



**PARK PRACTICE**

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NUMBER 5

*Grist*

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### Commentary

#### HIGH COST OF VANDALISM

"Why do people destroy, deface, break, burn and batter the things that they have paid for themselves with their tax dollars for their own use and enjoyment?"

"What prompts a person to put the torch to a historical building, drop a cherry bomb into a park toilet, carve initials and obscene messages on any flat surface he can find, shoot holes in signs, throw a \$400 radio from a fire tower, put sand in the gas tank of a \$10,000 tractor, spin the wheels of his motorbike over a freshly seeded grass plot, rip up picnic stoves, smash water well pumps?"

"Is it thoughtlessness or just plain cussedness? Probably both. The question is really one for the psychologists to answer.

"Of more importance, what can Department employees do to help curb the problem?"

"Let's admit that we almost certainly never will eliminate vandalism entirely but it is reasonable to hope that we may be able to reduce it through application of preventive measures.

"Education tends to be put forward these days as some kind of magic cure—all, which it isn't. Nevertheless, education probably is our best long-range hope for a solution to vandalism and most of the other problems that plague the Department. Education is used here in its broadest sense, to mean not only schools but all public contacts. We undoubtedly can do a better job of acquainting people with the problem and what it is costing them.

"A good job of education would, in turn, serve to stimulate help from the citizenry in reporting incidents of vandalism along with information (such as auto license numbers) that would lead to the arrest of those responsible. We can never get too much of this kind of assistance.

"Department employees can't be everywhere at once, but better surveillance and stepped-up patrolling is an obvious need. Activity of this kind will occasionally catch someone in an act of vandalism. More

important, it has a deterring effect, just as the frequent sighting of police cars on the highway slows down heavy-footed drivers.

"Prompt action to erase the handiwork of vandals is essential. The power of suggestion is strong. One set of initials gouged into a table-top invites imitation. It isn't always possible, of course, to wipe out every trace of damage as soon as it occurs, but getting on the job as quickly as possible usually will cut down on the amount of such work that eventually will have to be done anyway.

"Controlling vandalism certainly isn't the most inspiring kind of work. Most of the time it's just plain drudgery. Yet it's part of the Department's total job, an assignment requiring the energetic and thoughtful cooperation of every employee."

This thought provoking excerpt is from an article in TOPICS, a publication of the Michigan Department of Conservation, and was written by Arthur C. Elmer, Chief, Parks Department.

#### TIRED OF REPLACING SHEARPINS AND PROPELLERS?

Ed Burt of Burt's Marine, Alexandria, Virginia, is displaying in the photo a variation of an outboard motor propeller guard. Most guards are either single or double



pronged device but lack two things: ease of installation and removal and full coverage of the propeller's diameter without decreasing the flow of water to the propeller.

This guard which is a common four tine pitchfork is installed by using a screwdriver and two large hose clamps, such as are found in most hardware and auto supply stores. It is important to get a pitchfork which is wider than the diameter of the propeller and preferably longer. This is because most of the damage to propellers is not from direct hits but from grazing of sides or bottom.

Jim Yeo of the Park Practice Circulation Office, sent the suggestion to GRIST and says that the guard was designed primarily for rocky waters, but that if you are boating in unknown waters it can sure save a lot of rowing.

#### DOCK OR BARGE CLEAT

Here's a useful design for a cleat-with-tring that can serve several purposes on a dock, barge, or boat. Ed Fahey, Senior Park Manager, Southwest, Colorado Game Fish and Parks Department, says such cleats work well to tie the ends of work barges together, to tie up to the docks, and for towing in general.



Ed lists the parts as follows:

4" x 15" x 1/2" plate with six 1/2" holes drilled as illustrated.

Three-piece cleat from 7/8" stock welded together and to plate.

Ring bent from 7/8" stock, welded to plate.

**PARK PRACTICE GRIST**

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# Speaking of Interpretation -

## MOSAIC SLIDES

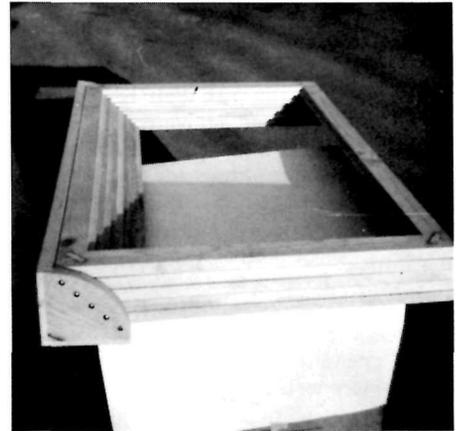
Often when organizing a talk using slides, the speaker would like to illustrate some point with two or three slides, but this would extend the talk beyond the allotted time.

