

POPULAR MECHANICS

INTERNATIONAL EDITIONS AUSTRALIA, BRAZIL, CARIBBEAN, DENMARK, MEXICO, SOUTHERN HEMISPHERE, SWEDEN

AUTOMOBILES AND DRIVING

- 26 Drivin' With Dan
- 46H Detroit Listening Post
- 58 Automobile Clinic
- 63 What Ever Happened to Air Bags?
- 66 The Daytona 500: Big Year for the Little Guys?
- 98 The '71s: Pickups That Pamper
- 114 Let Your Gun Rack Work Year Round
- 122 Those New Gasolines: How to Pick the Right One for Your Car
- 126 Saturday Mechanic: How to Use the Tach-Dwell for Perfect Tune-Ups
- 148 From Van to Camper—\$340
- 150 The Racer's Threads

BOATING, OUTDOOR RECREATION

- 14 What's New Outdoors
- 52 On-the-Go Camping
- 102 Honeymoon on a Houseboat: Exploring America's Newest Waterway
- 106 Surf Fishing With a 4-Wheel Drive
- 114 Let Your Gun Rack Work Year Round
- 115 Boating Tips
- 142 Build PM's Top-Performance Sailboat: the Glen L 10

SCIENCE AND INVENTIONS

- 20 Science Worldwide
- 76 They Like 'Impossible' Jobs
- 80 Danger in the Hospital
- 110 Just Patented: PM's Pick of the New Inventions

PHOTOGRAPHY

- 84 Wrap a Ring Light Around Your Lens
- 119 New in Photography
- 120 Photo Print Dryer You Can Build

ENVIRONMENT

- 50 Pollution Fighters' Newsletter

SHOP AND CRAFTS

- 94 Make This Model Steam Tractor
- 134 Hints From Readers
- 142 Build PM's Top-Performance Sailboat: the Glen L 10
- 147 Hints From Readers
- 148 From Van to Camper—\$340
- 153 Make This Appliance Test Block
- 154 Hints From Readers
- 155 This Die Holder Makes Thread Cutting Easy
- 156 Make Your Own Gemstone Faceting Machine
- 162 Add a Limit Switch to Your Lathe Carriage
- 163 New Tools You Should Know About
- 166 Hints From Readers

HOME AND YARD

- 130 Exciting New Products
- 132 Weekend Projects: Things to Make for the Fun of It
- 138 What an Ugly Radiator Can Do for a Room
- 164 Solving Home Problems
- 182D 'Glass-Top' Wagon-Wheel Table
- 182H Homeowners' Clinic

ELECTRONICS, RADIO AND TV

- 72 Cassette or Cartridge: Which Tape Machine for You?
- 84 Wrap a Ring Light Around Your Lens
- 116 New Quickie Kits for Hi-Fi
- 118 New in Electronics

SPACE, AVIATION, MILITARY

- 90 Coming: A Computerized Collision-Avoidance System

REGULAR FEATURES

- 6 Letters

NEXT MONTH IN POPULAR MECHANICS
22 pages in all!

The '71 Boats. Center consoles, jets, sails, new products—**AWACS: Protection From 6 Miles Up.** It's an 8-engined 707 full of electronics.
Pinto vs Vega: A Coast-to-Coast Test. New bantamweights rack up 10,000 miles.

THIS MONTH'S CLASSIFIED ADVERTISING SECTION BEGINS ON PAGE 200
POPULAR MECHANICS

Cover Photo by Elbert Witt
Build This 10-Foot Sailboat for \$200 (No building form is needed and it's light enough for cartopping)

ROBERT P. CROSSLEY

Editor

JAMES M. LISTON Executive Editor JOHN A. LINKLETTER Managing Editor

WAYNE C. LECKEY Home and Shop Editor SHELDON M. GALLAGER Assistant Executive Editor

