of, being light just then, Joe had considerable time to spare. He pitched in to help Gus with the sandpapering and dusting.

"Just see how easy it is to get the paint nice and smooth with this brush," Gus pointed out, when they had smoothed down the priming coat, and he began to

apply the second coat.
"That's because you are using good

paint," said Joe.

"Sure it's good paint! Didn't I mix it myself? But if you'll take a good look at this paint brush you'll see why the paint flows so smoothly. That's no 39-cent bargain sale brush made out of pig's whiskers stuck in the handle with glue. No, sir! It's pure badger hair set in rubber, and I'd hate to tell you how much money I parted with to acquire it, Gus stated with the enthusiastic pride of a good workman in a fine tool.

"So the brush makes a lot of difference, does it?" Joe asked with interest. "Why, I thought that anything with bristles in it would do. I'd have used a cheap brush that I could afford to throw away after I'd finished and save myself the

trouble of cleaning it."

"THERE'S where you're all wrong," said Gus with emphasis. "Cheap brushes may be all right to use on a cowshed, but you can't do a really fine job with 'em. They simply will not flow the paint on smoothly, and you spend half your time picking off the bristles that keep coming out of the brush."

By the end of the week, the first three coats had been put on. Gus made sure that each coat was thoroughly dry before he applied the next one. Of course, each coat was sandpapered lightly and Gus and Joe spent a lot of time on the

dusting.
"Now comes the hardest job of all," Gus announced the morning after they had finished sanding and dusting off the third coat of paint. "Today I'm going to flow on the finish varnish coat, and I'm going to have it absolutely smooth and glasslike all over or bust a

leg trying!
"Get the oil stoves going, Joe, while I wet down the floor and walls so that walking around won't raise any dust. Then when the temperature is up to 70 degrees you can go outside and see that nobody races a motor in the garage or does anything else that would be likely to kick up a lot of dust or jar any down from the ceiling.'

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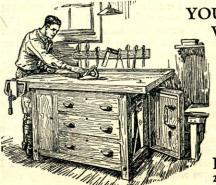
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How to Paint Your Car

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"Why be so fussy?" said Joe. "What little dust you might get on the car by walking around won't hurt the varnish

any."
"Don't you believe it," Gus stated decidedly. "That's why most amateur jobs look so punk. The least bit of dust on the varnish, and the bird who did the job has to tell all his friends that it looks fine if you stand 20 feet away!

"Just to be sure, I'm going to strain this varnish through a piece of that cotton cloth. Then, if there are any lumps or particles of grit in it, they won't have a chance to show up like warts on the finished surface."

Joe followed Gus's instructions so literally that he made two customers shut off their motors at the door and pushed the cars inside by hand.

The next morning Gus, with a great deal of pride, invited Joe in to see the result of his handiwork.

HERE!" he said. "That's pretty THERET he said.

durn near as good a job as any professional auto painter could turn out."

"Sure looks swell," admitted Joe admiringly, as his eyes traveled over the smooth shining surface—no trace of dust or a brush mark anywhere.

"We ought to go into the auto painting business if you can do as good a job as that," he suggested. "By the way, I was looking over my flivver last night, and as far as I can see, the paint is perfectly good, only it's kind of dull. Could I freshen it up if I put a coat of finishing varnish on it?"

"If the paint isn't cracked or checked you can do a good job that way," replied Gus. "These quick drying auto enamels are pretty good for such a job, but you must be just as careful about dust as if you were trying to apply coach varnish. That's what most of the enamels are, anyway-high grade varnish with color added. Only be sure that you buy the best grade you can get; some of the cheap grades show white when the car gets rained on and they begin to look shabby before a month has gone by.

"Don't forget the heat, either. There was a fellow I know who put on a coat of one of these one-day-drying auto enamels in a cold garage in the middle of winter. It took nearly a week to dry and meanwhile dust blew in through the cracks in the door. That job looked like it had been done in a concrete factory.

"And as for going into the painting business-nothing doing! I'd rather pull down three transmissions and four rear ends than do one paint job. I'm an auto mechanic-not a painter.

"This bus is finished now," he declared, as he started in to clean up his brushes. "We'll let it sit there for a couple of days and then I'm going to shower it down with cold water to set the surface of the varnish. Then I'll wipe it off with a piece of chamois skin and after that I'll roll down Main Street thinking I'm fooling everybody into believing that I have a new car!"

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