



# PARK PRACTICE

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# Grist







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**THE NATIONAL CONFERENCE ON STATE PARKS, INC.**  
and **AMERICAN INSTITUTE OF PARK EXECUTIVES, INC.**

in cooperation with **DEPARTMENT OF THE INTERIOR, National Park Service.**



## Commentary

### In DEFENSE OF THE BOSS

We human beings are peculiar animals in more ways than one. Science tells us that one characteristic which sets us apart from all other species is our ability to smile. Not to show pleasure, mind you, or to reason things out, or to remember as we do, for there is increasing evidence that the so-called "lower" animals may be able to do this. No, it is our ability to smile which we are led to believe puts us in the "human" classification.

There may be other distinctions, too. Our tendencies to find fault with higher authority could be one, for example. Fault finding, when circumspectly used, can often be beneficial for it tends to keep higher authority in line and on its collective toes in order to do a better job and remain higher authority. This has its counterpart, after a fashion, in lower orders also.

But the kind of fault-finding we are here examining has nothing whatever to do with constructive criticism. It is commonly called the "gripe" and is usually aimed at the boss, or the "system". Its end result is destruction of values and production; it is worlds apart from constructive criticism.

The "gripe" is the most prolific product of the "griper"—you know the type for there is one in almost every group. He shores up his sagging ego by taking issue with everything. You couldn't convince him of it, but by so doing he out-smarts himself for he closes the door to any constructive offering he might, on rare occasion, come up with. He finds fault with anything and everything he is asked to consider or to do. He doesn't reason things out—he just naturally takes a stand against them because this seems to him the natural thing to do.

In his work, with this frame of mind, he doesn't lay-to with a will; rather, he practices silent contempt and works in a detached manner as though someone has taken advantage of him. Truth is, he took advantage of himself. But he's not smart enough to know it.

Among other things, the boss is usually

the target for this fellow and it isn't cricket. The boss has many problems; in rate and quality of production, economies in operation, safety, personnel management, equipment, reports, and many others you probably never heard of, or if you had, you probably couldn't care less. But he has them because he is the boss and heads up the team. He can't be helped in his work, and he can't help his men in theirs, by people dragging their feet and griping about every decision he makes or order he gives.

The boss—the good boss, at least—can make life easier for his men if they give him a fair shake. This includes a little understanding, a lot more humanism in the form of a smile, and a lot less griping.

—Amisol

### TRANSPARENT SHEETING FOR EXHIBIT PROTECTION

An adhesive-coated transparent mylar sheeting in use at Arches National Monument for more than five years has given such good results that Lloyd M. Pierson, Superintendent, De Soto National Memorial, wants to share the information with GRIST readers.

The sheeting, called "Cleer-Adheer", was used to laminate some 8 x 10 matte photographic prints and drawings which were to be completely exposed to the elements. The laminated prints were then taped to a plywood background and framed with sheet metal. No glass or other protective device was used. After five years exposure, they are still in fair shape and legible. Some had been cut with a knife or written on, but there was no failure or discoloration of the "Cleer-Adheer."

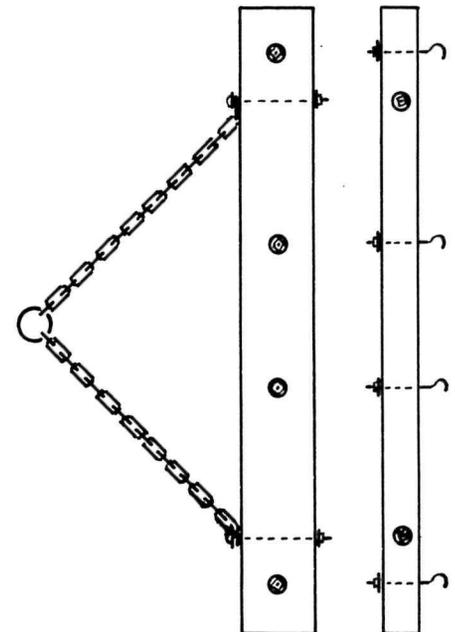
The sheeting has held up also under seashore conditions. Sheets of printed paper were laminated between sheets of "Cleer-Adheer" and then tacked under glass in a somewhat exposed place. Moisture and sun have not affected the sheeting, although one colored printing job faded. Lloyd says they've also used a single sheet of "Cleer-Adheer" to cover and fasten a paper sign to a flat surface, allowing a 1-inch overlap all around the sign. Here, too, the adhesiveness of the sheeting has kept the sign

glued down and free of any deterioration from the weather. This has been in use for six months with good results.

Having tried a cheaper product with poor results, Lloyd thinks this product is well worth the price difference. "Cleer-Adheer" is made by the Chicago Desk Pad Co., Inc. and he gets his from a local office supply store. It comes in a variety of sizes and thicknesses up to rolls 40 inches wide and 240 inches long. The .002 gauge which costs 59¢ for two sheets or 20¢ a sheet in quantities has proved useful for most of his purposes, Lloyd says. It is also available in a matte finish.

### HOME MADE FENCE STRETCHER

Instead of buying fence stretchers, Ranger E. C. Ault of East Tawas State Park, Michigan suggests making up any you need from 2 x 4-inch lumber, hammock-type swivel hooks, machine or



carriage bolts, and strong chain. Length is determined by the height of the fence. The sketches show the way his idea works out.

**PARK PRACTICE** *Grist*

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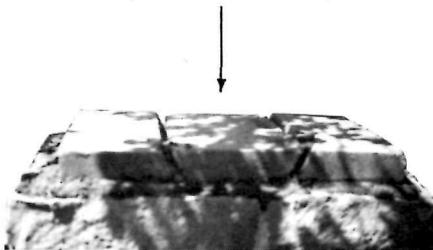
Printed by DISTRICT LITHOGRAPH CO. INC., Washington 7, D.C.