Willard E. Dille, Chief Park Naturalist, Grand Teton National Park, has solved the problem by making composites or mosaics as shown in the photos. Will cuts

## IMPROVED CHART DISPLAY RACK

The photos show an improved chart display rack designed and built at Raccoon Creek State Park, Hookstown, Pa., and submitted by Frank Sayut, Park Superintendent.

The unit is constructed of standard 1x2's mitered and assembled with scotch fasteners, using screws for hinges. The ends are made of 3/4" plywood.



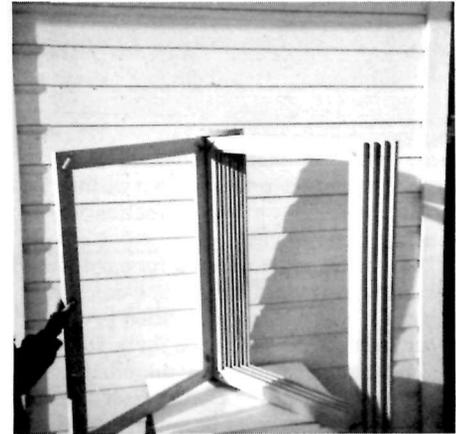
## TIME-SAVER FOR SLIDE LABELING

A rubber stamp can save many man-hours of hand-lettering in a slide and mounting operation, says Park Archeologist Calvin R. Cummings, Tuzigoot National Monument, Ariz.

Cal uses the following wording and arrangement for the stamp.

Tuzigoot National Monument  
Number \_\_\_\_\_  
(on top border of mounts)  
Subject \_\_\_\_\_  
(on bottom border of mount)

The stamping works well on ready-mounted cardboard slides or on the masks for glass mounted slides. Slides or masks can be pre-stamped and the detailed information can be added when the slide is catalogued and filed. The system gives a uniform appearance to all slides in the collection.



portions from several slides and mounts the selected portions between glass. He allows a slight overlap between the cut parts which produces pleasing dark lines between the segments. (A slight gap should not be allowed because it will produce a disconcerting bright line on the projection screen.) Such a mosaic can be used as mounted or rephotographed.



*Office gossip travels faster over grapevines that are slightly sour.*

—THE OFFICE ECONOMIST

ICE RESCUE SLED

The ice rescue sled shown in the photos was designed by Frank Sayut, Superintendent, Raccoon Creek State Park, Pa.

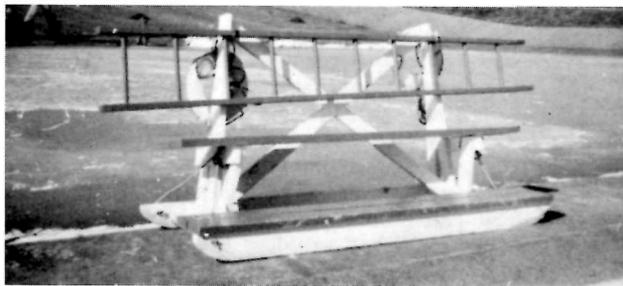
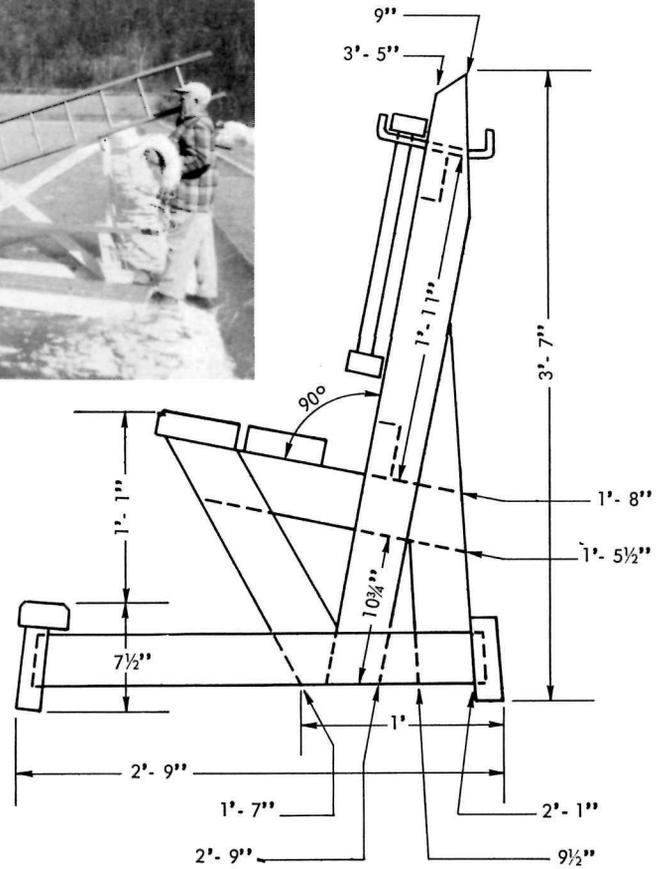
The sled can be used as a bench by skaters or fishermen and should an emergency develop it can easily be moved to the spot using the tow ropes which are fastened to each end. An eight foot section of wooden ladder, ring buoys, and rope are stowed on the sled to provide on-the-spot rescue equipment.

