



# PARK PRACTICE

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NUMBER 3

# Grist





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**NATIONAL RECREATION AND PARK ASSOCIATION (AIPE)**





### Commentary

#### "WE'VE ALWAYS DONE IT THAT WAY"

Customs, as well as habits, have been with us since the beginning of time. From year to year, from father to son, customs have developed to remain for centuries. The origination of many of our customs has been lost in antiquity and so we often take recourse in the trite, sterile statement "We've always done it that way."

How many times have you heard someone say with a sigh of remorse: "remember back in the good old days when we--." With this trend of thinking, we should have remained "back in the good old days" when a pit toilet wasn't just found in a far remote section but came with every dwelling before modern plumbing was invented.

We sometimes find ourselves afraid of change. Perhaps we're afraid that we might not be able to cope with new methods. But usually after change is made, if the change is right, we find that somehow it was an improvement and things seem to operate better than before.

Where would we be today had we avoided progressive thinking back in those "good old days?" How would we have attained today's standards? Progress in medicine, progress in automation; progress in transportation and a host of other things which touch our daily lives, are manifestations of habit-breaking; discarding old ways for new. It is necessary that we keep in step with a better life, a growing population, and a growing nation.

Progress is vital and changes must be made if changes are needed. If there is a better way to do it, let's try it. Change for the sake of change can be as detrimental to progress as no change at all, but we should and must adopt an attitude of progressive thinking. When a change is indicated, then let change be the order of the day and get on with progress. We should not continue with methods and routines simply because we've always done it that way.

Patricia K. Conner

#### "FLICKERING FLAME" FLASHES FIRE PREVENTION MESSAGE

Throughout East Bay Regional Park District, Oakland, California, wherever a roadside fire has occurred, a warning sign, such as the one shown here is erected. It is a two-faced sign to catch traffic from both directions. The flames are painted in three raised layers of different shades of fluorescent reds, oranges, and yellows, which makes them appear to flicker as one drives toward them. The effect is so successful that traffic invariably slows down and passengers take note of the message.

The trees are painted green, of course, and the cost plate is removable.



Christian Nelson, Chief, Interpretive Department at East Bay, who submitted the suggestion, says that this sign is really successful in driving home the fire prevention message.

*Every time you see a dust-cloud or a muddy stream, a field scarred by erosion or a channel choked with silt, you are witnessing the passing of American democracy.—*

—Sterling North

#### BE EVER READY FOR FIRST AID

Total preparedness ought to be part of the NPS safety program, says Harry P. Linder, Superintendent, Tuzigoot National Monument, Arizona, who forwarded this suggestion for a first aid kit made by Archeologist Calvin R. Cummings.

For all protective and interpretive personnel who guide visitor tours, make back country patrols, or are on business away from easy access to regular first aid equipment, the following items are a must, says Cal.

"Pocket Guide to First Aid",  
stock no. 195.05 (c) National Safety Council, 1961  
425 N. Michigan Avenue  
Chicago 11, Illinois

Pocket First Aid Kit  
GSA stock no. 6545-656-1092  
4"x2 1/2"x1", cost 70¢ each

Both items fit in a pocket, or a leather belt case is available into which both will fit.

#### POCKET ASH TRAY FOR TRAIL HIKERS

When GRIST's loyal and frequent contributor, Donald M. Black, now Assistant Park Naturalist at Shenandoah National Park, was called upon to take a special group on a conducted hike during the peak fire danger period in October, he took a special precaution. Into his pockets he put a few tin foil lined bags that 4x5 cut film is sealed in. When the group came to a smoking rest stop he announced that all pipe ashes, cigarette butts, and used matches must be dumped into one of the bags before they left the safe smoking area.

After this was done, the top was folded over a couple of times and the corners bent to hold the bag securely shut. In this way the potentially hazardous material can be carried out of the danger area and be deposited in a trash receptacle in a safe area or back at headquarters.

Of course, such foil bags are handy to carry along on the trail for any other kind of litter as well.

### Park Practice GRIST

a bimonthly publication of the nonprofit, educational Park Practice Program cooperatively conducted by the National Park Service, U.S.D.I., the National Conference on State Parks, and the National Recreation and Park Association as listed hereafter.

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\$1000 to patch those lines by hand.

How does the sealer work? NH<sub>3</sub> frees the calcium carbonate in the water which is then carried into the cracks and seals them. The entire inside of the pipeline is coated, much like a thin whitewash or paint coating, and large as well as small cracks are sealed. (To achieve this the pipelines should be completely filled during treatment.) The amount of calcium in the water is therefore an important factor and it is advisable to have the water tested in a laboratory for calcium content. In the experience of the Chowchilla District, it is desirable to move water through the lines at a constant but moderate rate in order to obtain sealing throughout, and quicker sealing action will result if the pipeline is treated in short sections, no more than a half mile long.

Two cautions are given. Because of the high amount of nitrogen present the drain water could damage some crops. Disposal of treatment water should present no problem, however, if used on crops needing nitrogen. The other caution is to persons entering large pipelines after treatment. Because of the liquid state of NH<sub>3</sub> and the strong ammonia odor, care should be exercised.

This method of leak stoppage in concrete pipelines is undergoing further study at the Bureau of Reclamation Laboratories in Sacramento, California, and if you are interested, write there for additional information.

### THWARTING THE THIEF

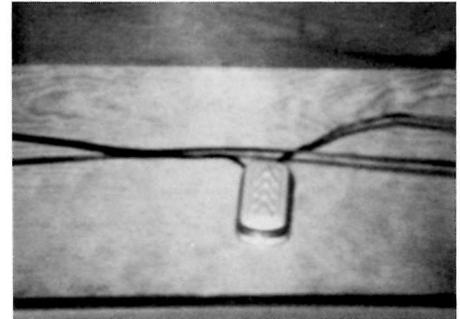
The maintenance building at Coronado National Memorial was broken into and a number of hand tools were stolen. This prompted Maintenance man George E. Brown to devise an inexpensive alarm system. (See photographs and diagram.)