**TO CAP A CHIMNEY**

The large chimneys at Pipe Fort, Pipe Spring National Monument are no longer used, and plans were made to cap them. Joseph C. Bolander, Caretaker, proposed that the cap slabs be made in three parts, the center piece being made in keystone shape.

Joe foresaw the possibility of wanting on some future special occasion to have a fire for atmosphere or warmth. If the slab were in three parts, he reasoned, only the keystone need be removed to allow the flue to function. Recapping then would necessitate only resetting the beveled edge block in the center and sealing with a little mortar.

Keystone Section of Cap

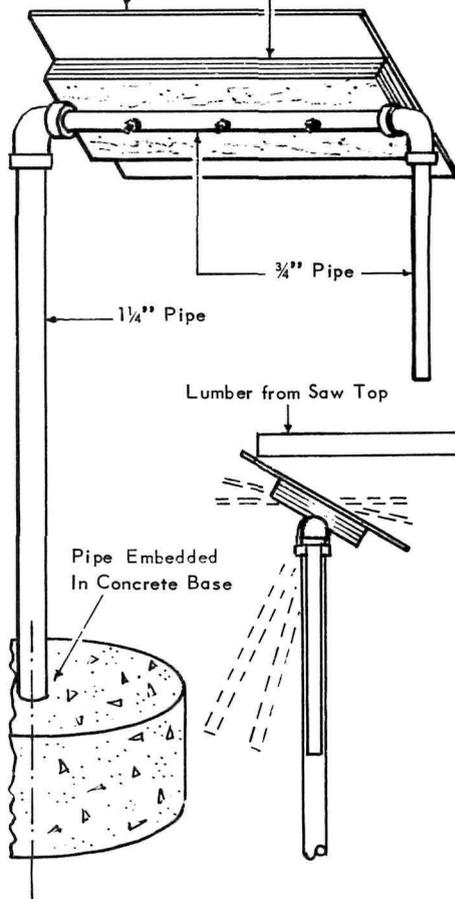


Then, too, three small parts are easier to lift atop a 25 foot chimney than one large piece.

**RECEIVING "RAMP" FOR TABLE-SAWED LUMBER**

Just as satisfactory as a roller and with much quicker adjustments for different saw settings is this "ramp" for receiving long lumber as it comes from a table saw on one-man projects. The design was worked out by Mac Frimodig, Region 1 Naturalist, Michigan Division of Parks and Recreation.

- 1/4" Masonite, 8 x 14"
- 3/4" Plywood
- 4 x 14" Bolted Through
- 3/4" Pipe



Quarter-inch tempered Masonite (approximately 8' x 14') is fastened to a 3/4" x 4" x 14" piece of plywood with screws or glue. Masonite was used for the surface because of its smoothness. The top edge was rounded and the entire surface was lacquered and waxed. (A heavy duty "ramp" could be made entirely from 3/4" plywood with rounded metal on the top edge.)

The stand is made of at least 1 1/2" pipe set in a concrete base. The plywood strip is bolted through the 3/4" cross-pipe of the stand. To raise or lower the top edge of the ramp to accommodate the conditions of different saw settings, merely tighten or loosen the cross-pipe.

"Long lumber which bends rides up the ramp to the top edge with scarcely any friction," says Mac.

**EFFECTIVE CLEANER FOR SHOWERS**

The job of cleaning shower walls and floors will be easier if you mix up a solution according to the specifications of Ranger Arthur Reed of Silver Lake State Park, Michigan.

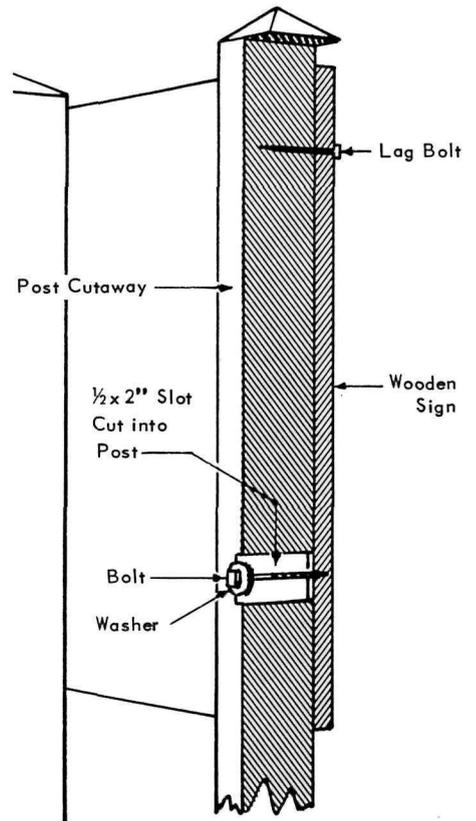
Art says his mixture makes a very effective "degreaser, deruster, and delimer" when used with hand scrub brushes.

Mix a hot water solution of 50% Spic-N-Span and 50% Sal Soda. A 3 lb. 6 oz. box of Spic-N-Span and a 3 lb. 7 oz. box of Sal Soda is enough to scrub about twenty shower stalls.

*Always do right; this will gratify some people and astonish the rest.*  
 —Mark Twain

**GIVE WOODEN SIGNS ROOM TO EXPAND**

John R. Sparks, Maintenance Foreman, Bluff Maintenance Area, Blue Ridge Parkway, made an award winning suggestion for reducing expansion and contraction damage to wooden signs.