THOMAS G. DAUER Art Director

Published by The Hearst Corporation
RICHARD E. BERLIN, PRESIDENT

RICHARD E. DEEMS
President, Magazines Division

JOSEPH F. KERN
Publisher

- BILL HARTFORD Automotive
- JOHN F. PEARSON Science and Aerospace
- GEORGE W. REIGER Boating and Outdoors
- SHELDON GALLAGER Electronics and Photography
- HARRY WICKS Home Workshop
- MICHAEL LAMM West Coast Automotive
- ROBERT LUND Detroit Automotive
- GARRY WINTER Copy and Production
- RICHARD H. FUNK Associate Copy and Production
- JOHN ADKINS Assistant Copy and Production
- ALVIN KIETZ Assistant Art Director
- FRED A. LEERS Assistant Art Director
- JOSEPH P. BEATON Assistant Art Director
- DON EVANS Technical Art Director
- CLIFFORD B. HICKS Special Projects
- SOPHIE GRONOWICZ Director, Bureau of Information
- EVERETT JOHNSON Cabinetmaker

ADDRESS ALL EDITORIAL COMMUNICATIONS TO: 224 West 57th St., New York, N.Y. 10019. For additional sources of information on the articles and products in this issue, write to Bureau of Information, Popular Mechanics, for free "Where-to-Find-It" list.

DANIEL J. COLEMAN
Director of Advertising

ADVERTISING OFFICES: New York: 224 West 57th St., 765-6830; Chicago: 520 N. Michigan Ave., 527-2400; Detroit: General Motors Bldg., Trinity 5-8711; Cleveland: 20310 Chagrin Blvd., Shaker Heights, 283-7788; Los Angeles: 601 North Vermont Ave., 666-6263.

JOHN A. REGINA Advertising Production Manager

SUBSCRIPTION SERVICE: Mail all subscription orders, changes of address, correspondence concerning subscriptions, and postmaster notices of undeliverable copies to Popular Mechanics, Box 646, New York, N.Y. 10019. Please enclose your latest address label for quickest service when writing about your subscription.

POPULAR MECHANICS IS PUBLISHED MONTHLY by The Hearst Corporation, 57th St. at 8th Ave., New York, N.Y. 10019, U.S.A. Richard E. Berlin, President; George Hearst, V-Pres.; Richard E. Deems, President of Magazines; John R. Miller, Executive V-Pres. of Magazines; Raymond J. Petersen, Senior V-Pres. of Magazines; William S. Campbell, V-Pres. of Magazines; Albert A. Rachoi, V-Pres. and Director of Circulation; Joseph F. Kern, V-Pres. for Popular Mechanics; Frank Massi, Executive V-Pres. and Treasurer; Harvey L. Lipton, Secy. Single copy in the United States and Possessions \$3.00 for one year; \$9.00 for two years; \$12.00 for three years. Canada, add \$1.00 for each year. Pan American Postal Union countries, add \$1.00 for each year. All other countries, add \$2.00 for each year. When changing address, give old address as well as the new, with postal-zone number, if any, and allow six weeks for change to become effective. Second-class postage paid at New York, N.Y., and at additional mailing offices. Authorized as second-class mail by the Post Office Department, Ottawa, and for payment of postage in cash. Registered as second-class matter at the Post Office at Mexico D.F., Mexico, June 29, 1950. © 1971 by The Hearst Corporation. All rights reserved. Printed in U.S.A.

Part of the popular mechanics of making a great drink:

the good stuff.



Old Grand-Dad
Head of the Bourbon Family

Kentucky Straight Bourbon Whiskeys. 86 Proof and 100 Proof Bottled in Bond. Old Grand-Dad Distillery Company, Frankfort, Kentucky 40601.

How the New Gasolines Affect Your Car Page 122

POPULAR MECHANICS

FEB. 1971
50 CENTS

What's
New In
Pickup
Trucks

Build This 10-Foot Sailboat for \$200

Page 142

Daytona 500 Preview

Big Year for the Little Guys?

Exploring the Scenic New Arkansas Waterway



New, More Versatile Cassette Recorders

How to Raise the Roof On a Camper Van

A Working Model Live-Steam Tractor