Frank used the following materials to construct the unit:

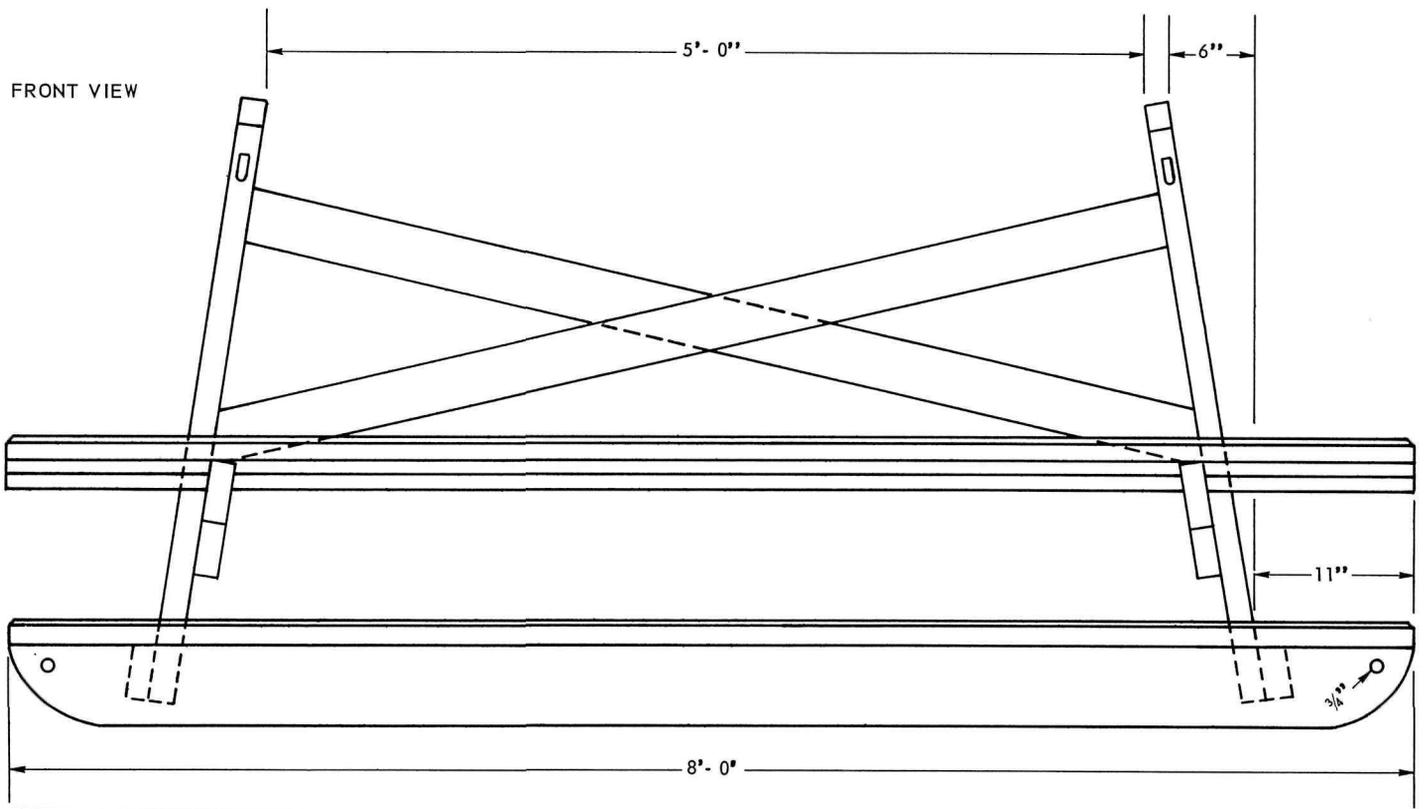
- 4 pcs. 2x6"x8'-runners and seat
- 2 pcs. 2x4"x43"-seat back
- 2 pcs. 2x4"x25"-back brace
- 2 pcs. 2x4"x21"-seat rail
- 2 pcs. 2x4"x20"-seat jack
- 2 pcs. 2x4"x68"-back diagonal
- 1 pc. 2x4"x8'-foot rest
- 2 pcs. 2x4"x31"-runner rail
- 2 pcs. 1/2x12"-reinforcing rod.



