



PARK PRACTICE

VOLUME 8

Grist

JULY/AUGUST '64

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

OF MEN AND ERGS

The word 'manpower' is thrown around rather loosely these days. It is meant to define quantities of human effort which might be applied toward the attainment of an objective. It's a perfectly good word (as words go) but like many another, its repeated use in an offhand manner can cause misunderstanding, indifference, or perhaps what is still worse, resentment.

The principal objection to the indifferent use of such words as 'manpower' is that they do not take into account the all-important personal equation. They tend to lump people in the manner of horsepower, tons, gallons, ergs, or other quantitative words. This simply cannot be done. Who ever accurately measured the full potential of the human brain? Or gauged emotion? Or ventured to estimate, by inflexible rules, the extent of man's initiative under all conditions? No one, of course, for this is possible only through self-appraisal in comparison with others.

So, if we think this out a little further, we become aware that 'manpower' includes more important factors than just sinue used to push, lift, move or build things. It involves heart, conscience, and brain.

The word 'manpower' works well in the office where plans are made, but when we move out to where this important mass of effort we call 'manpower' is located, we would do well to alter our thinking. Now we must recognize that we are dealing with vibrant humans into whose hands we will entrust the success or the failure of that which we want to accomplish; we must be aware that people will make their own judgments of our proposals and react to them in various ways.

This should cause us to consider a few of the factors which go to make up a good supervisor. The good ones are the fellows who know that understanding begets understanding; they know that money paid an individual can buy considerably more than his time on the job. They know that the poorest approach to total productivity is a demanding attitude toward subordinates.

Rather, they consult with, then ask that certain jobs be done. They allow for a full measure of individual resourcefulness to

find its way into the work, and they encourage initiative in him to whom the job has been entrusted.

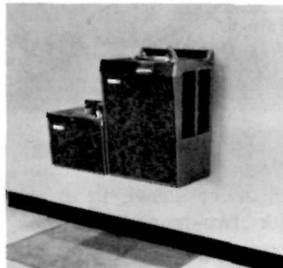
Finally, when the work has been completed, the good supervisors are considerate enough to express their thanks for the interest the worker has shown—an interest, incidentally, which the supervisor has encouraged and developed. Just as everyone likes to read his name in print, so does everyone like to know that his efforts have been recognized and appreciated. Personal satisfaction is a substance more desired by the creative than gold.

The good supervisor will have gotten his 'power' from the man—but in a richer form than 'manpower'. It will have come from those who have been enlisted to their fullest capabilities—as men, not as units of work. —Amisol

DUAL HEIGHT DRINKING FOUNTAIN

Turner L. Robinette, Park Engineer at Colonial National Historical Park reports on their installation of two dual height drinking fountains in the visitor center lobbies at Jamestown and Yorktown for the benefit of the smaller thirsty youngsters and the preoccupied park visitor parents.

The units, one shown in the accompanying photo, makes a neat wall installation, one easy to clean and wax floors under.



Offered by Westinghouse Elec. Corp., Major Appliance Products Service Dept., Columbus, Ohio, one cooling coil serves both the high and low fountains.

AID TO LOCATING LOST PERSONS

Even something as seemingly insignificant as a chewing gum wrapper may be a clue to locating a lost person, says Ranger George B. Robinson, White Sands National Monument, so it is important to have answers to a lot of questions if possible

before starting a search.

Here is a questionnaire George uses in obtaining, from family or friends, information necessary to search and rescue operations. It has been adapted from a similar one presented by Training Assistant Jack Morehead at the Horace M. Albright Training Center.

Lost Person Questionnaire

In the event a person is reported lost, ascertain the following information by tactful questioning of family and/or friends. DO NOT OVERLOOK ANYTHING. Facts which may seem unimportant at the time may be the key to a successful search operation.