The tool room is a wire cage which is



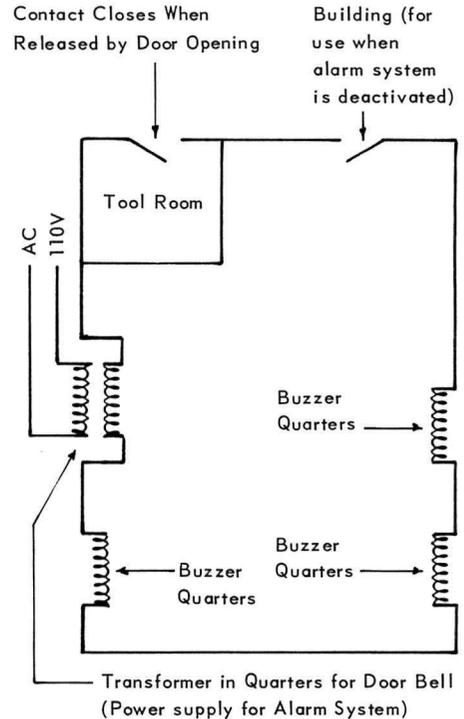
inside the maintenance building. George's alarm system consists of an accommodation switch (the type used on auto doors to turn on interior lights) which is installed in the doorway to this tool room. When the door is opened a connection is made that rings a buzzer in the residences

of the Superintendent, Chief Ranger, and Administrative Assistant. During normal working hours another switch (hidden) deactivates the alarm system. At the end of the working day the alarm is turned on



for the night. The power supply for the system comes from the door bell transformer in one of the residences, so even if a thief disconnected the power to the maintenance building before entering, the alarm would be operative.

Door Switch Activates Alarm When Opened  
On/Off Switch Located in Maintenance Building (for use when alarm system is deactivated)



The cost of the buzzers and switches was about \$6.00. The wire was obtained through surplus, and labor could be figured at about one man day.

### LONGER LASTING SHINE

To make that shine on badges, name plates, buttons, or belt buckles last longer, Edward J. Fahey, Senior Park Manager, Southwest, Colorado Game Fish and Parks Department, offers this suggestion. Coat the item with clear nail polish.

### MIRACLE LEAK SEALER

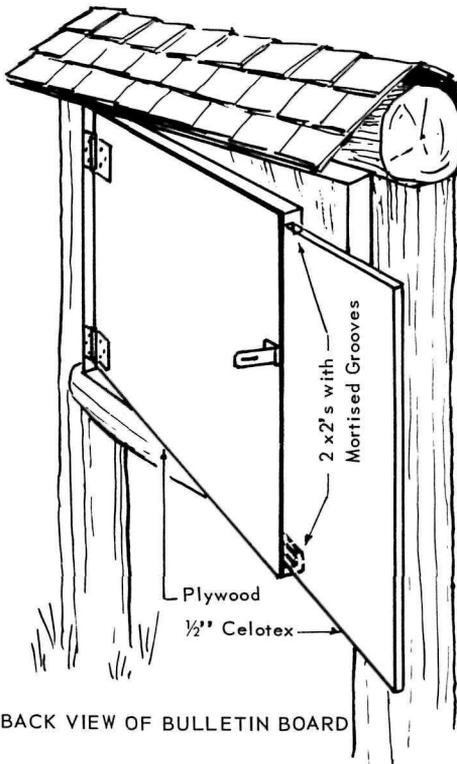
The U. S. Bureau of Reclamation's publication ERA for February 1966 reports the the fertilizer anhydrous ammonia (NH<sub>3</sub>) will seal leaks in concrete pipes in irrigation systems. The usual ways to correct the difficulty are either to put fine sawdust into the irrigation water or to patch the pipes by hand.

A large landowner who was having severe leaking pipe problems added NH<sub>3</sub> to the irrigation water for fertilizing purposes. He noted to his surprise that the leaking stopped after addition of the fertilizer. The 30-inch monolithic (cast-in-place) pipeline has been used for three years since without recurring leaks. The Chowchilla (California) Water District experimented with the accidentally discovered technique on 3 miles of 30-inch and 36-inch monolithic concrete pipeline in which there were 171 leaks. They began with 80 units (1 pound of NH<sub>3</sub> is 1 unit) an hour and cut to 40 units an hour after 3 days. After 14 days all but 12 leaks had stopped completely. Those were patched by hand after the lines were drained, but later experience indicated they too could have been sealed by continued application of the new leak stopper. About \$300 worth of NH<sub>3</sub> was used. It would have cost about

# Speaking of Interpretation -

## RUSTIC BULLETIN BOARD

The log standard with its slanted roof shown here provides protection for the swinging bulletin board. The board is so designed that the interpretive material can be mounted on celotex in office or workshop and then only has to be slid into the frame at the location.



BACK VIEW OF BULLETIN BOARD

This idea was submitted by Alex Bizauskas, Manager, Higgins Lake State Park, Roscommon, Michigan.

## SPACE-AGE MATERIALS FOR TRAIL LABELS

In the July-August 1965 issue of GRIST, the use of 1/16" acetate covers for photo aluminum nature trail labels by Rock Creek Nature Center, National Capital Parks, was reported. As a result of damage from vandalism the thickness of the acetate was increased to 1/8", but this too was broken, using the rock on the trail.

Robert G. Bruce, Supervisory Park Naturalist, reports that they inquired about more resistant materials and that a new plastic called "Lexan" was recom-

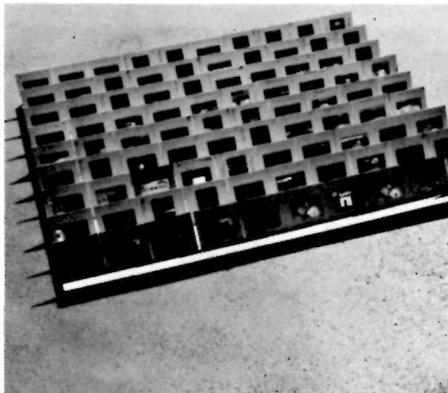
mended. This is the material used for faceplates worn by our space-walking astronauts.