SIDE VIEW



FRONT VIEW

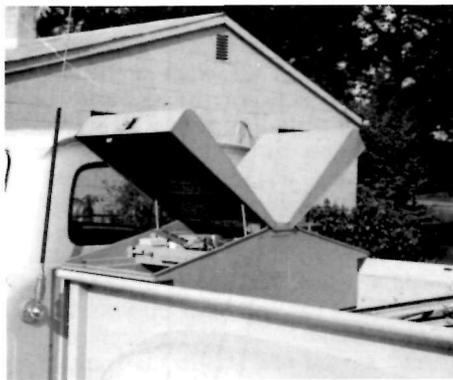


## TOOL BOXES FOR TRUCKS

Frank H. Bunce, Manager, Bernheim Forest, Clermont, Kentucky, thinks the metal tool box shown here is one of the handiest things to come on the market recently.

As you can see, the metal box has a low profile, so that it doesn't interfere with use of the truck cab window or inside rear view mirror. It does not rest on the floor of the truck bed, thus leaving that space free for long tools, supplies, or ladders. Sliding trays allow access from either side of the box, and a good lock is provided.

Model 40-A, Utility Tool Box, pictured here, is made to fit standard pick-up trucks. It is available from the manufacturer, Stahl Metal Products, Inc., 4750 West 160th Street, Cleveland, Ohio 44135. The price in March of this year was \$97.50, plus crating and freight. Larger models for larger truck beds are available.



## EFFICIENT VALVE LIFTER

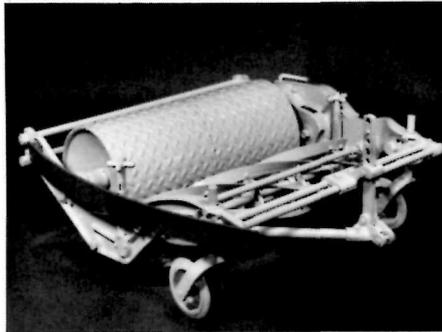
Cecil L. Clark, Shop Foreman III, at Sequoia and Kings Canyon National Park passes along a suggestion for making a valve lifter for use in the repair of small one-cylinder gasoline engines.

The simply constructed device is made by using that good old stand-by, the "C" clamp (4 inch size) as shown in the photo. The lifter has been used in Sequoia for a number of years and has proved to be very efficient.



## TREE GUARD FOR ROSEMAN MOWER

Danger of damaging the bark of tree trunks by striking them with a mower is eliminated by attaching the now-available-tree guards to Roseman mowers. (See photo.) The tree guard acts as a bumper, and when distance is misjudged, only a glancing blow results. The guards attach to the outside units of the three-, five-, or



seven-gang Roseman Mower.

The guards are available from Roseman Mower Corporation, 2300 W. Lake Avenue, Glenview, Ill.

HOW COFFEE GRAINS CAN HELP  
WHEN MOVING OR STORING  
A REFRIGERATOR

Some care is necessary in moving a refrigerator, and it is a good idea to ask your mover whether, on arrival at the new location, it will be necessary to have a qualified service man on hand.

But what about those coffee grains? Well, on the day the movers are to arrive, empty the refrigerator of all foods, defrost, and the wipe dry. To eliminate the stale odor that accumulates in a refrigerator which is being moved or stored, sprinkle the coffee grains in the food freezer section, ice compartment, and in the glide-out hydrators (fruit and vegetable trays). When you put the refrigerator back into service, just wash the interior in accordance with the manufacturer's instructions.

Thanks to Gary E. Everhardt, Park Engineer, Southwest Region, for these suggestions.

ODOR ELIMINATION IN  
INDOOR PARK AREAS

An odor counteractant designed to neutralize odors rather than mask them has been developed by Airkem, Inc. to control odors in restrooms and other public areas. This "gelbar formulation" works on the principle of opposites. Two odors when placed together in the same area cancel each other out, leaving the effect of no odor at all. The principle was established in 1941 by a scientist, Guy Pascal, and has been successful in a number of odor-

control products, including Airwick, the original home air-freshner.

The product, called Solidaire, also emits small amounts of essential oil into the atmosphere, leaving what Airkem calls an air-freshened effect. This is designed to give indoor areas the smell of the outdoors. Solidaire is used in dispensers that are loaned free of charge by Airkem. There are several types of dispensers to meet different needs. The "Guardian" hangs unobtrusively on the wall of a restroom. "Cavalier II" and "Cavalier V" will effectively handle areas from 1,000 to 4,000 square feet. The "Sentinel" units can attach to already existing air conditioning units.

For further information write to: John A. Memmolo, Airkem, Inc., P. O. Box 203, Commerce Road, Carlstadt, N. J., 07072.

## COLLECTING THOSE BUTTS

"The fire started as a result of emptying an ash tray into a waste basket." How many times have you read that line? Well, it needn't happen to you!

Park Archeologist Calvin R. Cummings, Tuzigoot National Monument, Ariz., suggests that you use an ordinary kitchen type step-on garbage can for the purpose. The inner pail lifts out (see photo), and can be carried through a building each evening or a couple of times daily, so that all ash trays can be emptied into it. Thus, paper and possible hot cigarette or cigar stubs are kept separate, avoiding the possibility of a needless, and usually costly building fire.