Fasten the top of the sign to the post with a 3/8-inch lag screw. Cut a 1/2-inch x 2-inch slot in the post through which to extend a 3/8-inch galvanized bolt to fasten the bottom of the sign. Use 1 1/2-inch galvanized washers on the bolts. If you wish, instead of the bolt, you can use at the bottom a 3/8-inch lag screw long enough to go through the 1/2-inch x 2-inch slot in the post and into the back of the sign.

# Speaking of Interpretation -

## CODING AND REPLACING

### TRAIL MARKERS

by Roland F. Eisenbeis, Superintendent of Conservation, Forest Preserve District, Cook County, Illinois.

For years I was guilty of stating that "people get uneasy once they lose sight of their car." With a little soul searching and observation, I've changed my mind. People will walk and enjoy self-guiding nature trails that are properly labelled.

All of us involved in nature trail work have much to learn, not only about trails, but about people. Through the years we have been doing a mediocre job in spite of the fact that visitors genuinely want and enjoy well labelled trails. This weakness is true at virtually all levels of interpretive programs.

Our main product is the out-of-doors and unless we put major emphasis on interpretation in the field, where it properly belongs, we miss the point. Too much of our efforts and costs are now going into nature centers which house more unnatural gadgetry than what we can honestly justify.

Most all of the nature trails you visit are ordinary and give you an impersonal feeling. They are not in harmony with the daily freshness of thought and inspiration that the natural surroundings impart. There is nothing as constant as change in nature and yet we try to give permanence to our interpretive work. We seek out points of interest that do not require frequent change of labels. This cuts down on our work and the number of labels we need to keep on hand. There is no quicker way to stagnation.

Frequent change of labels gives freshness and is the key to good public use. Each visit is then a new experience and reflects the thought of a return visit. At each of our nature centers there is on file a supply of over five hundred different trail labels. These are the product of ten years of work to provide the variety we feel necessary for good trail stories.

To make proper use of the labels and to insure use of all those available, it is important that each is coded in some way. The code is used in many ways. It serves to classify labels by subject matter, the men in the field use the code number when ordering a new supply, and it also serves as a cross index for our master file. Label titles can be misleading and confusing to those in the printing shop. However, when given a code number there can be no mistake. The stencils carry the

same code and here again it provides a cross reference which insures prompt and accurate attention.

We use letters of the alphabet for the many categories that are covered, and numbers indicate where each card is found within its category. We have a sample card index and a subject index at each nature center, so that specific cards can be found without difficulty. The problem is to know what you have on hand and continue to use the variety that is available at the appropriate time.

There are drawbacks in having a good reservoir of trail labels. It requires intimate knowledge of what is on hand if you are to use them effectively through frequent change. A running inventory is needed to prevent an unnoticed depletion of labels. Then, too, the file cabinets needed for the cards require considerable space. These problems are small, however, when you consider the vast amount of interpretive work that can be accomplished through well planned and well attended nature trails.

There are two factors which make it highly important that we put more effort into our trail work. People are more outdoor-minded today. They also have great opportunity to visit zoos and museums of natural history which are doing a wonderful job. There is no need that we duplicate in our nature centers that which is already being done in other institutions.

Our main stock-in-trade is nature and where better can you enjoy and learn about it than out on the trails—where it is found?

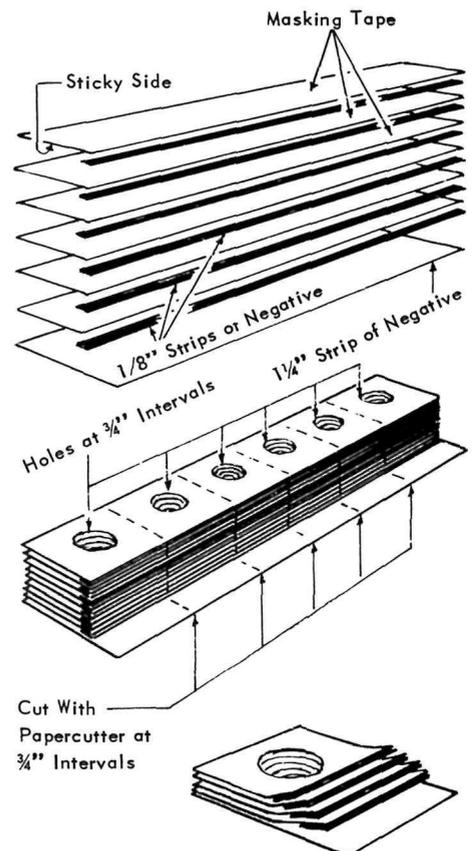
## EASIER NUMBER CODING FOR AUDIO-VISUAL INSTALLATIONS

When Don Black was still at Natchez Trace Parkway (he is now at Shenandoah National Park) he and Jack V. Houston, both Park Naturalists, wanted to simplify the job of numbering all switches, outlets, controls, cables, etc. for the Audio-Visual installation in the Tupelo Visitor Center so that they could be keyed by number to an instruction manual.

They needed a way to make neat yellow paint spots on all things to be numbered and a way to insure that the right number was put where it belonged without having to check and recheck a long list. They pooled their ideas and came up with the solution of making sets of uniform masking stencils and marking the number on the stencil edge so that it could be transferred

to the paint spot after drying.