Tests showed that the material could not be broken when struck with a hammer. However, 1/16" Lexan, when bashed, did dent the plate underneath, so 1/8" was selected. A 2 x 4' piece costs about \$20. Cut to 5 x 7' for the label covers makes the cost about \$1 a piece. This is two to three times the cost of standard acetate, but the Lexan has not been broken, whereas the standard acetate had to be replaced monthly.

## SLIDE VIEWER-SORTER FOR LESS THAN \$1

The slide viewer-sorter shown in the photograph and sketch is lightweight, wireless, portable, and easy to store. Slides can be safely carried from room to room in it, and construction materials cost less than a dollar.

Albert J. Benjamin, Historian, Booker T. Washington National Monument, who designed the viewer and sorting board, says that it can be any size or shape, but the one shown here is 1/2" plywood, 20" x 19 7/8" with 18° cuts, 5/16" deep, spaced 2" apart. To provide a reflective surface the board can be painted with any white enamel, or, for a more highly reflective surface a special screen paint such as Sherwin-Williams A-100 can be used. Any normal window light will provide the needed back lighting which, reflected from the white board, will brilliantly illuminate the slides.



The board shown in the photograph holds 90 slides and Al says it has proved to be a great saver of time and effort when setting up programs or when sorting any large number of slides.

## CHECK-OUT SYSTEM FOR 35mm SLIDES

The system described here for keeping color slide files in order while some of the slides are out in use was devised by Park Archeologist Calvin R. Cummings, Tuzigoot National Monument, and was passed along to GRIST by Duane N. Graf, Superintendent. Although developed for use in a multiplex type slide storage unit the system could easily be adapted to most other types of slide files.

**Check-out Sheet.** Prepare a simple form with four columns headed: Date Removed, Initials, Slide Number, and Date Returned. Attach to inside door of storage cabinet.

**Cardboard Square, 2' x 2'.** As a slide is removed from the filing cabinet a cardboard square is inserted. This keeps the other slides from shifting and covering the place of the missing slide as well as showing at a glance which slides are out.

The person removing a slide fills in the information requested on the check-out sheet and inserts a cardboard square in place of the removed slide. When the slide is returned, the date is entered on the sheet, the cardboard is removed and the slide replaced.

*The man who knows how to do it will always have a job. The man who knows why it is being done will be the boss.*

## NEED A SIGN IN A HURRY?

Cover a sign board completely with background paint of the desired color and allow to dry. Place metal interlocking lettering stencils on the board to spell out your wording. You can experiment with various placements, spacing, and letter sizes. When you get the effect you want, tape the stencils to the board. Use a one-fourth inch magic marker to trace the outer edge of the stencil letters. This leaves the letters outlined by a quarter-inch border. Remove the stencils and fill in the letters with a lettering brush.

A close look by a professional may disclose that the sign is a do-it-yourself job, but it looks neat, and can be made up right where and when it's needed. To Robert S. McDaniel, Administrative Assistant, Kings Mountain NMP, goes credit for the suggestion.

## SAFE, CORDLESS HAND DRILL

Drillgine, a 3/4 H.P. gasoline engine-powered hand drill is a versatile tool. It uses the smallest, lightest gasoline engine ever developed, and the whole thing weighs only 8 pounds, about half as much as a heavy duty 1/2 electric drill. There are no heavy cables to drag, and it works in any weather and any position.

A 1" drill will drive through a 4" by 4" fir in 20 seconds, and special carbide bits drill through cement or steel at surprising speeds.

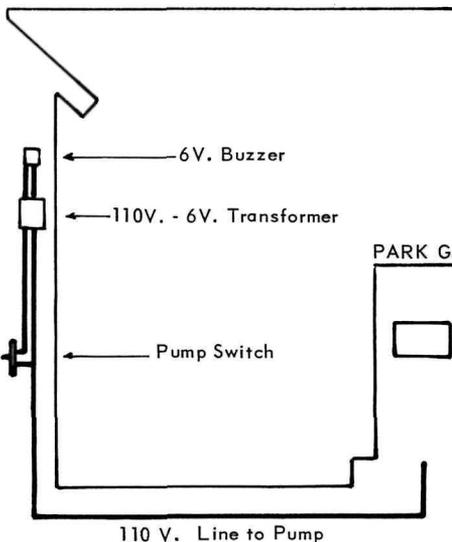
Even when operating in waist deep water there is no danger of shock or death.

For additional information write to Drillgine, 2000 Connecticut Avenue, N.W., Washington, D. C. 20008. The item is listed in GSA Supply Schedule.

## SECURITY FOR SPARE GAS CAN

The spare gas can shown in the photograph is off the floor of the pickup (to keep it from rusting), and it's locked in place.

Edward J. Fahey, Senior Park Manager, Southwest Colorado Game Fish and Parks Department, had the rack welded to the utility box. The strap across the top of the can is hinged and you can see the lock at the free end.



## MORE SHINE, LESS SPIT AND POLISH

As any housewife knows, chrome plated surfaces, such as faucets and handles on lavatories and sinks, refrigerator handles and panels, and stove backboards can look dull and dirty almost before your back is turned from cleaning them. As soon as splashed water dries on them they are spotted and look as if it's time to clean again.

W. Mikell of the NPSSoutheast Regional Office has a suggestion for park personnel. Put a good coat of automobile wax on chrome surfaces of park service equipment and installations. Water runs off and one swipe with a cloth renews the shine. No harm if park service wives pick up the suggestion, too.