Only one can is needed for each building, and one of the type shown here is available from GSA (Stock No. 7240-619-7270) for only \$3.25.

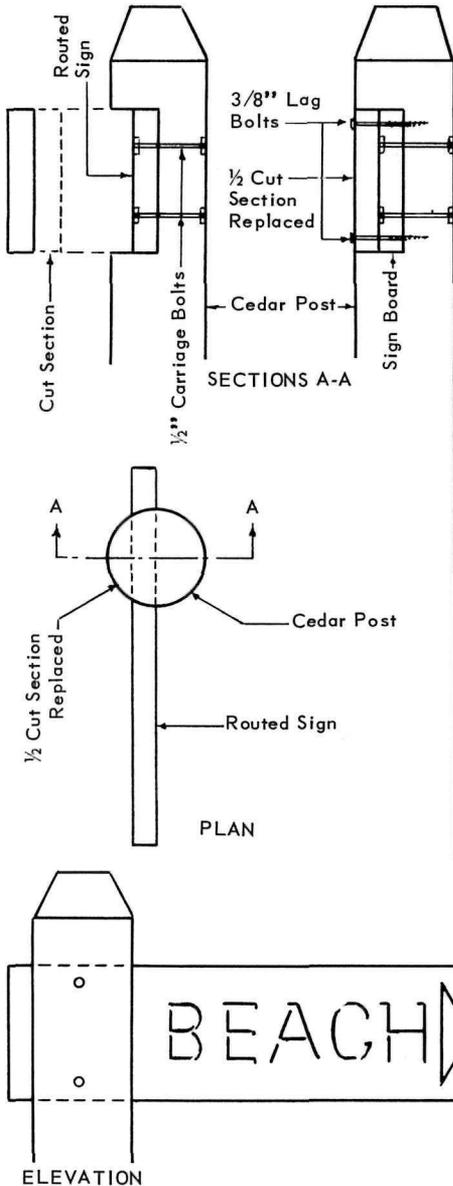
## DEMOUNTABLE SIGNS

At Metamora-Hadley Recreation Area, Michigan, they have a new method of mounting routed signs which makes re-finishing jobs easier. Supervisor George T. Welbon, Jr., says they no longer have to dig up the post, and the method permits laying signs on a flat surface.

A section twice the thickness of the sign is cut from the post with a keyhole saw

(see sketch). The sign is then mounted with half-inch carriage bolts. The section that was removed is then cut in half lengthwise and the outer portion is reinserted and fastened with six-inch lag screws. The mounted sign then appears to have been inserted through the post.

When refinishing is necessary, the lag screws are removed, the carriage bolts are taken out, and the sign can be taken into the shop.



Glen used the following headings for organizing his list of addresses:

- Audiovisual supplies
- Electronic equipment
- Slides
- Films
- Visual aids & photography equipment
- Library supplies
- Book dealers
- Natural history associations
- Publishers
- Laboratory & museum supplies
- Spelunking supplies

A list developed for the ranger division might use such categories as building equipment, forest fire equipment, rescue equipment, ski supplies, firearm supplies, and boating supplies—just to name a few.

*All too often a clear conscience is a result of a bad memory.*  
—THE RIDGE RUNNER

**SADDLE CINCH FROM OLD HOSE**

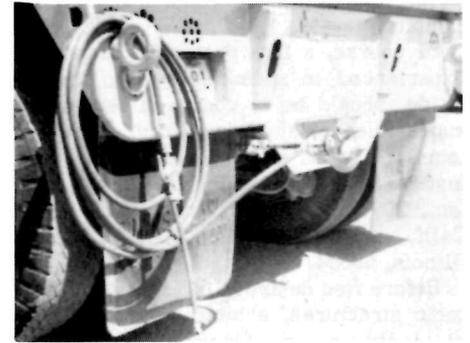
When your back saddle cinch wears out, just take some old 1 1/2" linen fire hose and make a new one.

John P. Hauanio, Jr., Forestry Technician, Hawaii Volcanoes National Park, says that the rear cinch on most saddles is used as a stabilizer rather than as a tightener, and therefore does not require the broad mohair unit usually used for both. As the back cinch wears out he re-



**AIR HOSE ADAPTER ON AIR-EQUIPPED TRUCKS**

When compressed air is needed to inflate tires (or for other purposes at locations away from regular air sources, why not use the air from the air brake system on a truck? That's a good question, and Noel J. Pachta, Foreman III, R&T, Big Bend National Park, has answered it.



The answer took the form of an air hose hookup, consisting of 25 feet of air hose, air gauge, flexomatic air coupler (#815), "glad hand" coupler, and reducer for the "glad hand". Cost for the materials—\$13.25. When not in use the hose can be disconnected and placed in a tool box.