Using a paper cutter, they cut old 4" x 5" negatives into strips 1 1/4" wide by 5" long. Another bunch of negatives were cut 1/8" x 5". A strip of the 1/8" x 5" negative was placed along one long edge of a piece of 1" x 5" masking tape. The tape was then placed, sticky side down, on one of the 1 1/4" x 5" strips of negative, with the edge to which the narrow strip of negatives was fastened placed toward the center. Narrow strips of negative were placed on four more strips of the masking tape and each of these tape strips was in turn placed on top of the first which had been placed on the wider strip of negative. Thus five layers of masking tape, with the narrow strips of negative all in the same position, were built up. Holes were then punched at 3/4" intervals through the tape near the edge away from the attached narrow strips of negative. Using a paper cutter, the strip was then cut half way between each hole, giving 7 sets of 5



tabs (stencils) to be pulled off as needed.

The assigned number was written on the tape in ink, the tab was pulled off, placed on the item to be given that number, then the yellow spot was painted, using the hole as a stencil. When the paint was dry, the number (which was right there on the tab) was put on the yellow spot in India ink then sprayed with a clear fixative when dry. The tab was then removed.

## DISTANT DEER DIAGNOSIS

Ranger George B. Robinson, White Sands National Monument submits the following abstract as an aid to Interpreters in assessing the physical condition of deer in the field when it is not feasible to bring them in for examination.

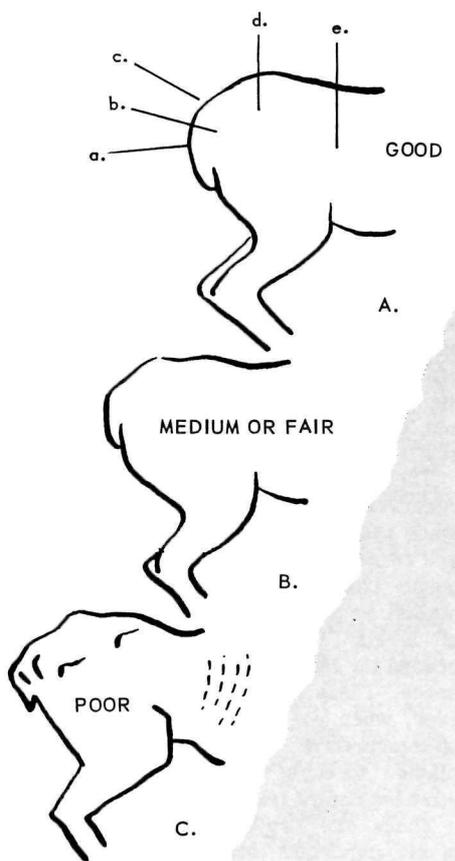
Riney, Thane. 1960. "A field technique for assessing physical condition of some ungulates," in *Jour. Wildl. Mgmt.* 24:1:92-94.

The majority of the several techniques that have been developed for assessing the physical condition of deer in the field, e.g., erythrocyte and hemoglobin norms for Mule Deer, and fat reserve indices for White-tailed Deer, have been applicable only to animals available for physiological study.

To fill the need for a simple, expedient field technique for obtaining an index to the general physical condition of live animals, a technique based on the tendency of inanition to manifest itself in progressive weight loss, and thinning has been developed. "An even general estimate of the condition or a population can be valuable as one measure of response of a population to a given ecosystem."

The technique utilizes the superficial, external appearances assumed by various areas of the hind quarters of deer (and other ungulates) in various progressive stages of inanition, as criteria for placing deer in one of three condition groups.

As the fat reserves of the animal diminish, the tail (a) appears more angular, the outline of a process of the



pelvic girdle (b) becomes visible, a distinct angle appears at (c), the lateral processes of the caudal vertebrae (d)

become visible as a faint line, and the outline of the ribs (e) is clear against the side.

If there are no visible angles corresponding to (a) and (c) on the diagrams, the animal is classed as being in good condition. If any one of the points indicated at (b), (d), or (e), can be seen, the deer is classed as being in poor condition. Diagram B above indicates an animal not clearly in good, or poor condition, hence, it is classed as being in medium or fair condition.

Data may be expressed as the proportion of animals in each condition class at a given locality, in a given season.

The maximum observational distance at which such visual assessments are made will have to be determined for each species, and in each area.

The author indicates that this method of assessment of condition is not as precise as that which utilizes fat reserves as indices, i.e., weight of perinephric fat expressed as a percentage of the weight of the kidney, but it has been used successfully in New Zealand, and Africa.

George has used this method, and says that, although it is indeed only a very general method, it has the advantages of eliminating the need to carry bulky equipment (only vision and knowledge of the anatomy of the animal are needed), and it does not require that the animals be captive.

## LUNCH BUCKET HOLDER FOR VEHICLES

No longer will lunch buckets, loose on the floor of a truck, get in the way of the driver's operation of brakes or gas pedal, if you adopt Norman Crawford's suggestion for a holder. Norman, a Laborer at Zion National Park, designed and constructed the holder shown in the photograph for a Dodge pickup.



The material used is 3/4 angle iron. The tray should be about 4 or 4 1/2 inches wide which will fit most lunch buckets nicely. The length depends upon the number of lunch buckets to be held and the height of the legs depends upon the height of the transmission hump. The unit is of welded construction and is placed directly in front of the seat and mounted on the floor. Cost of materials and installation was less than \$10.00.

## SAFE CONTAINER FOR PLASTIC ACID BOTTLES

Hand pressure exerted on a plastic bottle while it is being punctured will cause liquid to spurt out. When that liquid is battery acid—brother, watch out!

Adrian Dennett, Laborer Foreman III of Zion National Park devised a tin container to be used in handling plastic acid bottles which reduces the hazard.

