



SEPTEMBER 1968

NUMBER 3

# Send your idea - Spend your award

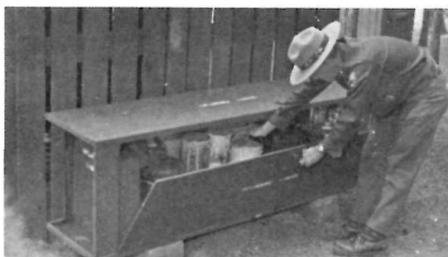
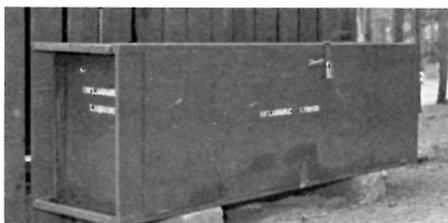
## SAFE OUTDOOR STORAGE FOR INFLAMMABLES (NPS MW 68-29)

Park Ranger R. Morris Brown of Rocky Mountain National Park tells how old metal cabinets that have served their usefulness indoors can be converted to useful outdoor storage.

Picture shows how such a cabinet was converted to provide safe "inflammables" storage at an outlying ranger station. Ranger Brown provides directions as to how to make such a conversion. Total construction time is estimated to be about four hours.

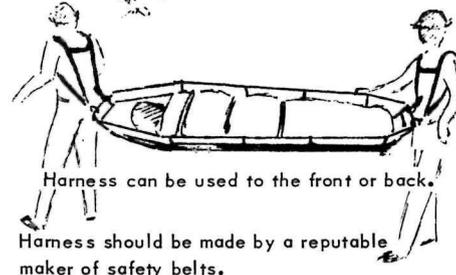
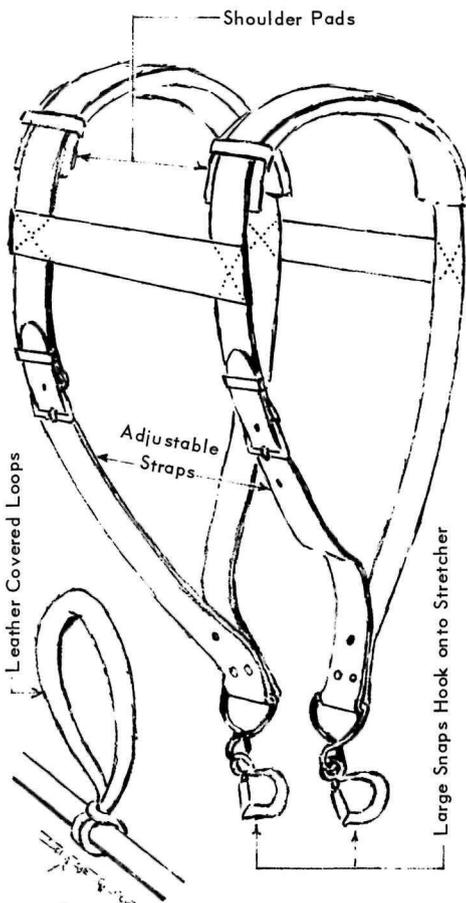
Note first that the cabinet is used in horizontal position. In selecting the cabinet, it should be a one door style that is structurally sound. The clothes rod or shelves can be removed but the shelves can be left in place to provide spacing. Ventilation openings should be provided. (Most cabinets have vents in back which are suitable.) A lock hasp should be installed

Four holes in the floor for anchoring to foundation are drilled. Next pour two cement footings and set bolts to correspond to holes in floor. Paint cabinet and stencil proper warnings on cabinet if it is to be used for storage of inflammable materials. Set in place and bolt to cement footings.



## ADJUSTABLE HARNESS TO AID IN CARRYING STRETCHER CASES (NPS SE 67-34)

An adjustable leather harness to aid in carrying stretcher cases out of a cave is suggested by Ronald Edwin Chumblery, a park ranger at Mammoth Cave National



Park. Drawings illustrate his idea and he calls to mind that these adaptations could prevent an accident and subsequent tort claims against the U.S. Government.

Ron suggests a pair would be especially beneficial when on steep inclines and/or in very narrow passageways, times when only two carriers are feasible. Weight would be distributed better with less strain on the hands which become quite slippery when acted on by sweat and humidity.

Complementing the harness, Ron further suggests padded leather thongs for use on the sides by others carrying the stretcher when space permits.

*There is nothing so American as our national parks. The scenery and wild life are native. The fundamental idea behind the parks is native. It is, in brief, that the country belongs to the people, that it is in process of making for the enrichment of the lives of all of us. The parks stand as the outward symbol of this great human principle.* —Franklin D. Roosevelt.

## SHARPEN FLAG SUPPORTS (NPS SE 66-209)

A practice introduced by John Willett, superintendent, Petersburg National Battlefield, could be helpful to others who have the responsibility of placing cemetery flags.

Each year when flags have been placed for Memorial Day, the ground has usually dried out from the winter weather and is compacted. As John points out, this makes it difficult to get the flag supports in the ground. This requires time and quite often results in breaking the wooden support thus destroying the flag.

John's practice, as introduced at Stones River, is to sharpen the wooden support with an ordinary pencil sharpener which will eliminate this problem. This must be done as new flags are phased in with the ones already used, because the grit from previous use will ruin the sharpener.