Date: _____ Time: _____ Place: (picnic area, along road,)
Name: _____ Sex: _____ Age: _____ Weight: _____ Height: _____ Race: _____
Color of hair: _____ Color of eyes: _____ Answers to: _____
Address: _____ Telephone number: _____

Clothing worn: (material, pattern(s), color, condition, etc.)
Footgear: _____ Type: _____ Color: _____ Sole pattern: _____ Condition: _____
Shirt or dress: _____ Jacket or coat: _____ Cap or hat: _____
Pants: _____ Stockings or socks: _____ Other: _____

Things carried: (type, color, amount, etc.)
Glasses: _____ Jewelry: _____ Watch: _____ Money: _____
Purse or billfold: _____ Contents: _____
Contents of pockets: (knife, coins, etc.) _____
Other: _____

Type of person:
Hardy: _____ Frail: _____ Agile: _____ Clumsy: _____ Aggressive: _____ Shy: _____
Easily frightened: _____ Energetic: _____ Resourceful: _____

Health
Heart: _____ Lungs: _____ Hearing: _____ Sight: _____ Disability: _____
Mental condition: _____
Outdoor knowledge: _____ Will answer to whistle or call: _____
Right or left handed: _____ Familiar with country: _____
Date lost: _____ Time lost: _____ Where last seen: _____ By whom: _____
What and when did they eat last: _____

Did they have food with them: (gum, candy, fruit - kind) _____
Do they have water: _____ Do they smoke: (brand) _____
Remarks: _____
Reported by: _____ Relationship: _____
Address: _____ Telephone number: _____
Name and address of nearest relative: _____
Ranger making report: _____

PARK PRACTICE



issued bimonthly at Washington, D.C. by the National Conference on State Parks, the American Institute of Park Executives, and the National Park Service, U.S. Department of the Interior in cooperation with federal, state, and local park and recreation authorities.

- NATIONAL CONFERENCE ON STATE PARKS**
 901 Union Trust Building Washington 5, D.C.
 Earl P. Hanson (California), President
 Donald B. Alexander (D.C.), Executive Secretary
- NCSPP Park Practice Policy Committee**
 Arthur C. Elmer, Chief, Michigan Parks & Recrea. Div., Chairman
 R. Elwood Edey, Supt., National Capital Comm., Ottawa, Ontario
 Polk Hebert, NCSPP Vice President, Louisiana
 M.C. Huppuch, U.S. Army Engineers, Washington, D.C.
 Clinton P. Johnson, Supt., Otter Creek Park, Kentucky
 Lawrence Stuart, Director, Maine State Parks, Maine
- AMERICAN INSTITUTE OF PARK EXECUTIVES**
 Ogleybay Park Wheeling, W. Va.
 Norman S. Johnson (Los Angeles County, Calif.), President
 Alfred B. LaGasse (W. Va.), Executive Director
- AIPE Park Practice Policy Committee**
 John P. Hewitt, Dir., Md. Nat. Cap. Park & Plng. Comm., Chairman
 Joseph A. Dietrich, Supt. of Parks & Trees, Greenwich, Conn.
 Robert W. Ruhe, Supt. of Parks & Recreation, Skokie, Ill.
- U.S. DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE**
 Ira B. Lykes, Chief, Div. of Park Practice, Editor
 1211 Interior Building Washington, D. C. 20240

MATERIAL FOR PUBLICATION should be sent ONLY to:
 Chief, Park Practice, National Park Service, Washington 25, D.C.

GRIST does not accept advertising for publication, and the mention of any commercial product, service, or manufacturer herein does not infer or imply endorsement, nor does it infer or imply that other similar products, services, or manufacturers are not equally acceptable. Manufacturer's names and addresses are given as a source of information should products or services reported herein be not available locally. These pages are open to the mention of any and all products and services which the publishers consider will tend to more efficient and economical operations in park and recreation work.

—SUBSCRIPTION RATES—

- NEW Membership, FULL Program; a complete, up-to-date library of DESIGN, GUIDELINE, and current year and 4 previous years of GRIST, plus all issues through the calendar year \$50.
 RENEWAL Memberships, all material each calendar year . . . \$10.
 (10% discount on 10 or more new or renewal memberships)
 GRIST (only), including binder, each calendar year \$ 3.
 (Subscription to GRIST is included in new & renewal memberships.)
 GRIST, multiple copies in addition to any above memberships, without binders to one address only, per annual volume, . . . 60¢
 with binders, any annual volume, to one address, each . . . \$ 1.
 (when in addition to full membership or 1st vol. of GRIST)

APPLICATIONS FOR MEMBERSHIP, FEES, and INQUIRIES should be sent ONLY to:
 Executive Secretary, National Conference on State Parks
 901 Union Trust Building, Washington 5, D. C.