As the photograph shows, Adrian used for the lower portion a large tomato can, to which he attached two small bolts or machine screws near the top on opposite sides. The upper part of the container is a large No. 303 peach can, altered to fit over the tomato can by cutting slots on opposite sides to slide down over the screws. A 3/4-inch hole in the center of the top allows the neck of the plastic bottle to protrude.

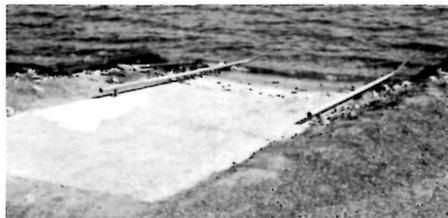
The unopened bottle of acid is placed in the lower portion of the container. The upper section of the tin container is then placed over the top of the bottle, the slotted sides coming down over the screws, the nuts on which are then tightened. The bottle neck which emerges



from the hole in the top can now be punctured without danger of spurting acid. The flat bottom of the tin container makes it less liable to tip over. The can should be labelled in large clear letters—"ACID".

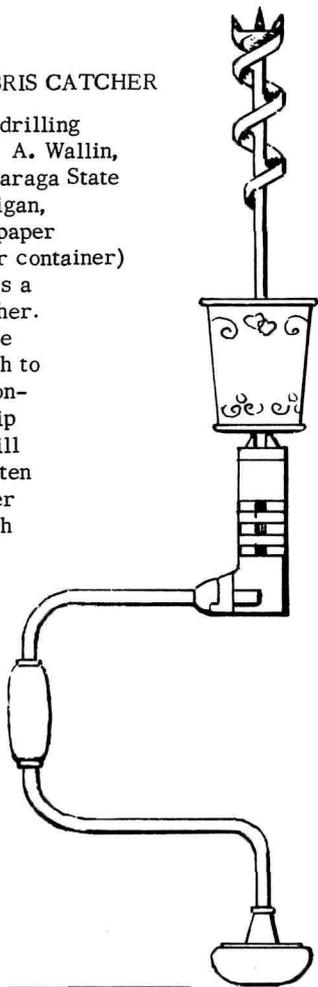
**GUIDES FOR LAUNCHING RAMP**

The people at Grand Coulee Dam National Recreation Area have come up with a simple solution for keeping trailers on their launching ramps. As the photograph shows, a concrete slab is constructed to slope into the water, and low stainless steel railings are set into the concrete. Boat trailer wheels are kept on the concrete by the low railings, made from stainless steel tubing.



**DRILL DEBRIS CATCHER**

Overhead drilling to be done? A. Wallin, Manager, Baraga State Park, Michigan, suggests a paper cup (or other container) or tin can as a debris catcher. Punch a hole large enough to allow the container to slip over the drill shank. Fasten the container in place with cellophane or other tape. A half of a hollow rubber ball could also be used in place of the paper or tin container.



**HOW TO CHANGE A BRONZE SIGN**

When a change has to be made in a permanent and expensive sign made of bronze, what do you do—throw it out and have a new one made? Well, you think a mighty long time before you do when it's going to cost several hundred dollars. That's just what Rudolph W. Bauss, Museum Curator, National Capital Region did when the open hours had to be changed

on the large "welcome" sign at the Lincoln Memorial in Washington. As a result, Rudy, who designed the sign originally, decided to make the change himself.



The old lettering was chiseled away and the new line which Rudy designed was cast and added by fastening it from the back with three countersunk threaded screws. To avoid problems of matching the sign surface around the changed letters, the new line was cast with its own background, blending in with the rest of the sign, as the photographs show.

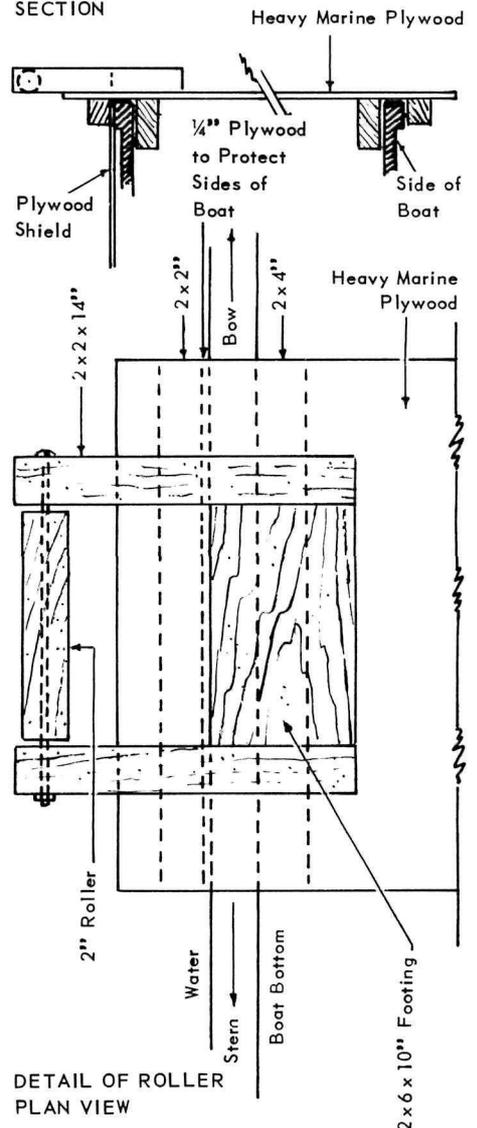


We have just heard of another change made in a bronze sign by a New York museum director. In this case, only two numbers were changed. The old ones were removed by grinding, and newly cast numbers were fastened in place with epoxy cement. The changed numbers have successfully resisted all kinds of weather for over a year, so the system will probably work for park signs in places where Rudy's better system cannot be followed.