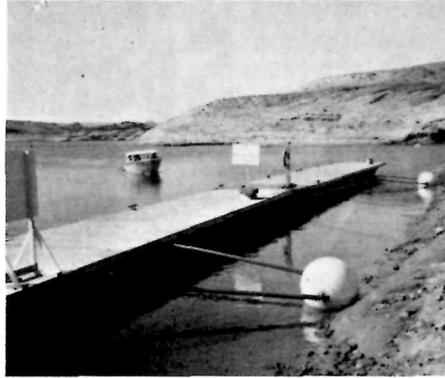
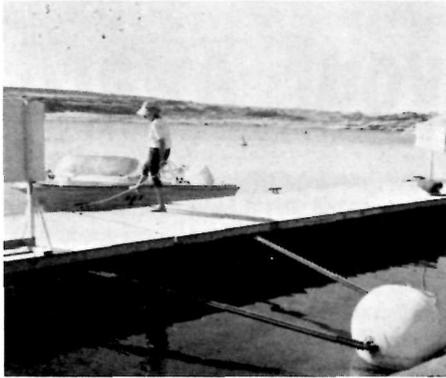
**DOCK STABILIZER  
(NPS SW 67-174)**

Keith M. Wilkins, Carpenter at Glen Canyon NRA has sent along his unique idea for a floating dock stabilizer. This stabilizer keeps a floating dock a safe distance from the bank and prevents it from dragging or tipping as the water recedes.

Keith says that in the past when docks went aground from receding waters, they

have tipped and then been filled with water and foreign materials, causing extra cleaning and maintenance before proper flotation could again be maintained.

As the photographs show, the unit is made from a 30-inch spherical buoy welded to angle iron arms on either side. The arms are connected to the dock with a link-bolt to allow fluctuation up and down. For permanent units, cross braces should be added for extra stability.



With the old type of raised concrete blocks, vandals could roll the cannon off onto the ground. In the six months following installation of the new-type mounts, no guns were pushed off their blocks.

The forms for casting the mounts are made from 1/2-inch plywood. Dimensions are variable and can be adjusted to suit best the type of cannon displayed and the nature of the ground. One man takes about an hour to make a form. Marshall suggests



Before

After

**A BETTER BASE  
FOR A CANNON WHEEL  
(NPS SE 67-6)**

A new mount for cannon wheels is in use at Vicksburg National Military Park providing greater safety and easier maintenance than the old type. Marshall Whatley, Operator General, designed the new mounts and suggested their use.

Marshall points out that the old mounts were raised above ground level and created a safety hazard. Since mowers could not

be operated close to such mounts, it was necessary to kill vegetation around these bases to eliminate the need for hand trimming. This arrangement caused unsightly bare areas and also left areas where much erosion started.

After Marshall designed the new-type mounts, they were cast and installed little by little, as time permitted. As the photo and sketch show, they are buried so that the top chamfered surface is flush with the ground, thereby allowing full use of the mowers.

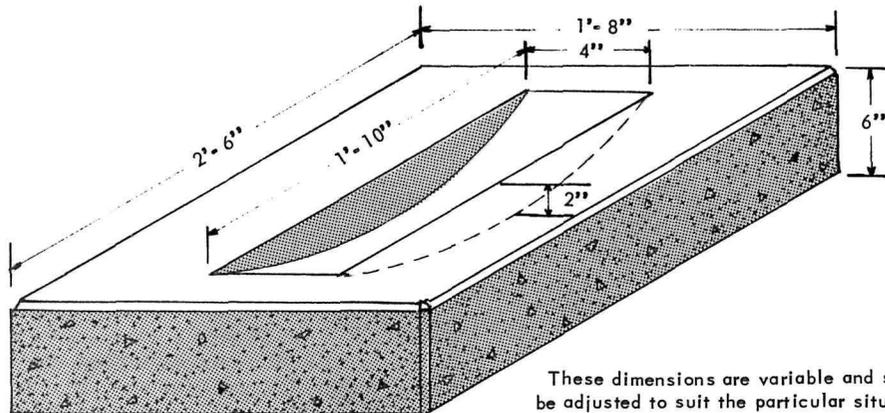
that four forms be made up so that four mounts may be cast at the same time. Each form should be greased so that it will not stick and may be easily removed for further use. The mounts are cast from standard concrete mix. Reinforcing wire is used to give extra toughness to the mount.

**TRAIL DITCHING DEVICE  
(NPS SW 67-145)**

The use of a novel trail ditching device is suggested by Jack Watson, Foreman II-Trails, Grand Canyon National Park, who designed, built and tested it. This device is used to clean and reconstruct the trail ditches in areas where, and at times when, the soil conditions are favorable. The work done by Jack's gadget had previously been done with picks and shovels.

Photos and list of materials provided by Jack give the necessary instructions for building a unit. He used surplus materials and expended \$44.50 in labor to construct the ditcher.

The ditcher may be turned over to work either the left or right sides of the trail.



These dimensions are variable and should be adjusted to suit the particular situation.



It weights 165 pounds and can easily be packed on a mule. Fifty-five pound weights are used to balance the unit for various soil conditions (uphill or downhill, wet, dry, etc.).

In operation, the unit is hitched to a mule (or where site is accessable enough to a tractor) and dragged down the ditch. One man drives the mule, another guides the ditcher. The unit cleans and forms a nice "V" shaped ditch, and also deposits the



excess material on the trail surface for use as a tread material. Downhill, the unit may be pulled by mule as fast as 1 m.p.h. Uphill, it is extremely difficult to pull the unit without a tractor, or other mechanical aid. Excellent results have been obtained when the unit is pulled uphill by tractor (better than downhill).

Studies of operational costs were made by Jack on the 4.5-mile section of Bright



Angel Trail, Grand Canyon National Park, between the Rim and Indian Gardens.

The cost per mile for ditching, water break cleaning, and spreading of the tread material was determined to be \$990 without the ditcher and \$103 using Jack's ditcher. For the \$990 figure, records of trail maintenance for 10 years were consulted. The \$103 figure is based on maintaining the trail two times when the soil conditions were right.

The photos show the ditcher and how it is hitched up. Specifications of the parts follow:

1. Guide bar 6'-4" long, 8 1/2" wide and 3/4" thick.
2. Cutting blade 2'-4" long, 1' wide, sharp on both sides. Adjusting bar 1'-6" long.
3. Draw bar 2'-3" long, 1 1/2" wide and 1/2" thick.
4. Cutting blade hold down chain, 30' long.
5. Blade holding line 11" long.
6. Holding pin housing 6" long.
7. Two fin tails 8" long, 4" wide, welded to tail of guide bar.
8. Handle 5' long.
9. Handle holder 5 1/2" long.