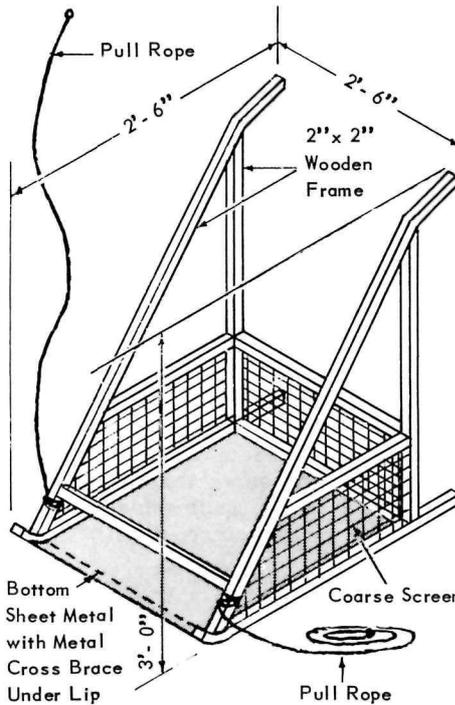
Printed by DISTRICT LITHOGRAPH CO. INC., Washington 7, D. C.

The baskets are manufactured by Howard Metalcraft Company, Emmaus, Pennsylvania.



KEEPING BEACHES CLEAN

One way to clean the assorted refuse off park beaches is to use the simple cleaning device designed by Park Manager W. Kusey and Life Guard D. Evans at

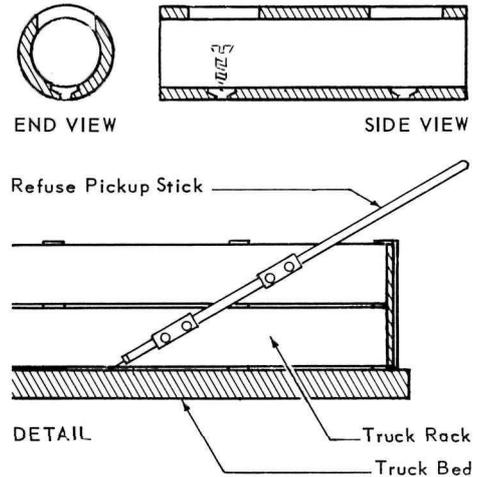


East Tawas State Park, Michigan. The cleaner, shown in the sketch, is intended for two-man operation, one pulling and one pushing, but can also be hitched to a small tractor if desired, in which case the tractor does the pulling while one man walks behind as if handling a plow.

REFUSE PICKUP STICK HOLDER

As the knights of old had lance holders fastened to their saddles, so may park maintenance personnel have holders for their refuse pickup sticks attached to park trucks (both hand trucks and motor trucks). Ranger V. Schwanke of Algonac State Park in Michigan suggests two lengths of metal pipe or tube, mounted

as shown in the sketch, to hold the refuse pickup stick.



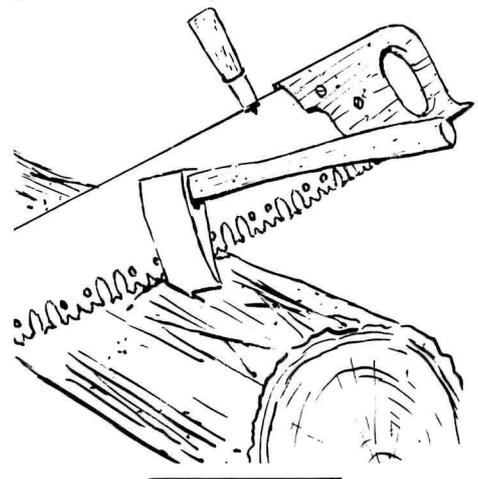
To simplify mounting, make holes on two sides of each piece of pipe, the holes on one side being just large enough for the mounting screws or bolts, the holes on the opposite side being large enough to put the screwdriver through when doing the mounting.

The mounts are placed in a diagonal line on the forward wall of the truck bed in back of the cab putting the stick handy to the right running board. Screwing the two holders to the wall in this fashion eliminates welding.

HOW TO START A SAW CUT

A. Wallin, Manager, Baraga State Park, Michigan, has come with a good idea for starting a saw cut.

Mr. Wallin tells us to sink the axe in the log parallel with the grain. Place the saw horizontal with the tip of the axe, start the cut and then remove the axe. (See sketch below.)



HOT NEWS CRISIS FUELS COOKOUT

From Africa comes the idea for this amazingly simple grill which burns only newspaper and very little of that. Only four double sheets crumpled to the size of a grapefruit will medium broil a one-inch steak in six to seven minutes. Known in

POLE MOUNTED LITTER BASKET

The neat litter basket shown in the photographs can be mounted on existing sign, shelter, or other posts. It locks to a unique mounting bracket which opens with a key, thus preventing theft.