## PROTECTION FOR UNIFORMS

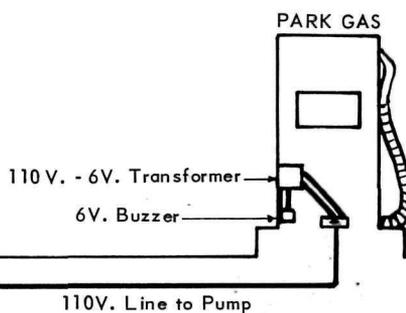
Edward J. Fahey, Senior Park Manager, Southwest, Colorado Game Fish and Parks Department, suggests plastic trash can liners as dust protectors for uniforms when not in use. The same material will keep that off-season hat in good condition.

## GAS PUMP REMINDER BUZZER

Ever get busy while a vehicle is being refueled from the park pump and let the gas run over a little? With all the things a man has to do, it's not surprising that you forget to shut the pump off in time, especially when filling one of those big truck tanks. So, Dean B. Thompson, Asst. Manager of Dodge #4 State Park in Michigan suggests using a buzzer system that will remind you that the pump is at work.

Dean has had a reminder buzzer tied right in so that when you turn on the pump, the buzzer goes on, too, and keeps up its noise until the machine is turned off. As the sketch shows, a 110 V. to 6 V. transformer is tied into the line to operate a standard 6 V. buzzer.

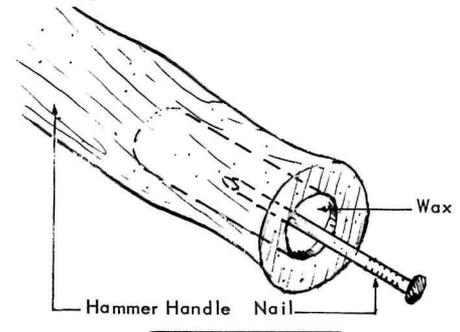
If the gas pump is some distance from the building you might have to locate the transformer and buzzer in the pump.



## WAX FOR NAILS

Driving a nail into hardwood can be considerably eased if the nail point has been given a touch of wax before starting. But carrying a container or stick of wax along on a job is a nuisance, so outside a shop the wax is seldom handy. One good way to change the story is to bore a hole in the base of the hammer handle and fill the hole with soft wax.

Howard Miller, a Park Ranger at the Ortonville Recreation Area in Michigan came up with this useful idea.



## SECURITY FOR EMERGENCY GAS SUPPLY

The photographs show the security device which Edward J. Fahey, Senior Park Manager, Southwest, Colorado Game Fish and Parks Department, designed to pre-



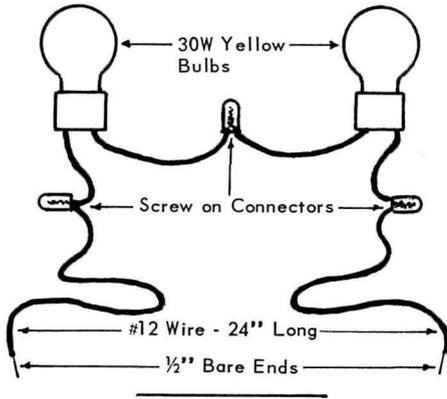
vent pilfering of his emergency gasoline supply.

The rack was made from scrap metal, so the only cost was for two hinges and for welding. It can be bolted to any desired place. The wide strap over the top of the can prevents anyone from getting to the gas when the lock is on.

**ELECTRICAL TESTING DEVICE**

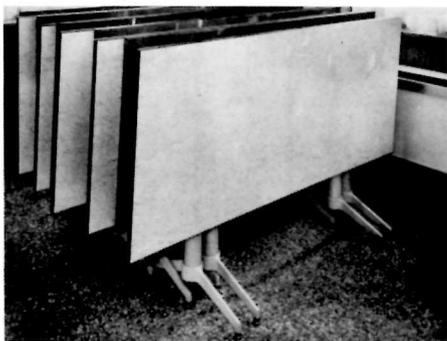
The device sketched here is used for checking hot wires, fuses, shorts in motors, poor connections, and other electrical problems. When checking 110 V the bulbs burn dim; for 220 V they burn decidedly brighter.

Dennis Muellerleile, Park Manager, Highland Recreation Area, Milford, Michigan, submitted the suggestion.



**HIGH-LOW, FLIP-TOP TABLES**

Round or rectangular tables with adjustable height, surfaced with colorful Formica and easily stored with tops "flipped" are provided in the CHF Table



line, available to Federal installations under 1965-66 GSA contract and purchasable by others direct from the manufacturer, Chicago Hardward Foundry Company, North Chicago, Illinois.

The CHF tables can be adjusted in fifteen seconds to any height from 19 to

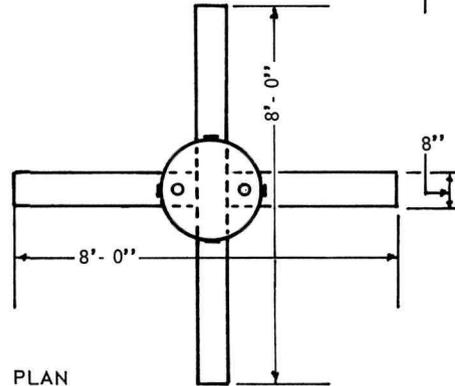
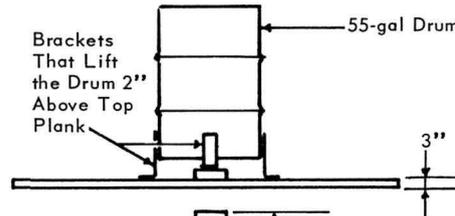
29 inches simply by rotating the tops. Tops and legs are available in a variety of colors—the Formica tops may be had in both plain and variously patterned designs, including simulated polished woods.