**CLUTCH FOOT PIECE  
FOR AUSTIN WESTERN GRADER  
(NPS W 68-101)**

The installation of a clutch pedal foot piece for the Austin Western Grader has been suggested by Bob La France and Lewis Gannaway of Sequoia and Kings Canyon National Parks. Their idea of this pedal is to help prevent the foot from slipping off the clutch, a hazard which is especially noted in the winter when shoes are wet from snow or rain, and which can cause bruised shins and ankles.

Bob and Lou also call attention to the fact that slipping of the foot has been a safety hazard when working in close places and has caused damage to vehicles and buildings. An employee can easily be injured if the operator's foot slips off the pedal at the wrong time.

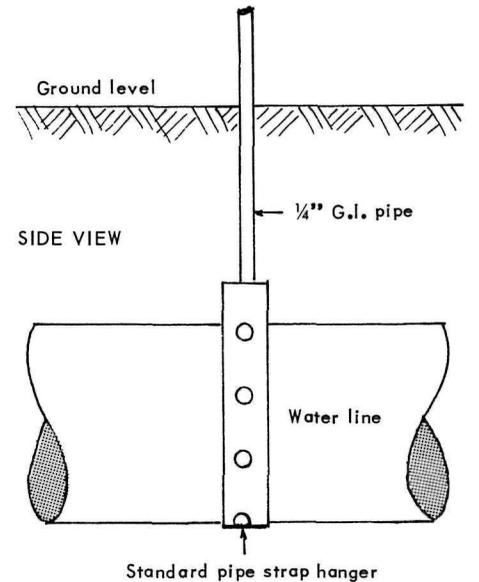
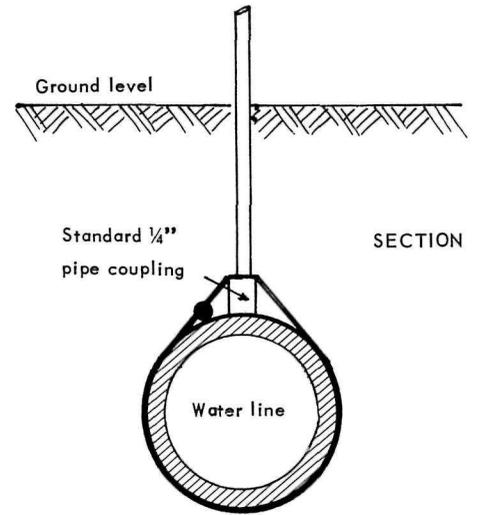
To help remedy the situation, they suggest the use of a metal plate 1/8 or 3/16 inches thick, as wide as the top of the clutch pedal and three inches longer to allow a turn up of 1 1/2 inches on each side. Pad with rubber and attach to clutch pedal with two 3/8-inch bolts.

**HOW "LISTENING PIPES"  
HELP DETECT LEAKS  
(NPS SE 67-2)**

How do you detect a leak in a main water line without a lot of digging and searching? Charles D. Campbell, a plumber, and Kirby Rickard, Jr., a plumber helper, worked out a system for finding such leaks in Shenandoah National Park that saves time and money.

Most of the water line mains in the Park are of 4-, 6- or 8-inch cast iron. "Under the old system we walked along those lines looking for wet spots which would indicate leaks," said Charles and Kirby. "Failing in this, we would dig down to the water line and use a sound meter in contact with the water line to determine direction and distance to the leak. Eight or ten holes had to be dug each time before finding the exact location of a leak."

Now the "Campbell-Rickard system" is in use — each time they dig a test hole, prior to covering it up they attach a length



of 1/4-inch G.I. pipe to the water line. Depending upon location (developed or undeveloped) the pipe is cut so it will either be at ground level or reach a little above ground. When subsequent leaks occur, the searching team can go direct to one of these 1/4-inch pipes, place the meter in contact, and get the same information that was previously only obtainable by digging a new hole down to the water line.

The method of attaching the 1/4-inch pipe to the main is shown in the sketch.

**SPECIAL TOOL BOX FOR TRUCKS**  
(NPS SE 67-77)

A change in the common practice of transporting men and mowing scythes in the same truck without a safety measure was created through the use of a special tool box for trucks, so reports Paul Riley, operator general, Shenandoah National Park.

As a result of Paul's suggestion, trucks at the park were equipped with a tool box running along one side and across two-thirds of the front of the truck bed. With divider in the box, mowing scythes can be stowed without being taken apart. Previously, such a tool, which has a handle about five feet long and a blade approximately twenty-six inches in length, was laid intact in the bottom of the truck with men sitting on tool boxes along each side of the truck. In the case of an accident or a sudden stop, this could have proven disastrous.

The top pieces of the tool box are hinged on the outer sides and the box bolted to the truck bed to prevent it from shifting. A piece of heavy rubber is tacked along the top end of one of the top pieces where it adjoins the other to prevent possible pinching of anyone sitting on the joint.

**TIME SAVING CABINET**  
**AT VISITORS DESK**  
(NPS SE 67-128)

In an effort to provide better visitor service and aid the person manning the Visitor Center desk at Manassas National Battlefield Park in Virginia, Daniel Kuehn, historian, suggested a cabinet that could be helpful to other visitor centers.

This money-drawer and storage cabinet simplifies desk operations in several ways: 1) It is on casters so that it may be located in the best place for the man using

it, thereby reducing steps between cash drawers; 2) It provides a handy place for bags and the fastest selling sales items thereby reducing the number of trips to the stock room; 3) With its modern cash drawer there is provision for efficient and accurate money handling not possible before.

In addition to being a time saver and requiring less effort on the part of the person working at the desk which allows more time to be given the visitor, another advantage this cabinet has is money security. As Dan points out, with his arrangement cash need not be removed from the drawer each night for safe-keeping. Instead the entire cabinet is rolled into the stock room which is kept locked.