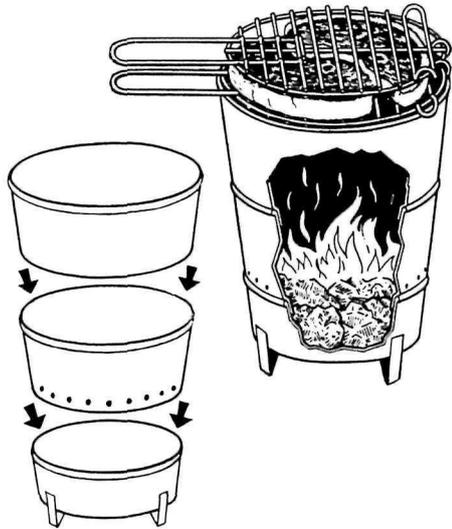
Frank H. Bunce, Manager, Bernheim Forest, Kentucky, is using the H-I model which is 12 inches in diameter and 24 inches deep. This small size makes handling easy. There are slots or "weep holes" at the base of the basket to allow run off of liquids.

The plaque which you see on the basket reads, "Don't Be A Litterbug", and is included in the price, which is under \$14. Should it be desirable to have the name of your park on the basket, a two-line imprint on the sign may be requested. This would be hand stamped in weatherproof ink. There is a \$2 initial charge for preparing the stamp, but on future orders no imprinting cost would be involved as the stamp would be retained by the company. If the original order were for 12 or more baskets, there would be no imprint charge.



Africa as the swanniebraai (swan-ee-bri), it is called Safari Grill in the United States.

An English scientist and engineer, Derek Davis, developed the grill which is made of



cold rolled steel in three collapsible sections. Each section fits neatly and securely into the other and assembly takes only seconds. The secret of the concentrated heat is

controlled combustion--draft from holes in the bottom and lower sides of the grill and, especially, fat dripping onto the fire. The charred paper acts much like a wick to distribute the fat drippings as they burn.

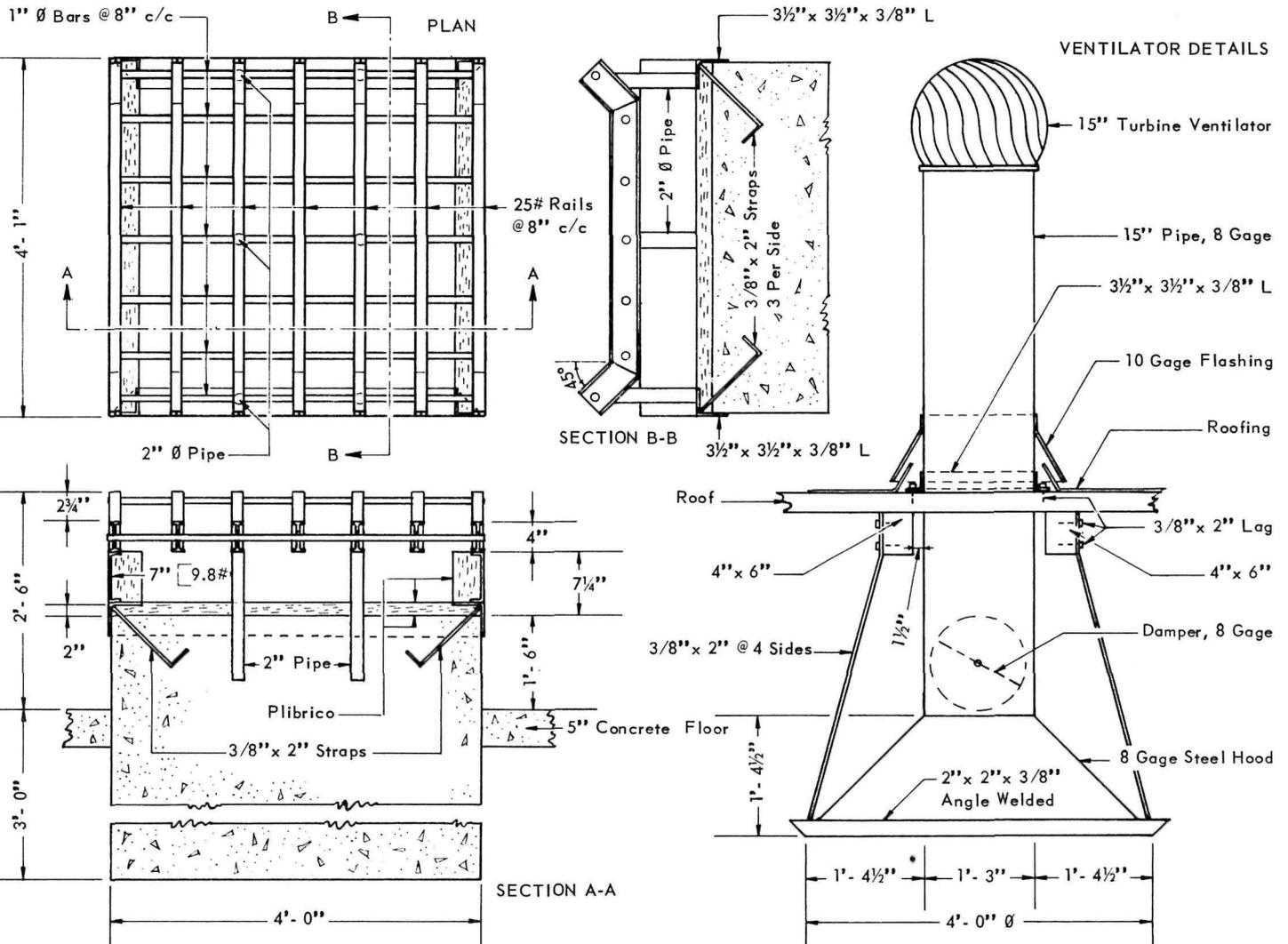
Since newspaper is made from news pulp which contains chemically the same cellulose as charcoal and wood, the same barbecue flavor is obtained. Fast cooking seals all the juices in the meat. Barbecuing a chicken requires more newspaper, more time, and basting with supplemental fat.