**PLATFORM FOR RAISING BUOY ANCHORS**

Two men can get a lot of lifting power assistance when raising buoy anchors by using a device like the one sketched here, which was submitted to GRIST by Assistant Manager D. Jones, Harrisville State Park, Michigan.

**DETAIL OF ROLLER SECTION**



**DETAIL OF ROLLER PLAN VIEW**

A platform constructed to fit across a boat is placed a little forward of center. On one end of the platform is a roller and behind it a foot brace. Beneath the platform, on the roller end, a protective sheet of 1/4-inch plywood is placed. The chain used to lift the anchor is placed over the roller and both men pull it until the anchor reaches the roller, then one of them tips the anchor over onto the platform. The roller has the advantage of usually keeping the anchor away from the side of the boat; if an anchor does accidentally swing against the side, the plywood shield protects the boat.

The boat used at Harrisville State Park is propelled by motor, so that motor power can be used if an anchor has become stuck on the bottom.

## KEEP SEAT BELTS IN PLACE AND IN SIGHT

Spring loaded mechanisms, such as Roll-a-belt are available which keep seat belts on the seats, out of the way of possible damage by being caught in doors, or otherwise. Such damage could have serious consequences, if, in case of an accident, a belt could not be unbuckled without a prying tool, and time were important in saving a person's life.

Note: Seat belts must be worn tightly—extend this belt completely so belt drums are in sight.



Donald F. Hutchens, Supply Requirements Assistant, Rocky Mountain National Park, Estes Park, makes the suggestion.

Roll-a-belts are the product of Borg-Warner Corporation, Spring Division, Bellwood, Illinois.

## CASTERS FOR STOKES LITTER

In some situations there is an advantage to having casters on a Stokes Litter. Robert N. Perkins, Supervisory Park Ranger, Rocky Mountain National Park and Shadow Mountain National Recreation Area, who suggests use of casters has found that they make for easier loading into a station wagon or sedan delivery patrol vehicle. There is a safety factor here, too. Casters reduce the possibility of back injury to a person assisting with the loading of a litter with an injured person on it.

The Stokes Litter as used in a sedan delivery patrol car is secured at the front and rear ends by two snap-clips.

As the photographs show, Bob attached two pieces of 2 x 4 to the bottom of the litter with four "U" bolts and removable type casters were inserted in the ends. If the litter is to be carried over rough terrain, the casters can easily be removed.



## MAGNET COULD SAVE SNOWSLIDE VICTIMS

At Innsbruck, Austria last spring skiers were caught in an avalanche. Only one survived. Although buried 10 feet deeper than the others he was quickly found and rescued several hours before his companions were dug out. Why?

Mountain rescue teams use a search apparatus similar to a mine detector which registers metal objects under the snow. The device can locate a magnet much more easily than it can find an ordinary piece of metal.

Yes, that Austrian survivor owes his life to the fact that he had a small magnet in his trousers pocket.

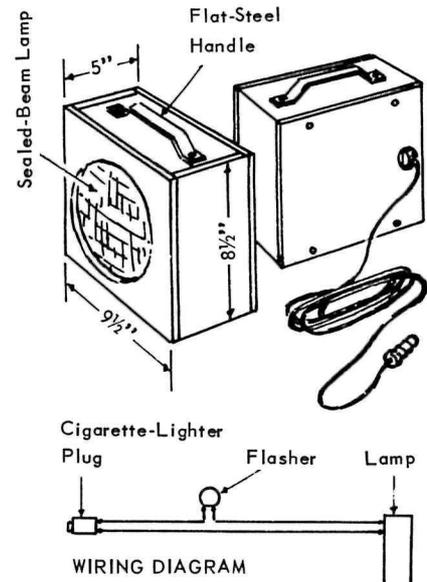
An Innsbruck ski-clothes manufacturer, as a result of this discovery, is now sewing into the waistband of each pair of ski trousers he sells a tiny, powerful magnet. The magnets have a field of about 20 feet radius, will cut out the guesswork in rescue operations, and can save precious hours wasted digging in the wrong places.

Our thanks to John W. Jay, Acting Regional Chief, Resources Management and Visitor Protection, Midwest Region for sharing this information with GRIST readers. John suggests that not only should all recreational skiers and ski patrols carry magnets, but that perhaps all park employees (such as snowplow operators) who work in potential snowslide areas should be required to carry them.

## LIGHT ON THE TROUBLE

A good trouble lamp may be made from a discarded sealed beam headlight if it has one element still working. Make a 9 1/2" x 8 1/2" x 5" case of 3/8" plywood, fitted with a carrying handle. Cut a hole in one side slightly smaller than the lamp. Fit the lamp to the opening and mount it with metal straps across the top and bottom. Wire the lamp to a female plug mounted on the back of the case. Put a male plug on one end of an extension

cord and a cigarette lighter plug on the other. Fit the male plug into the female plug on the back of the lamp and the cigarette lighter plug into the lighter on your dash. Red plastic over the lamp and a flasher in series in the line will convert the lamp into a warning signal light.