Overall dimensions of the cabinet are as follows: height, 42" (even with counter top); depth, 18 1/2"; width, 20 1/4". Material is 3/4-inch plywood. The three shelves are adjustable and the large casters can be locked in position to prevent undesirable movement. The cabinet pictured was made to order and is a finished piece of cabinetry with a cost of about \$100. The cash drawer is the Model TD-1, Alarm Till, made by the Indiana Cash Drawer Company, Shelbyville, Ind.

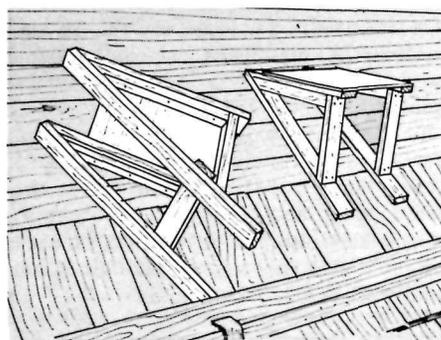
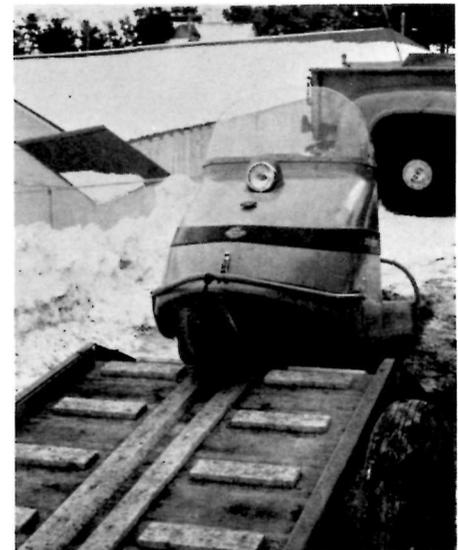
**MAKE PORTABLE PLATFORMS**  
**FOR USE ON ROOF**  
(NPS W 68-26)

"Easy Chairs" is the nickname given by roofers at Yosemite National Park in California to small portable, wooden platforms that have made their work easier while applying wood shingles or shake roofs.

J. G. Crocker, carpenter, explains that such a platform can be used for holding bundles of shingles, or the carpenter may sit on it while applying the shingles. Platforms can be made to fit any roof pitch.

**CONVERT TRAILERS**  
**TO SERVE DOUBLE PURPOSES**  
(NPS MW 68-11)

Practical use of available equipment at a nominal cost is recommended by Maxwell E. Hancock, supervisor park ranger, Yellowstone National Park, Wyoming, who tells what was done when trailers for small snow mobiles (Ski-Doo-Alpines) were needed to transport them to and from points of use.

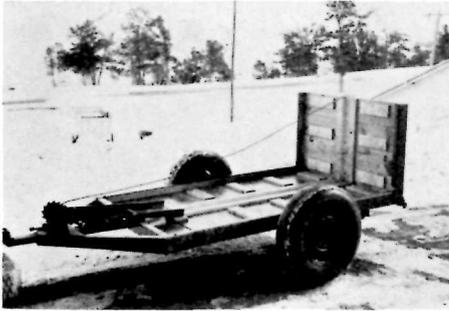


The platforms mentioned here are made of 1"x2" pine with 3/8-inch plywood top, all the parts being glued and nailed together. Twelve to sixteen wood screws should protrude through the bottom runner about 3/8" to prevent the platform from slipping on the roof. When these platforms are made properly and kept in good repair, they have been found to be very safe and can be used many times.

The park had on hand two "Powder River" squeeze chutes used in the elk trapping operation. During the winter these chutes are mounted on mobile scales and the trailer frames normally used to transport them are not in use. During the snow period decking is placed in the frames of these trailers along with a few other additions to help guide and anchor the machines thus making adequate trailers for Ski-Doos.

The cost of materials was \$10.03 for each trailer and the labor amounted to \$19.08 making a total of \$58.16 for both trailers. Less than half an hour is needed to convert a trailer from one use to the other after the original construction is complete.

These trailers do not have the features that make the regular snowmobile trailer more efficient and desirable but such a conversion as suggested met an immediate need and proved to be a practical use of



available equipment at a nominal cost. New trailers for a single snowmobile cost between \$150. and \$200. each. Ranger Hancock's conversion resulted in a saving from \$240. to \$340.

#### USE LIQUID GLASS IN ROUTED SIGNS (NPS MW 66-37)

To reduce maintenance costs, Eugene J. Koevening, foreman I, maintenance, Mount Rushmore National Memorial suggests using liquid glass, such as Herter's Resinote, in routed signs.

Resinote comes as a clear liquid, but may be tinted to any desired color with nonfading pigments. It is an adhesive which will attach itself in the routed letters, and when colored will not fade or peel out and will last indefinitely.

Here's how Gene says it should be done:

- Rout the letters with a straight face routing bit to a depth of from 3/16 inch to 1/4 inch. This allows the sign to be sanded two or three times and refinished.

- Pour liquid glass into the letters until the routing is filled above the level of the sign. Allow liquid glass to harden.

- Mechanically sand the liquid glass lettering even with the surface of the sign and smooth letters with 280 emery paper.

- Stain the sign itself to the desired shade.

- Wipe the stain from the letters.

Resinote costs \$6.25 a gallon, or \$5.00 in 55-gallon lots; and pigment costs about \$0.70 a gallon. Resinote may be stored for long periods. It will not harden until the activator is added.

Signs can be refinished in place; rerouting, masking, and painting letters is eliminated. In addition, the nonfading quality and durability of liquid glass letters is a plus factor. The experimental signs proved to be very successful at Rushmore.