Noel says the device paid for itself the very first time it was used, when it saved the cost of sending a repair truck and driver for a two-way trip over 35 miles of rough road.

*"Budgeting is the science of distributing dissatisfaction uniformly."*  
—MAURICE STANS

**SUPPLY AND EQUIPMENT DIRECTORY**

You can benefit in time-saving and in quality and cost of supplies and equipment if you will develop for your park an organized list of business addresses.

Glen F. Kaye, Acting Chief Park Naturalist, Crater Lake National Park, says it took him about eight hours to develop such a list for museum and other interpretive uses, but that it was time well invested.

places it at virtually no cost by riveting the reusable "D" rings from the worn-out unit to a piece of old linen fire hose. See the photos.

## FIRE PROTECTION FOR HISTORIC BUILDINGS AND MUSEUM EXHIBITS

Between the time the alarm sounds and the time the fire fighting equipment arrives and goes into action, an irreplaceable historic structure could be destroyed or one-of-a-kind artifacts lost to posterity.

Some park people have hesitated to have sprinkler systems installed because of concern about hurting the appearance of structures or exhibits and possible damage from accidental discharge of water. In the new Wawona Pioneer History Center at Yosemite National Park a "pre-action" sprinkler system was installed which overcomes the two chief objections. First, the system is not apparent to the eye at once, and second, it is practically impossible to accidentally discharge water from the sprinkler heads. Should the detector falsely trip the deluge valve, water will fill the sprinkler pipe but not discharge from the heads because none of the heads will have opened. Even if one of the sprinkler heads should be accidentally knocked open, no water will be in the pipe because the deluge valve has not tripped. The only way to accidentally discharge water is for both these accidental situations to occur simultaneously, which is highly improbable.

Several National Park Service officials visiting Wawona Center did not notice the automatic fire extinguisher system until it was pointed out to them, and the Park Naturalist in charge of the construction of the Center is pleased with the installation, feeling that it does not detract from the exhibits.

Of course, a fire protection engineer, experienced in sprinkler system installation, should be in charge of design and supervision of any installation. The system at Wawona Center was designed and installed by Gage-Babcock Associates, Inc., 3099 Telegraph Avenue, Berkeley 5, Calif. or 53 W. Jackson Blvd., Chicago, Illinois, 60604.

Before fire destroys irreplaceable historic structures, exhibits, and archeological specimens, Museum Specialists, Historians, Naturalists, and others concerned with preservation of evidences of our heritage should consider installation of sprinkler systems. This type of protection is practically a must in isolated areas, and even where fire department coverage is rated excellent far more damage can be expected from 2 1/2", or even smaller, fire hose streams than from one or two sprinkler heads.

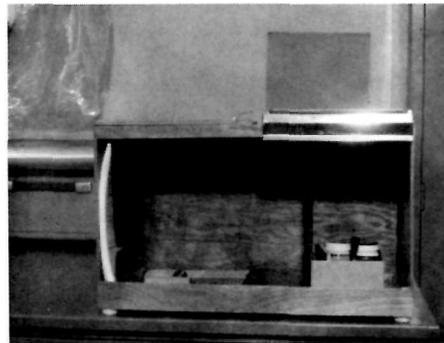
*One may lack words to express the impact of beauty but no one who has felt it remains untouched. It is renewal, enlargement, intensification. The parks preserve it permanently in the inheritance of the American citizen.*

-BERNARD DeVOTO

## FINGERPRINTING KIT

If you have a sufficient number of new employees each year and have occasional need to fingerprint park rule violators, you might wish to consider building a kit like the one shown here which was designed and developed at Zion National Park by District Ranger "Andy" Anderson.

A desk top is too low and a counter top is too high for fingerprinting, so Andy took measurements from a man of average height, 5' 10", from the bottom of his bent elbow to the floor to determine how high the top of the box needed to be. The kit was to sit on top of a map filing case, so the correct measurements for the kit were 18" long, 10" wide, and 11" high. Birch veneer, 3/16", was used.



The box has three compartments, one for blank fingerprint cards, one for ink, roller, and cleaning supplies, and the other for fingerprint powders and lifters. On the top a thick plateglass was bordered on three sides. A latch was placed on the open third side; this permits removal of the glass for cleaning. A card holder was fastened to the top with countersunk bolts, and a carrying handle was mounted in the center of the top. Rubber feet prevent slipping and also protect the surface on which the kit rests.

Andy made the box for about \$5.00 and estimates that the cost from a contractor would have been from \$30 to \$60.