*Quite a number of people already have a four day work week. They do four days' work in from five to six days.*  
—the Office Economist

**FLOATING DRUMS**

To make the buoy shown here, Edward J. Fahey, Senior Park Manager, Southwest, Colorado Game Fish and Parks Department, used a 55-gallon drum, made water tight.

**ELEVATION**



**PLAN**

The drum rides upright on two crossed planks 3" by 8" by 8' long, painted white. It is attached by four brackets welded to the lip and so made as to bring the drum two inches above the top plank.

Ed says that you have to take your time getting the drum balanced on the planks so it will ride upright.

**LOCATING BOUNDARY MONUMENTS**

Boundary monuments are difficult to locate under snow, debris, etc., even with the aid of an accurate compass. One locator method used consists of three vertical blaze marks pointing in the direction of the monument. This gives the general direction, but not the distance.

Often, therefore, when snow is deep it is necessary to stomp around looking for the marker or to use a metal tipped pole to probe down in the snow while listening

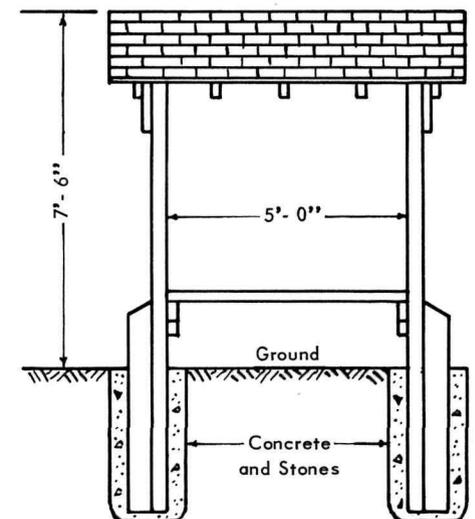
for a solid sound from the monument.

Park Ranger Edward J. Drotos, Blue Ridge Parkway, suggests that one blaze mark be placed on a suitable tree, pointing in the correct direction. Near the blaze mark would be placed a large headed nail, such as a galvanized or aluminum roofing nail with the distance to the monument etched, stamped or painted on it. Two trees could be used for even greater efficiency. The distance indicated on nail heads on the two trees would be measured off, giving the exact location of the monument at the bisecting point.

**RUSTIC TRAILSIDE SHELTER**

A trailside rest and shelter which blends with wooded surroundings (see photo) has been designed by George H. Kaufman, Superintendent II, Pinchot State Park, Pennsylvania, and Steven T. Leskosky, Park Superintendent I, has passed the design and materials requirements along for the benefit of GRIST readers.

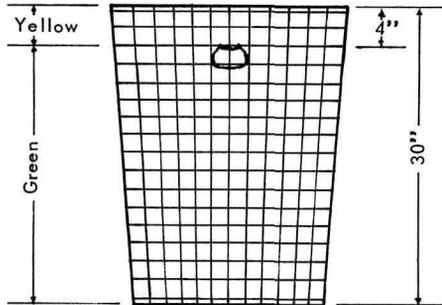
- 2 ea. oak posts 4x6x10 feet
- 2 ea. oak support posts 6x6x3 feet
- 10 ea. fir, 2x4x10 feet
- 12 ea. pine sheathing 1x5x16 feet
- 1 ea. fir, 2x6x10 feet
- 1 square asphalt shingles
- Miscellaneous nails, bolts, and finishing materials.



**FRONT VIEW**

**MAKING TRASH BASKETS  
EASIER TO SEE**

Trash baskets will be easier to see if a four-inch band of bright yellow or orange is painted around the top of each, suggests Harold Buckenmeyer, Assistant



Manager, Sterling State Park, Monroe, Michigan. This provides a strong contrast to the bottom part of the baskets which they paint green.

**COST STUDY—  
USE OF PLASTIC BAG LINERS**

Over two recent seasons, several selected parks in the NPS Southeast Region have participated in a controlled cost analysis study of refuse collection and disposal operations to determine the cost advantages or disadvantages of using plastic bag liners. Tests were conducted under identical conditions of collection and disposal; the variable was the use of plastic bag liners during one test period.

The data indicate a definite economic advantage in the use of the plastic liners. Savings effected varied from 28% to 54%. The unit cost in one test campground was reduced from \$1.08 to 50¢ per can; this included all phases of the operation: collection, disposal, can cleaning, can replacement, plastic liner cost, and all associated costs. Some of the tangible benefits of using plastic liners are: keeps cans cleaner and reduces need to wash, makes handling of contents easier and simpler, retards can deterioration by eliminating corrosion causes, reduces misuse of cans.

In each area a certain amount of bag rupture occurred. This can be minimized by using burlap bag inner liners, or by using a plastic liner of increased thickness. The preferred choice is the use of burlap bags which are placed in the containers and remain throughout the season; the throw-away plastic bags are placed inside of these. Plastic bags are available in thicknesses from 0.002" to 0.004". If the burlap inner liner is used, plastic bag liners of 0.002" thickness are satisfactory.

The plastic liners may be purchased from several sources using the following specifications:

Bag (liners), plastic (green or transparent) to be used as liners in trash cans; minimum wall thickness 0.002." The bags shall be packaged in flat condition. The only seam permitted shall be not less than 1/8" wide at bottom edge of bag, and bottom edge of seam shall be not less than 1/2" from edge of bag. The bag shall be of sufficient strength to permit the lifting of 100 lbs. of evenly distributed load in the bag without rupture or without stretching more than 10% in any position.