#### PROTECTING BRAKE LINES FROM BROKEN TIRE CHAINS (NPS SE 67-119)

Tire chains on snow plows, road sanding equipment or other heavy duty vehicles operating in winter can break and quickly damage hydraulic lines serving the brakes, with dangerous results. Charles L. Vance, mechanic and Ray Glenn Branam, a fire control aid who had been a mechanic, both in Great Smoky Mountains National Park, joined to develop metal guards to protect the hydraulic lines from broken chain damage.

During the winter, there were a number of instances of these tire chains breaking and falling down around the axle with resulting damage or rupture of the hydraulic line activating the brakes, causing the brakes on the vehicle to become inoperative. This not only endangered the operating crews, but the traveling public as well. Repairs often had to be made at the site of the break-down, under extremely difficult weather conditions.

Charlie and Ray improvised guards from flat pieces of steel 1/2 inch thick by 2 inches wide and 11 inches long (although length must be adjusted to the particular vehicle) which were bolted over the exposed hydraulic lines and which effectively prevented damage to these lines from broken tire chains. This has materially increased the efficiency and the safety of vehicles used as snow plows and in road sanding operations.

Material required for each installation is 1 piece of flat steel 1/2" x 2" x 11"; two 5/8-inch cable clamps.

To install: Place the flat steel on the two rear spring U-clamps and extending to the brake drum. Mark and drill two 5/8-inch holes on each side of the spring's U-clamps. Fit the 5/8-inch cable clamps around the spring's U-clamps and through the holes drilled in the flat piece and



tighten nuts. This forms a heavy protective guard over the exposed hydraulic line, and installation is generally very simple.

#### SAVE THE FACE OF A SIGN (NPS NE 68-73)

Wooden or any other non-metal signs, painted or unpainted, can be saved from the sprayed or slapped-on paint of vandals and from the chemicals used on road to remove ice and snow. A thick and even coating of petroleum jelly spread on the face of a sign will prevent any paint from adhering to the sign face.

Maurice Kowal and Ronald Reichard of Minute Man National Historical Park recommend the use of the petroleum jelly because vandalism to outdoor signs has been a major problem. The vandalism consists of names, letters or just blobs, etc., painted onto sign faces usually by use of aerosol spray paint cans. The protective coating of jelly can be readily applied by a window squeegee, paint brush, sponge or rubber roller. Then when cleaning time comes, a wiping cloth will easily remove both the jelly and extra paint, leaving the sign in its original condition.

When chemicals are used on the roads to remove accumulations of ice and snow, these solutions are splashed onto the signs during the winter months and usually are not cleaned off until late spring because of freezing temperatures. This causes extensive damage to many roadside signs. These deposits can be cleaned off, too, after application of petroleum jelly.

Maurice and Ron also point out that since most of these signs are located along heavily traveled highways, and the



size of the signs varies from two by four feet to approximately five by fourteen feet, the coating can contribute to the accident prevention program by reducing the man-days required in the maintenance of the signs. They estimate savings per annum to be in the thousands of dollars.

*It's much safer to drive if both the weather and the driver are dry.*

**MARKERS FOR USE  
AT ACCIDENT SCENE  
(NPS SE 67-69)**

The use of markers following an accident, especially when the vehicles must be moved before photographs of the actual positions can be made, is recommended by Dennis W. Kuenzel, park ranger, Vicksburg National Military Park.

First, here is the making of the markers as described by Dennis: Background is painted white and 2" red illuminating tape is used for the letters which are placed upon 12" x 12" x 1/4" plywood. A stand is attached.

The letters that correspond to the lettering sequence used on Form 10-413 (Investigation Report of Motor Vehicle Accident), article number 15, are placed accordingly to indicate position of vehicle, such as point where vehicle hit fence, where vehicle left the road and edge of road. The distance between points can also be identified by noting the number of feet between each sign.

The photos used for illustration describe what happened when a motor-bike with two riders traveling at an excessive amount of speed went out of control, left the road hitting a fence, where it slid along the side of the cemetery fence, coming to rest between the fence and a tree.



**NOTE:** Injury to the heads of both riders would have been greatly reduced if they had been wearing "crash" helmets.

**TRAFFIC CONTROL CLIPBOARD  
(NPS W 68-144)**

From Olympic National Park comes a suggestion from Stephen Olts, fire control aid (Crew Chief) that standard clipboards carried in vehicles be painted to form traffic control signs.

This idea is simply done by painting one side red with white letters for "STOP" and the other side painted yellow with black letters to display "SLOW".

This procedure makes a readily available emergency traffic control sign that can be handy in all vehicles, eliminating the need for an extra emergency board sign that might be misplaced. In this way, the clipboard is available in all vehicles for all normal use as well as service in an emergency.

**AUDIO-VISUAL ROOM  
DELAY LIGHT CONTROL  
(NPS SE 67-24)**

An automatic time-delay light control designed by Eugene Stringer of Hot Springs for installation in the Visitor Center Audio-Visual room, has several benefits according to this pumping plant and electrical substation operator and mechanic.

First, such a control provides better services. A person on duty at the information desk will not have to leave the desk at close of hourly slide programs to switch on audio-visual room lights, and the information desk will not be unattended for several minutes each hour.

Second, this control creates greater safety in that without it visitors attending slide programs might be injured while attempting to exit in darkness if the person on duty at the information desk inadvertently failed to switch on the lights at the close of a program.

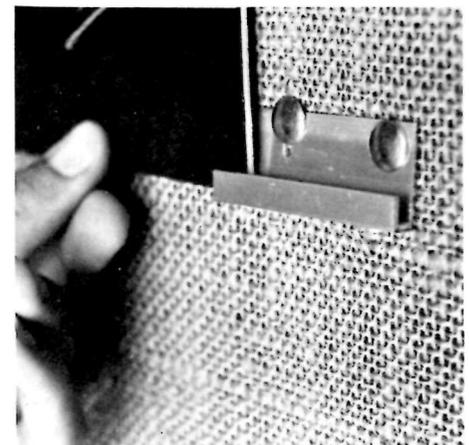
Eugene states that since the audio-visual room lights are already controlled from three separate locations, the suggested automatic control must operate in conjunction with the three manual controls. He suggests that a double pole, double throw, time-delay relay be used. This will enable the three manual switches to be operated independently of the automatic control at any time.