## PREVENT MARKINGS ON METAL WATER TANKS

Within the very first week after installation of three metal water tanks at Hawaii Volcanoes National Park, all three were heavily scratched with names, characters, and obscenities. Because of the high humidity and constant dampness, it was necessary to repaint the tanks to keep them from rusting, this in addition, of course, to the need to cover the unsightly markings as soon as possible. Searching for a way to prevent further markings on the tanks, Hiroshi Okamoto, Building Repairman, decided upon the following solution.

Fine mesh hardware cloth was wrapped around the tanks and flat metal bands were used to hold the material tightly against

the tank surface. The close-up photo shows how material has been joined to itself where two pieces come together.

The only painting now necessary is for routine maintenance purposes, estimated at about once in every three or four years.



## HOT SOCKS FOR COLD FEET

Now outdoor workers or sportsmen are assured of warm feet. Special heavy, ribbed wool socks in 15" over-the-calf length now come wired to be electrically heated with economical D cell batteries. The socks can be put on at the beginning of the day, then, as soon as heat is needed, a battery can be attached to the top of each sock (see photo) and the connectors snapped into place.



Two styles are available: grey with red top, and all red. List price for the grey and red style is \$7.95; for the solid red, \$9.95. Orders should be sent to: Visa-therm Products Co., P.O. Box 486, Bridgeport, Conn.

**LOW COST LOADING DOCK**

Labor and cement were the only costs involved in building this inexpensive loading dock, says Edward J. Fahey, Senior



Park Manager, Southwest Colorado Game Fish and Parks Department. Ed thinks it looks better than a pile of dirt, and we agree.

**NEW USES FOR MERLON POLYCARBONATE**

Known for doing things metals can't do, Merlon polycarbonate is now sometimes used for doing things metals also do--and doing them better. For instance, a coil of this versatile plastic replaces wires, reels, and balancers employed in many conventional tool suspension systems (see

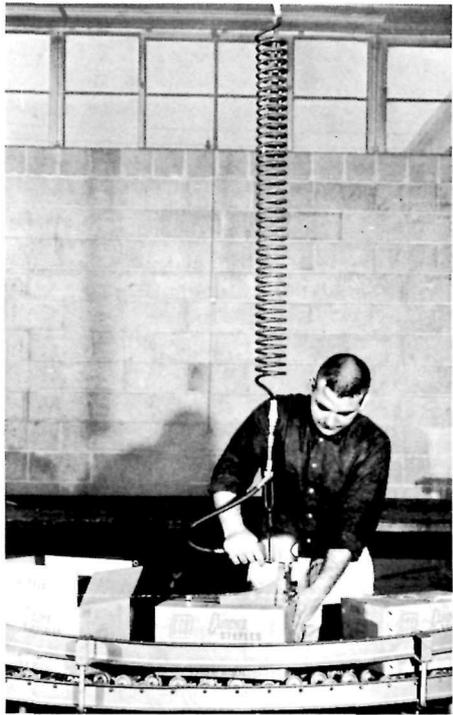


photo). This coil is aptly named a Skyhook. Text-flexed over one million cycles, the Skyhook handles tools weighing up to 20 lbs., maintains operating pressure of 200 psi, stretches to 3 1/2 times its retracted

length and snaps back immediately on release. It is designed to replace conventional hose-and-balance reel units at \$5 to \$14 lower cost. Extruded or Merlon, the flexible coiled spring functions as an air supply line and tool balancer for use with air-powered screw drivers, nut runners, drills, staplers, and other industrial bench tools.

High flexing and impact strength, good dimensional stability at high and low temperatures, resistance to machine shop oils and fluids are some of the properties attributed to Merlon polycarbonate. The device described here is marketed by the Carton Closing Corporation, Butler, Pa.

*An optimist is one who takes the water thrown upon his idea, beats it with enthusiasm, and uses the steam to push ahead.* —THE RIDGE RUNNER

**KEEPING ACCURATE STOCK RECORDS**

Arthur T. Wilcox, when he was Director-Secretary of the Metropolitan Park District, Akron, Ohio, sent to GRIST two shop forms which work effectively in

his district. They will work well with any park system where there are regional supply points (or a central supply point).

The first form shown here is a stock requisition which originates with the park manager, who sends it to the appropriate stock area, which may be the central maintenance area or one of the cold storage yards. The item being requisitioned is approved by the superintendent of maintenance, either at the point of origin or the stock area, and the requisition is receipted at the time of issue and at the time of delivery of items back in the park. There are places to indicate whether the item required is for a new installation, a replacement, for maintenance or improvement, and whether it is an emergency requisition.

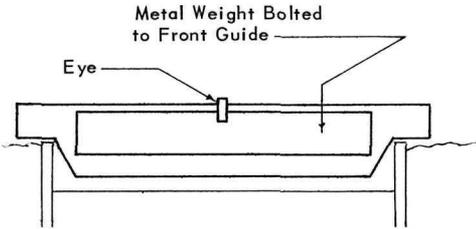
The second form, also shown, is a stock inventory card which gives a perpetual inventory by noting the total on hand, and after every withdrawal or purchase. There is a place near the top of the card for indicating how many items should be kept in stock, as a maximum and minimum, for use in judging when to reorder. Also included are a bin, or yard location space, and a delivery time space to make certain of proper delivery time and place for items coming from the vendor.