The cooker is 12 1/2 inches in diameter and stands 13 inches high. The expanding grid hooks securely over the edge, has stay-cool handles, and will hold three good-sized steaks or six to eight chops. Two models are available. The Deluxe Model, made of heavy-gauge steel and including carrying case with permanent plastic handle, weighs 6 pounds 2 ounces and sells for about \$10.95. The Standard Model, at \$8.95, is made of lighter-weight steel, weighs 5 pounds 4 ounces, and comes in an under-the-arm carton.

The Safari Grill is sold in many specialty shops, but is also available from Swaniebraai, Inc., Barr Building, Washington, D. C. 20006.

SHELTERED CHARCOAL GRILL

The good looking charcoal grill and ventilator combination shown in the photograph and sketch can be used safely in an open park shelter. H.W. Groth, Director of the Cleveland Metropolitan Park District sent in the picture and plan for readers of GRIST.



STORAGE STALLS FOR SAND AND GRAVEL

Messy, unsightly, and wastefully inefficient piles of sand, gravel, crushed stone, and other aggregates have been eliminated



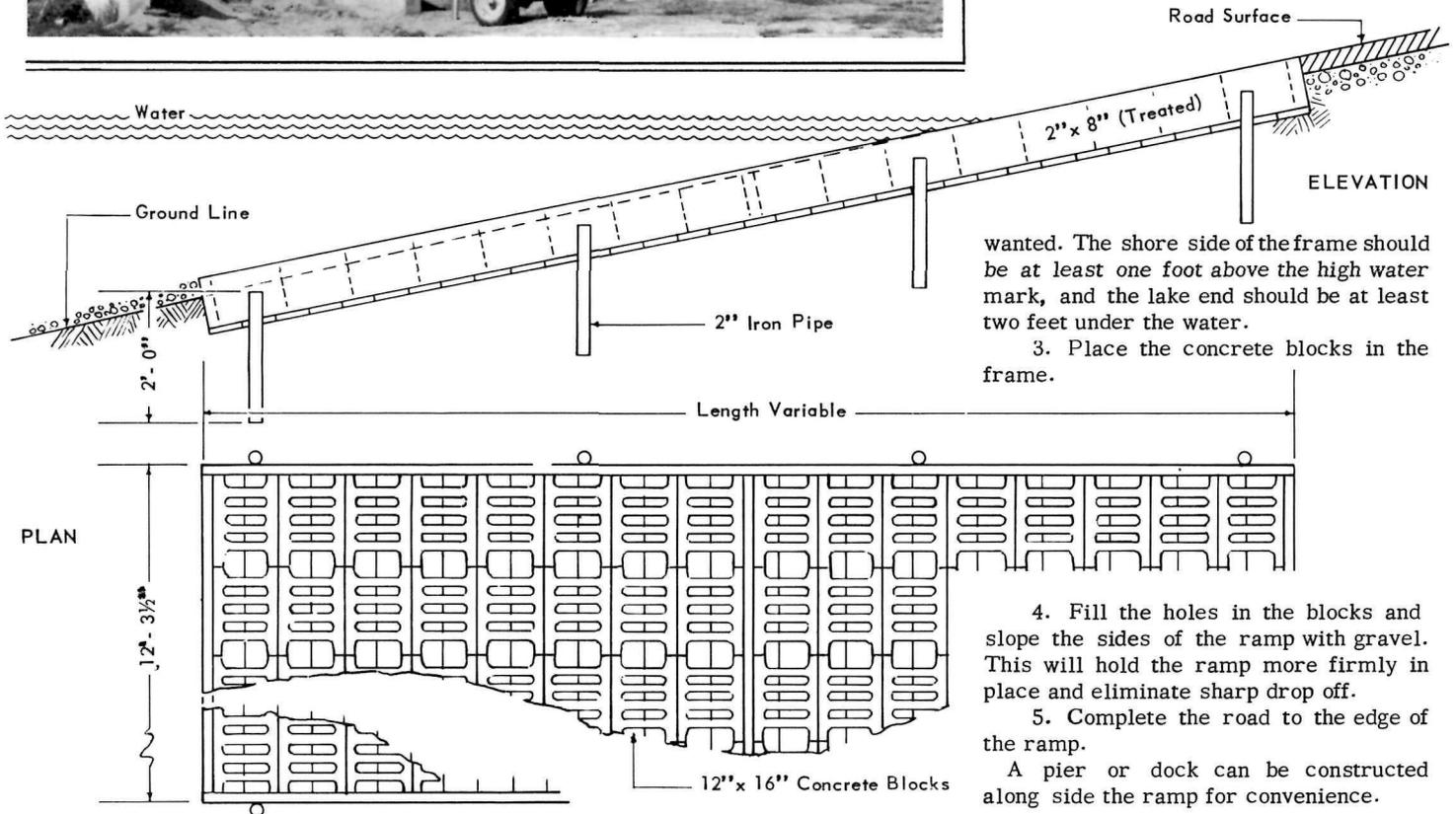
at Shenandoah National Park by building simple "storage stalls" against the back wall of a park building. As the photograph shows, the partitions are of concrete, tapered from a broad base up to a narrower top.

tion: don't build the ramp on the exposed shoreline of a large lake as ice pressure may push it out or damage it.

Here are construction procedures:

1. Make the frame for the ramp with a bottom so that the concrete blocks will rest on a level surface.

2. Smooth the surface of the lake bottom and push the frame into the location



wanted. The shore side of the frame should be at least one foot above the high water mark, and the lake end should be at least two feet under the water.