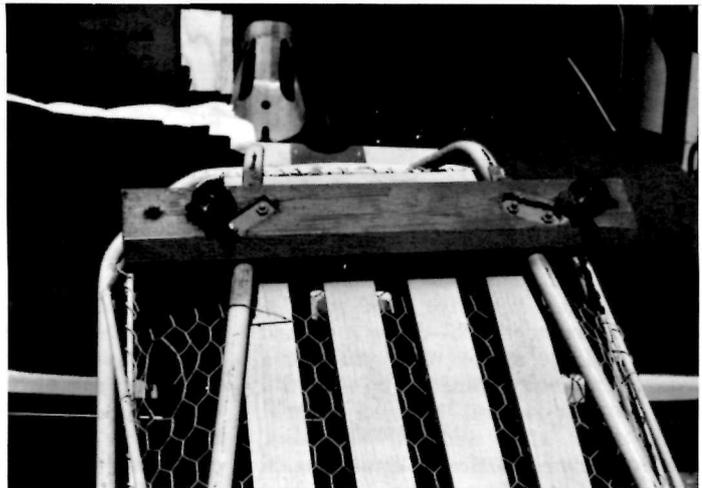


This idea comes from J. Russell Krupps, in Popular Mechanics.

## SCHEDULING PREVENTIVE MAINTENANCE FOR FIRE EQUIPMENT

There is no longer any question about the relative merits of preventive maintenance over mere corrective maintenance. But an effective system of scheduling must be followed and the work programmed in a systematic manner.

The following schedule for fire equipment maintenance was devised by Irwin C. Cowley, Acting District Ranger, Petrified Forest National Park, Painted Desert District. Irwin says this can be used as complete in itself, or as a master schedule with separate supporting schedules for some of the equipment.



SAMPLE MAINTENANCE SCHEDULE

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

FIRE EQUIPMENT PREVENTIVE MAINTENANCE SCHEDULE

PARK \_\_\_\_\_ DISTRICT \_\_\_\_\_

	January-June, 19__			July-December 19__		
	Date Due	Date Done	Init.	Date Due	Date Done	Init.
<b>FIRE TRUCK</b>						
Serviced (as per separate schedule)						
Driven (as per separate schedule)						
Pumper operated (monthly)						
Hose charged (monthly)						
Hose refolded (monthly)						
Equipment checked (monthly)						
<b>HOSE BOXES</b>						
CJRL Hose hydrostatic test (annually)						
CJRL Hose charged (quarterly)						
CJRL Hose refolded (quarterly)						
Linen Hose refolded (twice annually)						
<b>FIRE HYDRANTS</b>						
Flow tests (annually)						
Flushed (quarterly)						
<b>FIRE LADDERS AND TOOLS</b>						
Checked (twice annually)						
<b>FIRE EXTINGUISHERS</b>						
Dry chemical, stored pressure type						
chem. dumped & weighed (annually)						
pressure checked (monthly)						
hydrostatic test (every 10 yrs.)						
Dry chemical, cartridge type						
chem. dumped & weighed (annually)						
cartridge weighed (twice annually)						
hydrostatic test (every 10 yrs.)						
CO <sub>2</sub>						
weighed (twice annually)						
hydrostatic test (every 12 yrs.)						
Soda Acid						
recharged (annually)						
hydrostatic test (every 5 yrs.)						
Foam						
recharged (annually)						
hydrostatic test (every 5 yrs.)						

THE "AQUAMBULANCE"

Time is often a critical factor in getting medical help to a drowning victim or a person injured in the water. A new water rescue rig called the "Aquambulance" could be that time-saving life saver. The idea for the rig was developed by Cliff La Tour, Safety Director of the Badger State Outboard Association.

As the photographs show, the rig consists of an aluminum frame and platform mounted on pivots on the forward section of a blunt-bowed boat. The frame supports a specially designed detachable aluminum stretcher suspended crosswise at deck height. Detached, the stretcher, which is made buoyant by a roll of plastic foam, can be easily placed under a drowning or injured person floating on the surface. By pivoting the frame, slings attached to the platform can be lowered to engage eyebolts on the stretcher.

Water wings on either side of the stretcher can be inflated instantly by an attached gas bottle, raising stretcher and victim to a horizontal position. The water wings nestle against the victim and prevent him from rolling off, even when the stretcher is tilted to a 45-degree angle.

One man can raise a 225-250 pound load from the water by exerting only 70 to 80 pounds of pressure on the rear of the frame. The "Aquambulance" is easily adaptable to any pleasure craft with a squared off bow, such as a trimaran or cathull runabout.

Cliff's idea for the supporting rig evolved from the original design of a "pulpit" or "perch" from which to judge outboard motor races. So it is adaptable to a number of uses besides rescue: search and patrol, water cleanup with a bow rake (not shown in photographs), some seining, and possible adaptation of the frame for "boom shocking" work.

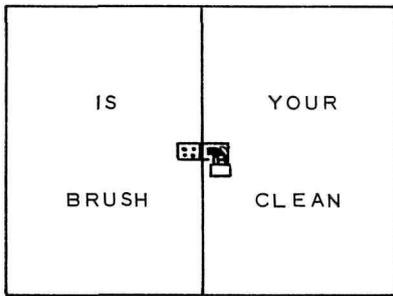
The rig was developed by Water Safety and Utility Research, Nashota, Wisconsin 53058, in conjunction with the Kaiser Aluminum Corporation. You may direct your inquiries to the Research organization.