Name of Item _____					Location of Item _____				
Manufacturer _____					Purchased From _____				
Maximum in Stock _____			Minimum in Stock _____		Delivery Time _____				
Date	Quantity Purchased	Quantity Drawn	Total on Hand	Destination	Date	Quantity Purchased	Quantity Drawn	Total on Hand	Destination

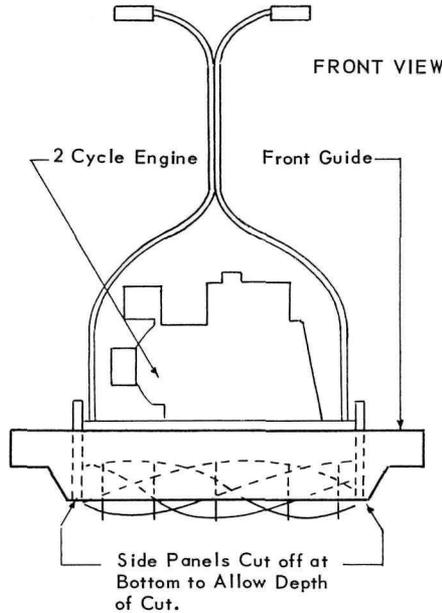
<b>STOCK REQUISITION</b>		
Akron Metropolitan Park District	Date Requisitioned _____	
FROM (Park) _____		
TO (Stock Area) _____	___ Maintenance or ___ Improvement	
Approved by _____	Date needed _____	
Supt. of Maintenance	___ Check if emergency	
Quantity	Description and Size	TO Be Used For
ITEM ISSUED BY _____	DATE ITEM ISSUED _____	
ITEM RECEIVED BY _____	___ NEW or ___ REPLACEMENT	
ITEM RETURNED _____		

ICE SMOOTHER  
FOR A TOBOGGAN CHUTE

Toboggans used on the two chutes in James Park, under the Evanston, Ill. Department of Parks and Recreation, constantly wore down the surface unevenly, and overnight snow and ice accumulation in pockets would freeze hard and form mounds which made the runways hazardous



FRONT VIEW



with a series of ridges and depressions. In places the mounds were almost as high as the wooden sideboards, which could cause a toboggan to go over the top of the boards. There was a need to smooth down the sur-

face from time to time for safety and comfort.

Robert E. Gresham, Assistant Superintendent of Parks, has sent, for the benefit

of GRIST readers, the solution worked out by shop mechanic Harvey Thorne. Harvey modified a discarded reel-type mower so that it could be used as an ice shaver. Here's how he says you can do it.

Using an 18" reel-type mower with a 2-cycle engine (the more horsepower the better), first remove the bed knife and brackets. Grind reel blades to a sharp edge. Cut off side panels to the depth of cut desired (1-1 1/2"). Now make wooden guides to run on the toboggan chute sideboards (see photographs and sketch) and mount to frame of the mower. The front guide is adjustable to allow control of the cutting depth, and the back guide is stationary.

The chutes at James Park are about 20' wide, and therefore, the 18" mower was ideal, but for wider chutes it would be no problem to extend the width of the wooden guides and have several mounting positions for the unit.

It was found that best results were obtained by backing the mower down, using a rope and pulley. In this way the operator can control the amount of feed and brace himself as well.

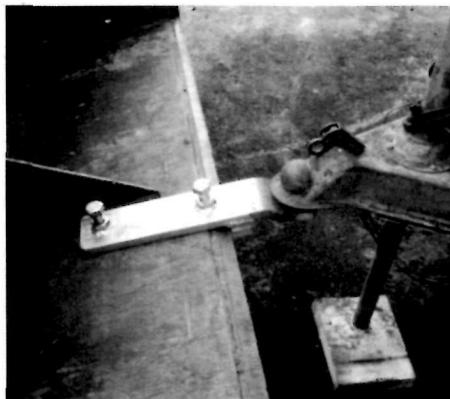


TRAILER HITCH FOR BACK HOE

You want to move a trailer, but don't want to take the back hoe off the tractor? Here is Edward J. Fahey, Senior Park Manager, Colorado Game Fish and Parks

Department, showing you a hitch which he designed for that situation.

The hitch is made of 3/8" plate, 19" x 4", using 3/4" bolts. The space between the two pieces is 3/4". Slide the device over the lip of the bucket and tighten the two bolts, hitch up and move.



RANGER 'RED' sez:-

"Them sweet young things with their skin-tight pants 'n long shaggy hair are a sight. An' tha girls aint much better, either."



Jim Burnett & IBL