3. Place the concrete blocks in the frame.

4. Fill the holes in the blocks and slope the sides of the ramp with gravel. This will hold the ramp more firmly in place and eliminate sharp drop off.

5. Complete the road to the edge of the ramp.

A pier or dock can be constructed along side the ramp for convenience.

LOW COST, LOW MAINTENANCE LAUNCHING RAMPS

From the Wisconsin Highway Department, Floyd F. Reinemann of the State Conservation Department, borrowed this idea for a launching ramp, which he saw in use at a public boat landing in Eagle River, Wisconsin.

Floyd says the ramp is inexpensive to construct and requires practically no maintenance. The edge of the ramp gives a firm backing for blacktopping materials, and the hard surface provides traction for vehicles.

The ramp can be constructed at the landing, and the materials can usually be carried in one two-ton stake-body truck. A bulldozer may be needed to smooth out the surface of the lake bottom and landing and also to push the frame into the lake.

Materials needed are: 2x8-inch lumber, 12x16-inch concrete blocks, treating material, spikes, and gravel. Size of the ramp and amount of materials needed will vary according to conditions that exist at the boat landing location, of course. If the lake drops off slowly, a longer ramp is in order; if it will be heavily used, a wider ramp may be needed. One precau-

SMUDGE POTS PROTECT FIRE HOSE

When is a smudge pot not a smudge pot? Hugh H. Bozarth, Management Assistant, Pipe Spring National Monument (Arizona), has an answer to that question in the form of a fire hose container made from the bottom of a smudge pot—proof against kids at play, strong winds, alkali soil, and the effects of wetting and drying in Death Valley. Wooden hose containers can't stand the gaff in that climate.