The holding coil on this relay is connected to the circuit which operates the motor driving the message repeater tape, thereby energizing repeater when program starts and de-energizing it when the program ends. The time-delay is set to provide ample time for operator to close doors after an audience is seated and leave the room before lights go out.

**USE ALUMINUM CAP MOLDING  
TO HOLD ATTRACTIVE DISPLAY  
(NPS SE 67-78)**

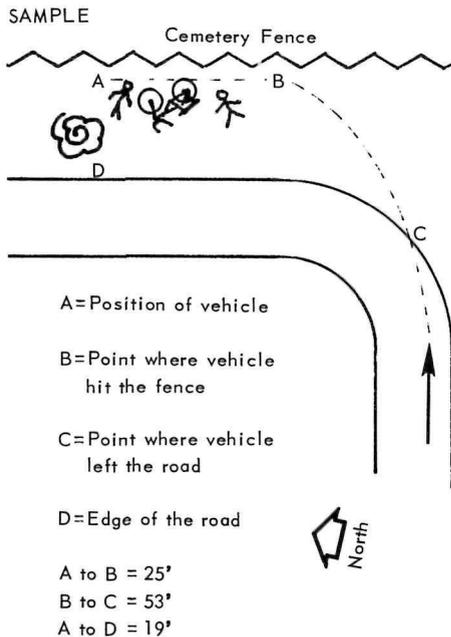
Oftentimes arises the problem of how to best display matted, but unframed, photographs, posters and other similar visual materials used for public information. John R. DeWeese, Management Assistant, Everglades National Park, suggest a solution to the problem—use aluminum cap molding.

The photographs show how the molding was used at Everglades National Park to present to the public a photographic display of areas of the National Park System during its 50th anniversary observance. In this display, one inch pieces were used at the top. They were held in place with one thumb tack. Two inch lengths at the bottom, were each held with two thumb tacks.



Use of the aluminum cap molding eliminates tack holes and damage to the medium on display. The molding can be purchased at most any building supply dealer at a nominal cost. Easy to work with, it can be cut to size with a metal cutting circular saw, fine toothed band or jig saw, and even a fine toothed mitre saw. If the holes that are already in the material do not conform to immediate needs, it is easy to drill.

Fancier corner holders can be con-



structed by carefully making two 45 degree cuts on either side of a center line and bending the material 90 degrees.



The trade name of the material used at Everglades is "Trimedge", identification No. A-54-H, manufactured by the William L. Bonnell Co., Inc., Newman, Ga. Other manufacturers produce comparable cap molding.

**TRAFFIC CONE  
STABILIZATION METHOD  
(NPS SW 67-83)**

With the thought of preventing accidents while safety cones are in use as traffic warning devices on road maintenance projects, Earl Mansor, truck driver R & T, Zion National Park, offers the idea of using a chain around the base of the cone, as shown in photo.

Since wind and vehicle traffic frequently upset the cones reducing their usefulness, the use of rocks on the cone base has resulted in damage to the cone and to vehicles accidentally striking the cone.

Earl has placed a length of 5/8-inch log chain around the base of the cone to provide sufficient added weight to keep the cone upright in most winds. The chain is pliable and will give under the force of vehicle impact. He explains that storage and transport presents no problem since the chain



can either be left on the cone or placed in the truck cab. Also, since the chain is cut to the proper length and has no loose ends, it appears to be safe.

*The only thing we have to fear on this planet is man.* —Carl Jung

The following is a partial listing of individuals who have received National Park Service suggestion awards to date. Following the listed awarded idea, you will find a page number if the idea was reported in this issue of PLOWBACK. Other listings cover awards for ideas of local application only. Awards information received after August 1, 1968, will be reported or listed in subsequent issues of PLOWBACK.

- Alexander, Gene R. (NPS W 68-72) Safety control switch air conditioning units.
- Artese, Fred (NPS NE 68-121) Spotlight for First Bank Bldg.
- Barbieri, James (NPS NE 68-29) Chain or hook for fixture in Federal Hall.
- Barbieri, James (NPS NE 68-72) Dimly light auditorium for showing movies.
- Barbour, Algeree M. (NPS NE 68-122) Traffic marker lines.
- Barry, Sheila R. (NPS WASO 68-57) Discontinue pay adjustment form letters.
- Bauer, Herbert B. (NPS MW 68-61) Revision of motor equipment handbook.
- Baxter, Marjorie L. (NPS W 68-131) Telephone check-list form.
- Benton, Robert E. (NPS NE 67-132) Direct telephone line from Fire Island & NYC.
- Berry, Jr., Russell W. (NPS MW 68-75) Alarm system for Gateway Arch.
- Best, John E. (NPS WSC 67-81) Information packet for new employees.
- Boykin, Jr., Lynch H.D. (NPS NE 68-112) Ramps for Yoh & McIlvaine Houses.
- Brown, R. Morris (NPS MW 68-29) Outdoor storage cabinet for inflammables. See p. PL-17.
- Brummond, Dorothy F. (NPS MW 68-18) Use GSA Forms 499M.
- Burns, Hazel L. (NPS W 68-139) Routing and transmittal slip.
- Cameron, Chris (NPS W 68-157) Information handouts for motoring public.
- Campbell, Charles D. & Rickard, Jr., Kirby (NPS SE 67-2) Detecting pipe leaks. See p. PL-19.
- Chittick, Richard T. (NPS NCR 68-92) Wrong way signs replace one way signs.
- Chumblery, Ronald E. (NPS SE 67-34) Adjustable harness. See p. PL-17.
- Ciucci, Jane (NPS SE 67-146) Labeling of SERO staff meeting minutes.
- Cuicci, Thomas S. (NPS SE 66-136) Drum sunk in ground at each downspout to reserve water for dry spells. See GRIST, Vol. 11, No. 2, p. 11, 1967.
- Cody, Mary T. (NPS NE 68-87) Non-slip strips for terrazzo floors.
- Cook, Lavern F. (NPS W 68-100) Change room numbers on ninth floor.
- Crocker, J.G. (NPS W 68-26) Roofing platforms. See p. PL-20.