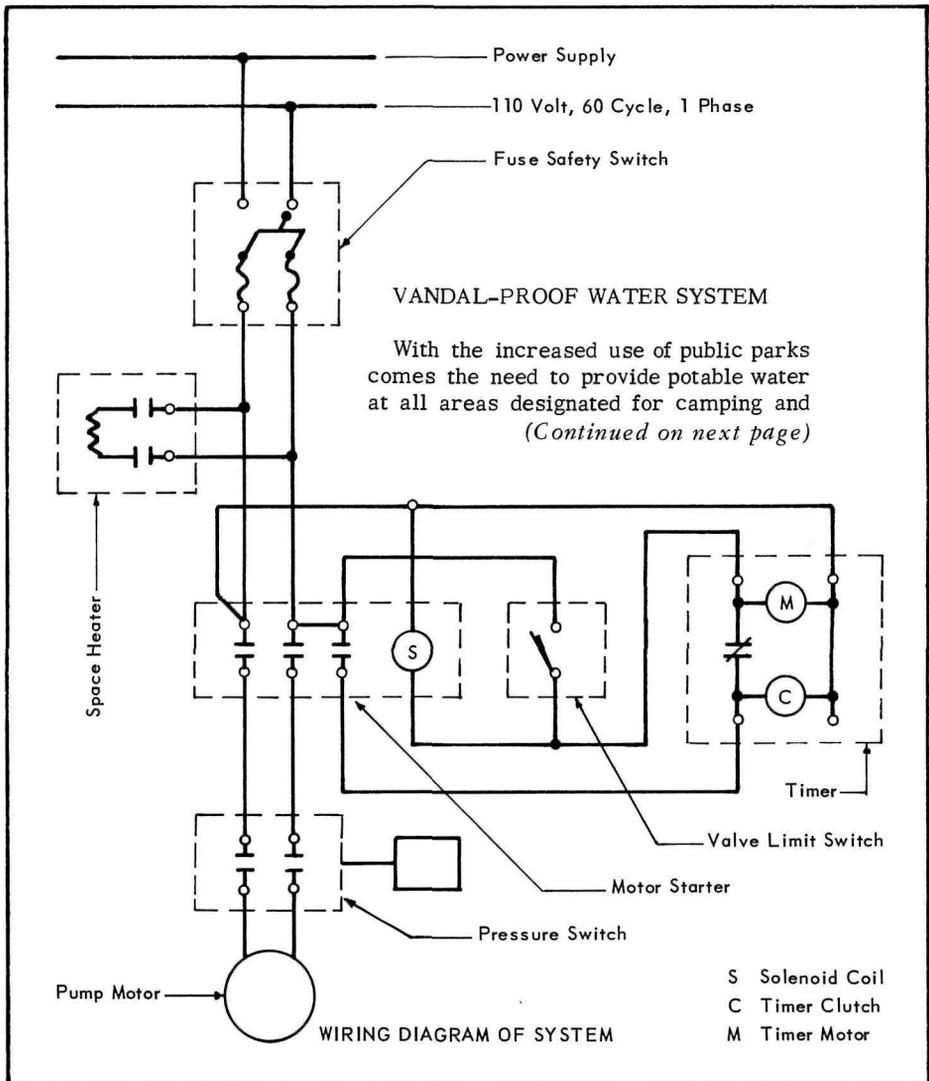
Waring Mikell, NPS Southeast Regional Office provided the information on the study.