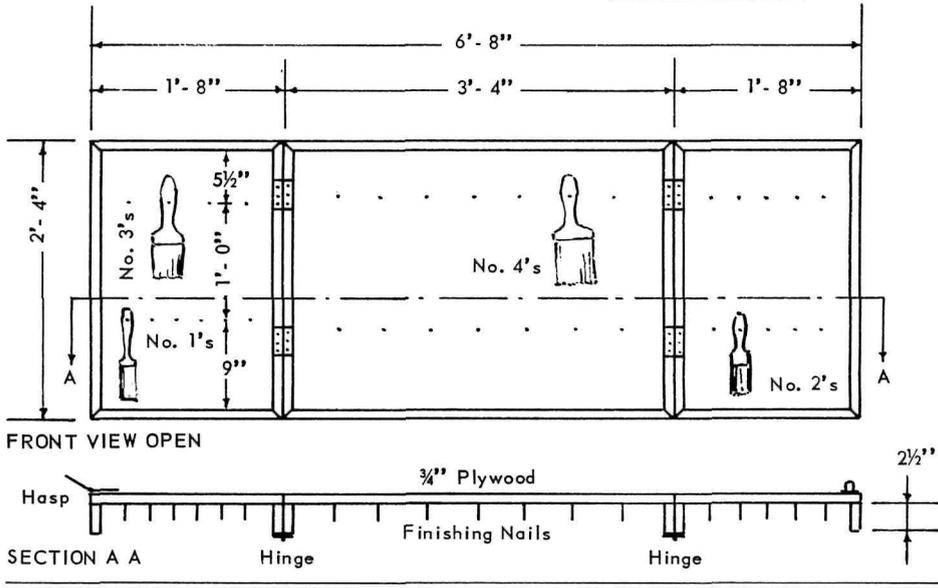
A PLACE FOR EVERYTHING AND EVERYTHING IN ITS PLACE

Thanks to Tom Gregg, Burt Lake State Park, Michigan, paint brushes used in his Park are clean, hung by sizes in a locked cabinet, and ready to do the job when needed.

Tom designed the cabinet, which is of 3/4-inch plywood, measures 40" x 20", and holds 34 brushes—fourteen four-inch, four three-inch, ten two-inch, and six one-inch. The brushes hang on finishing nails.

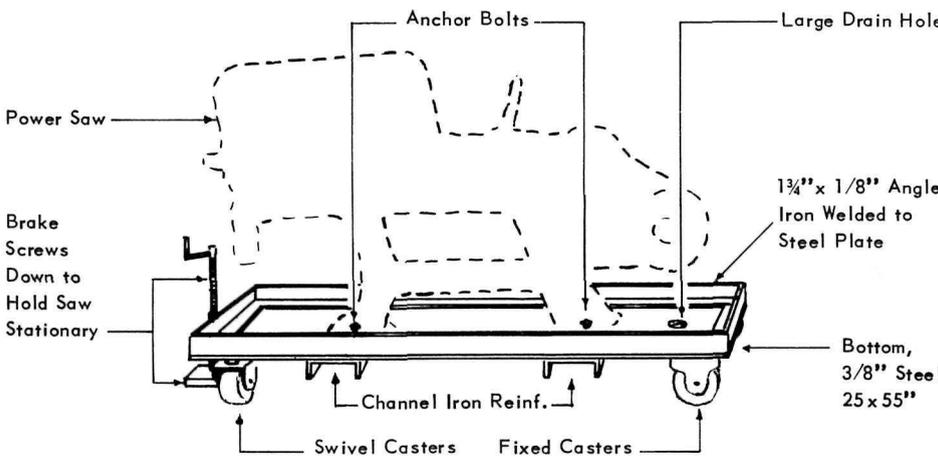


FRONT VIEW WITH DOORS CLOSED



FRONT VIEW OPEN

SECTION A A



PORTABILITY FOR A POWER HACKSAW

In order to cut materials of different types, sizes, and shapes, it is helpful to be able to move a power hacksaw about in the shop.

Emil Justet, Shop Mechanic at Zion National Park, made the shop's power hacksaw portable by mounting it on a steel platform with casters. See photograph and sketch. An additional advantage is that the platform becomes a drip pan for oil and cuttings (a drain was made at one end of the platform), keeping oil off the floor and thus eliminating a safety hazard.



BLOCK THAT SPLASH

Various devices for avoiding mud puddles and erosion at the base of water hydrants are used in parks around the country. Jerry B. Gathings, Laborer at Bandelier National Monument has come up with about the simplest one we've ever seen—that shown here, which requires no expenditure for materials and only a few minutes time with a saw.

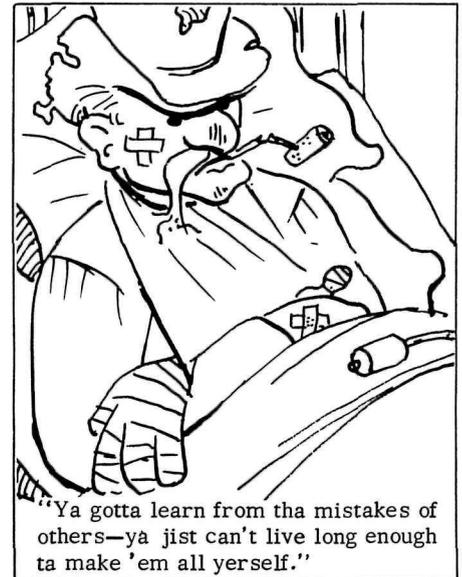
Jerry sawed an eight-inch slice from



a fallen pine tree which was about two feet in diameter. Then he sawed out a slot wide enough to accommodate the water pipe and deep enough to bring the mouth of the faucet directly over the center of the block. Striking the center of the block, the volume and pressure of the water are diminished so that the likelihood of puddle formation and erosion is reduced.

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 \* ANNUAL RENEWAL FEES (\$15  
 \* FOR FULL PARK PRACTICE  
 \* MEMBERSHIP, \$3 FOR GRIST  
 \* ONLY) ARE DUE.  
 \*\*\*\*\*

RANGER 'RED' sez:-



"Ya gotta learn from the mistakes of others—ya jist can't live long enough ta make 'em all yerself."

Jim Burnett & IBL