**ELIMINATE DAMAGE  
TO OVERHEAD DOORS  
(NPS SE 67-113)**

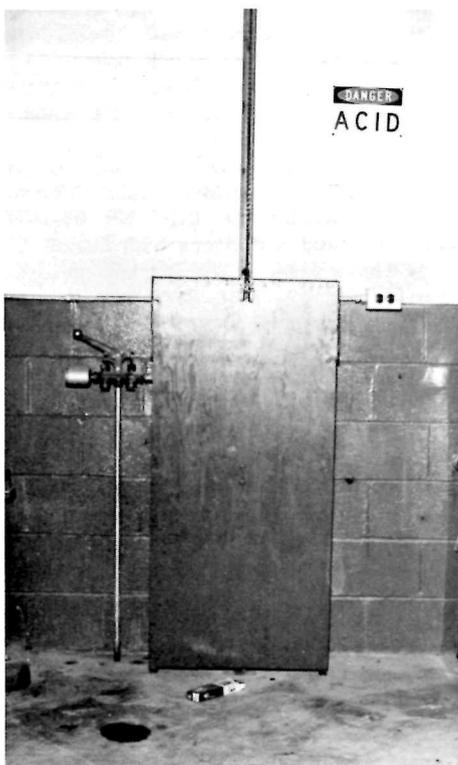
Robert Hines shares a suggestion of a device in operation at Great Onyx Job Corps Conservation Center that works satisfactorily and could be helpful at other centers by eliminating damage to overhead doors.

When the door is open, a panel rolls down over the controls to the lift so that the lift cannot be operated until the door is closed.

When the door is closed, the hoist controls are exposed for operation.

Damage that might be caused to such doors by a vehicle being lifted on an inside hoist while a door is open overhead can be prevented with the use of a chain, pulley and panel, one or more as indicated in photographs, to work in conjunction with the overhead door and the lift control.

This means protection to both door and vehicle; also, the possibility of having a vehicle actually knocked off the hoist by hitting the door can be eliminated.