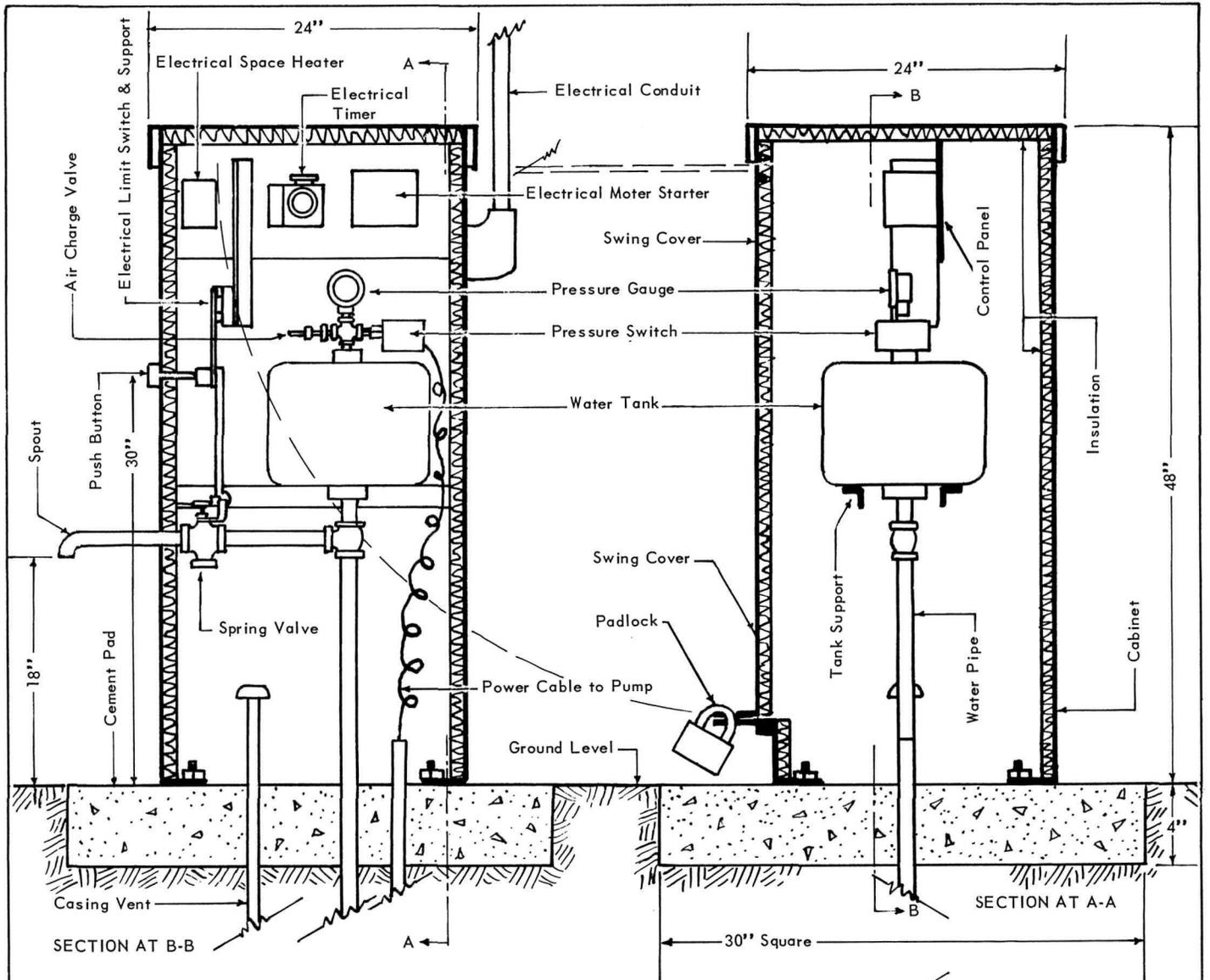
**NEW USE FOR UTILITY POLES**

The salvage operation of an electric utility company is a good place to look for sign construction material. George R. Owers, Asst. Superintendent, Department of Parks and Recreation, Ann Arbor, Michigan, reports that his Department was able to get utility pole tops from such an

operation at a few cents each. From them they constructed park entrance signs such as the one shown here, using also some routed redwood planks.

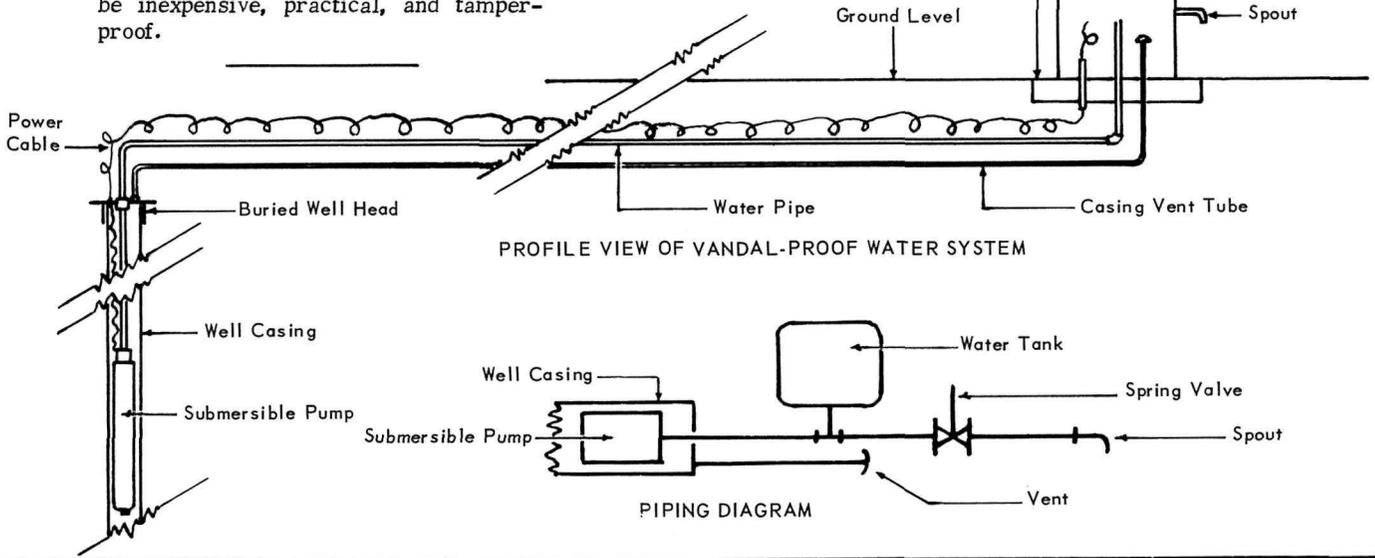
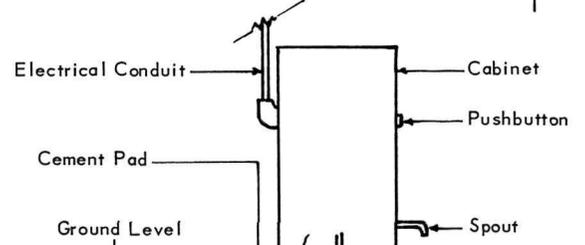
The pole tops are set in a trench with concrete to a suitable depth and the redwood planks are bolted to them. The sign shown here is 4 1/2' high by 10' long. It faces a main road and points to the park entrance. At the entrance is a sign in the same design 3' high by 8' long. The signs are used in Park Washtenaw in Ann Arbor.





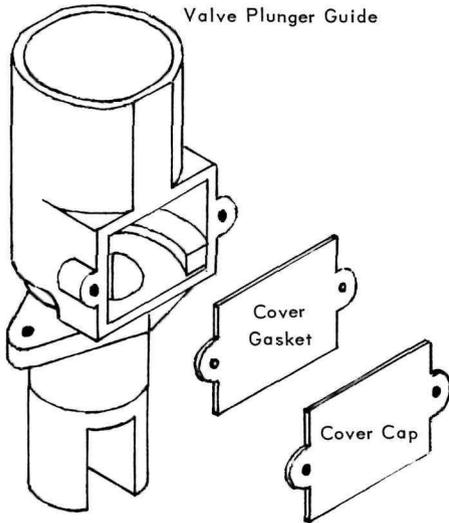
picnicking. In some unprotected areas it is necessary that the water supply system be proofed against vandalism and tampering.

From the Emsco Screen Pipe Company, P.O. Box 14240, Houston, Texas 77021, comes this blueprint of a system said to be inexpensive, practical, and tamper-proof.



VALVE PLUNGER GUIDE FOR GRAVELY TRACTORS

A new one-piece type cover and valve plunger guide for Gravelly tractors to provide more oil to valves without leakage came out in 1963. If you have Gravelly tractors which are older than that you can convert the two-piece unit to provide the same effect as the one-piece by using gaskets.