- Davis, John (NPS NCR 68-136) Grills for fireplaces at Ft. Hunt.
- De Luca, Anna T. (NPS NE 68-99) Foil document boxes to store American Museum of Immigration items.
- Deuel, Jo Lynn (NPS NE 68-89) Aluminum storm door for admin. building.
- DeWeese, John R. (NPS SE 67-78) Aluminum cap moulding for displays. See p. PL-22.
- Durant, William (NPS NE 68-11) I.D. cards for employees for off-hours.
- Gargan, Alma R. (NPS NE 68-6) Establish annual blood bank for INHP.
- Geisinger, David W. (NPS W 68-19) Index of standard designs for designer and field men.
- Gillespie, Richard L. (NPS NE 67-85) Construction project appraisal form should be attached to spec. & drawings.
- Gilpin, Louise R. (NPS WSC 68-43) Work progress stamp.
- Gonzales, Manuel A. (NPS SW 67-51) Overlay sheet for standard form 80.
- Green, Harold C. (NPS NCR 68-100) Grass strip replaced by brick.
- Guine, Eddie R. (NPS NCR 68-81) Rail for front on No. 1 casement.
- Gumm, Ruth M. (NPS WASO 66-66) Elimination of NPS form 10-371.
- Hancock, Maxwell (NPS MW 68-11) Conversion of trailers to serve two purposes. See p. PL-20.
- Haney, Phyllis V. (NPS WASO 68-51) Changes for NPS directory.
- Hetzer, Charles W. (NPS NCR 68-119) Branding iron for Catocoin.
- Hines, Robert L. (NPS SE 67-113) Eliminating damage to overhead doors. See p. PL-23.
- Holden, Max W. (NPS SE 67-110) Maps to nearest hospital for personnel.
- Hout, Paul A. (NPS SE 67-139) Descriptive folders saved and sent to hospitals.
- Howell, James H. (NPS W 68-115) List of approved plantings at residences.
- Hutchinson, James W. (NPS NCR 68-18) Change entrance sign to eliminate confusion.
- Jackson, Victor L. (NPS MW 68-86) Modification of Admatic-Carousel. See GRIST, Vol. 9, No. 1, p. 6, 1965.
- Karraker, David O. (NPS W 68-143) Small window in cellar door for safety.
- Kirkland, Robert O. (NPS MW 67-74) Signs for downhill grades.
- Kirkland, Robert O. (NPS MW 68-32) Gathering data in cost accounting.
- Koenig, Eugene J. (NPS MW 66-37) Liquid glass for letters in routed signs. See p. PL-21.
- Kowal, Maurice L. & Reichard, Ronald R. (NPS NE 68-73) Prevent damage to outdoor signs. See p. PL-21.
- Krause, Elizabeth (NPS WASO 68-20) Sign for entrance to 4th floor canteen.
- Kuehn, Daniel R. (NPS SE 67-128) Money-drawer cabinet for information desk. See p. PL-20.
- Kuenzel, Dennis W. (NPS SE 67-69) Use of markers when photographing scene of accident. See p. PL-22.
- LaFrance, Bob & Gannaway, Lewis J. (NPS W 68-101) Clutch pedal foot piece for grader. See p. PL-19.
- Lamoreaux, Guy O. (NPS W 68-40) License number in color on credit cards.
- Lamoreaux, Guy O. (NPS W 68-42) Mimeographed forms for mailing lists.
- Lee, Foon C. (NPS W 68-116) Improve present computer program.
- Lindsey, J.C. & Sands, J. (NPS NCR 68-17) Request for appearance forms.
- Magie, Robert A. (NPS W 68-71) Bumper jacks replace axlejacks.
- Martin, Jr., James L. (NPS NCR 67-159) Signs to clear up visibility problem.
- Martischang, Fred M. (NPS MW 68-87) Cross index to Code of Federal Reg.
- McGettrick, Robert J. (NPS NCR 68-45) Lookout form for investigating criminal offenses.
- McGillivray, R.J. (NPS W 68-69) Modification of small parking stripers parts.
- McLane, Charles E. (NPS NCR 67-171) Personnel information on I.B.M. cards.
- Meek, C. O. (NPS WASO 68-44) Visible cardex file on awarded employees.
- Meenan, George E. (NPS NE 68-97) Hard hats for protection force.
- Mentor, Gerald (NPS NE 68-25) Historians for guiding groups from bus agencies.
- Mentor, Gerald B. (NPS NE 68-75) Sign, showing hours open, for front of bldg.
- Mentor, Gerald B. (NPS NE 68-76) Bannister railing and stair mats for safety.
- Mentor, Gerald B. (NPS NE 68-77) Sign holder replace tripods.
- Merry, Wayne P. (NPS W 68-91) Wood chips for trail surfacing.
- Monsor, Earl, (NPS SW 67-83) Traffic cone stabilization method. See PL-23
- Nathanson, Sam (NPS NE 68-68) Lunch-room for children during bad weather.
- Nelson, F. Garth (NPS MW 68-44) Machine validated gate passes.
- O'Bryant, Harry L. (NPS W 68-98) Pre-printing info. on certif. of deposit.
- Olts, Stephen K. (NPS W 68-144) Two-way clipboard traffic control sign. See p. PL-22.
- Orgill, Stewart R. (NPS MW 68-65) Change in forms for campground registration.
- Oskuie, Peggy (NPS WASO 68-63) Form letter to acknowledge receipt of requests for certificates.
- Paige, Bruce B. (NPS NCR 68-73) Pigeon-hole boxes for pamphlets in kiosks.
- Palmer, Michael W. (NPS W 67-134) Amend procedure for standing applications.
- Patrick, Lyman N. (NPS W 67-182) Safety brace on dump truck boxes.
- Paulits, Thomas J. (NPS NE 68-103) Trash containers for parking area.
- Petersop, Arnold M. (NPS MW 68-70) Fire emergency cut-off for exhaust fan.
- Reagle, William (NPS NCR 67-125) Bar to lock tulip type trash baskets.
- Reilly, James L. (NPS NCR 68-106) I.D. emblem for equipment.
- Rheinisch, Robert K. (NPS NE-68-39) Signal mat alarm system.
- Riley, Paul A. (NPS SE 67-77) Tool box for trucks. See p. PL-20.
- Rolandson, Peggy (NPS W-68-36) Combining & transmitting mail to Bureau of Public Roads.
- Ryan, Mary (NPS WASO 67-121) Railing for steps to auditorium stage.
- Schiffman, Paul W. (NPS SE 67-126) Paper fastener to extract jammed slides from projector.
- Scovill, Douglas H. (NPS SW 66-92) Countex method for counting coins. See GRIST, Vol. 11, No. 4, p. 30, 1967.
- Smith, Robert F. (NPS W 68-32) Nat. and Uniform Bldg. Code for instructors.
- Sova, Margaret A. and Prai, Betty J. (NPS MW 68-103) Origination indicated on form W-4 when sent to Regional Office.
- Spungen, Dorothy S. (NPS NE 68-84) Lengthening of hand rail at Bank Bldg.
- Stone, Jack L. (NPS NCR 68-1) Save and use 1966 One Day Individual Passports.
- Stone, William U. (NPS NE 68-38) For tulip-type basket use construction jig.
- Stringer, Eugene (NPS SE 67-24) Automatic time-delay light control. See p. PL-22.
- Thomas, James E. (NPS NCR 68-32) Permanent flag holder.
- Thomas, James E. (NPS NCR 68-80) Same work clothes for stables as other maint. personnel.
- Thomas, Kay (NPS WASO 68-60) Signs for "C" & "E" street entrances of Interior Bldg. indicating time doors are locked.
- Thomas, Ralph E. (NPS WASO 68-84) Acctng. Office carry facilitating service charges from the field.
- Tommins, Daniel M. (NPS NE 68-81) Eliminate hazardous floor conditions in maintenance trucks.
- Vance, Charlie L. and Branam, Ray G. (NPS SE 67-119) Metal guards to protect hydraulic brake lines. See p. PL-21.
- Van de Mark, Richard D. (NPS NE 68-62) Improve function of message repeater.
- Vial, Charles L. (NPS NCR 68-39) New visitor signs.
- Virostek, Carol J. and Hanisko, Raymond (NPS NE 68-104) Wax spraying attachment for elec. buffing machine.
- Wallis, O.L. (NPS WASO 66-63) Exhibit sign for hours when Memorial isn't open.
- Walters, William D. (NPS NE 68-109) Mirror and half doors with buzzer to prevent unknown persons from entering.
- Watson, Jack E. (NPS SW 67-145) Trail ditching device. See p. PL-18.
- Whatley, Marshall J. (NPS SE 67-6) Cannon wheel base or mount. See p. PL-18.
- Wilkins, Keith M. (NPS SW 67-174) Dock stabilizer. See p. PL-18.
- Willett, John T. (NPS SE 66-209) Wooden supports for cemetery flags. See p. PL-17.
- Williams, Jr., Garland B. (NPS NCR 68-122) Directional sign for Parkway.
- Williams, Charlotte M. (NPS SE 68-41) Hall be closed for storage.
- Wolfe, Patricia Sue (NPS NE 68-94) Better lighting for room in Museum.
- Woolfenden, James C. (NPS NCR 68-13) Signs for underpass at Ft. Hunt.