Robert A. Studebaker, Ranger, Waterloo Recreation Area, Chelsea, Michigan, who submitted this suggestion, says that they make their own gaskets. Bob stresses the importance of using a thick soft material for the upper gasket to allow a tight fit without undue pressure when the block is tightened down.

TOUGH-SKIN, NEVER-SINK BUOYS

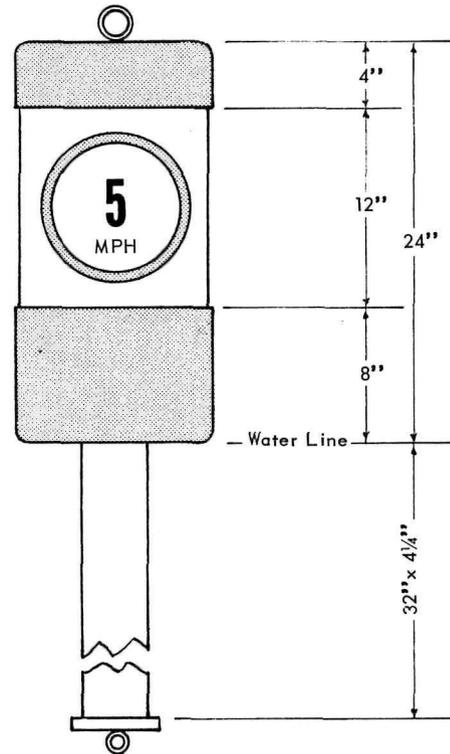
Arben buoys are heavy duty units said by the maker to withstand impact, all kinds of weather, and to offer maximum resistance to oil and gasoline. A three-unit design with an added floatation stabilizer is said to give the buoys rugged flexibility. They are designed to meet highest marine standards.

The top and bottom sections are molded from proven marine fiberglass with mid-sections of high-impact plastic to permit the raising of clear markings for display. On display markers, the top and bottom sections have an outer Gel coat of International Orange. The colors are red or black for channel markers. The raised areas of the mid-sections are painted and baked.

All buoy sections and stabilizers are filled with rigid polyurethane foam with a minimum density of 2# per cu. ft.

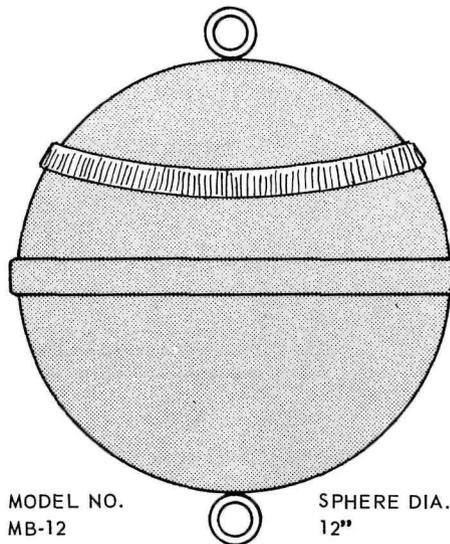
Arben mooring buoys are constructed in two sections jointed by an "H" channel rubber bumper. The sections are formed from flexible fiberglass. These are filled with polyurethane foam and given a white outer Gel coating. The top sections are

striped in bright blue. PVC center guide tubing with rods, washers and eyes of hot-dipped galvanized steel are used. Swivel bottom eyes are available if desired.



MODEL NO. CM-12 (12" dia., 24" above waterline) Additional Sizes: 36", 48", 60", and 72" above waterline.

MODEL NO. CM-20 (19 1/4" dia., 72" above waterline) Additional Sizes: 36", 48", 60", 72", 84", and 96" above waterline.



MODEL NO.	SPHERE DIA.
MB-12	12"
MB-24	24"
MB-36	36"

Make special order for larger models.

Recommended securing systems for specific conditions, complete with drawings, will be furnished upon request or with quotations on your specifications.

For further descriptive material and prices write to Arben Marine Products, Inc., 5909 Melrose Avenue, Hollywood, California, 90038.

*Open wide the door for us, so that we may look out into the immeasurable starry universe; show us that other worlds like ours occupy the ethereal realms; make clear to us how the motion of all worlds is engendered by forces; teach us to march forward to greater knowledge of nature.*

Giordano Bruno (1548-1600)

ROCK PAINTING VANDALISM

The problem was vandalism. With paint by brush or can, vandals have managed to mar some of the beautiful natural attractions in our parks--our rock formations.

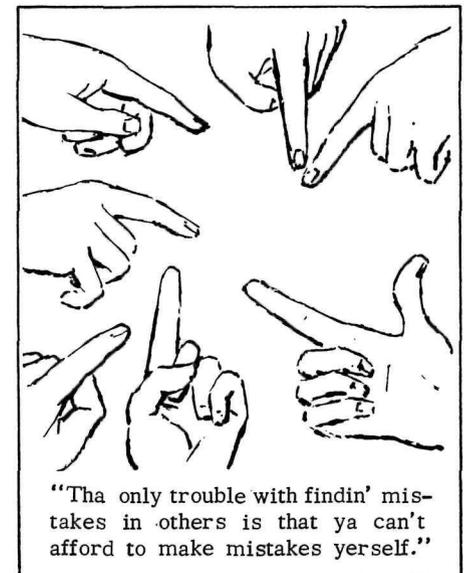
Ranger Dana B. Long of Cuyamaca Rancho State Park, California, has come up with an idea for removing paint without scarring the rocks.

While the method seems far removed from the scene of the problem, it has been used successfully in restoring natural beauty to rocks in the California state parks.

Previously either a wire brush or chisel was used with resulting scars to the rock. Ranger Long found that the oven cleaner "Easy Off" in a spray can does the job effectively. The cleaner is sprayed over the paint, left overnight, and then removed the next day with sponge and water.

Who could ask for an easier way to such success?

RANGER 'RED' sez:-



Jim Burnett & IBL