The citrus grove smudge pots have one



built-in advantage to begin with—they are insulated and so provide protection for the hose from the intense heat of the Valley sun. In addition, they are painted reflective white for less heat absorption.

As the photographs show, the container Hugh designed is firmly attached to the fire hydrant with angle iron braces, projecting far out enough so that a spanner wrench can travel free when used on top of the hydrant. The rolled hose (200 feet), both couplings rolled to the outside, rests on a circle platform of 1/2-inch mesh steel screen for ventilation. The weight of the cover rests on the mesh, not on the hose.

EVALUATING PARK EMPLOYEES

Rating the performance of employees can be quite a chore, as any foreman, supervisor, or park manager knows. Clinton Besonen, Manager of Sibley State Park at New London, Minnesota had to rate quite a few temporary workers at one time and decided that he needed a common sense guide for the purpose, something simpler than the detailed manuals often supplied for such purpose. Although Federal and State Governments usually have rating standards available, reading a description of the rating elements may be helpful to anyone faced with the task of evaluation. Clint uses the following definitions of characteristics to be considered:

Industry—To be industrious means to demonstrate a steady attention to the work at hand, to be busy and hard working. Such a person is active, more than willing to do his share, and shows serious interest in whatever he undertakes.

Responsibility—A reliable person is trustworthy. Work can be assigned to a reliable person with the assurance that it will be done to the best of that person's ability. Reliable persons do not need constant watching and may be depended upon to finish whatever they undertake and to tell the truth.

Work Progress—A man said to be progressing in his work is one who advances or improves with experience. He will grow, improve and increase in knowledge and skill. Such a man is valuable to the department in which he works. He will be able to accomplish speedy, accurate, and satisfactory work.

Attitude—This refers to the way a person looks upon his associates, his work, his superiors, and life in general. He works not only because he must, but because he feels it is the proper thing to do. He respects authority and approaches his problems here with the idea of making the most of his time and contributing what he can to the general good.

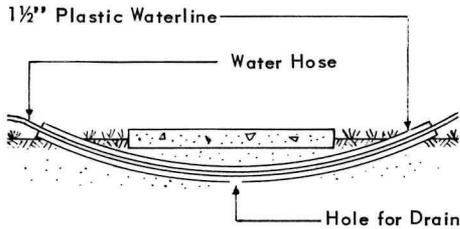
Behavior—A man's behavior covers his conduct and adaptability. While a man's conduct is defined by the rules, it may also be defined by the readiness with which he obeys them. A person whose behavior is good is tractable and conforms to the rules of whatever group surrounds him.

Clint applies one of three terms to rate the employee after considering the factors above: G (for Good), S (for Satisfactory), and U (for Unsatisfactory). Federal or State standards may require other rating terms, but most of them are similar to these three levels.

How are the mighty fallen!
OLD TESTAMENT, Isaiah, XIX, 12

PLASTIC TUNNEL PROTECTS HOSE

Where a hose must frequently be run across a sidewalk or road and is therefore subject to possible damage, try using the system suggested by R. G. McRae, Manager of Mitchell State Park in Michigan. He has had a length of 1-1/2-inch plastic waterline run under each walk or road where a hose must often be used.



Park personnel can run hose through the lines, safe from damage by vehicles and no longer a tripping hazard for walking visitors.

Holes should be drilled at the low points in the plastic line to permit drainage of storm water.

INEXPENSIVE SPECIAL USE SIGNS

Now and then almost any park has need for special use signs which do not justify expenditure of a lot of time or money. Frank B. Bellinghausen, Asst. Park Supervisor, S.P. Taylor State Park, Lagunitas, California, has found a solution which works well in his park and should be useful for any park system which prints small cloth, paper, or metal signs.



Frank takes a standard sign, keeps that part of the sign wanted in the finished job, and uses the color of the lettering (in this case red) to paint out the unwanted wording and provide a background for the new. Using heavy cardboard, he

makes a stencil for the new lettering. The background color of the original sign is then used for the new wording (in this case white). The production time is negligible and the stencil can be used over and over.

RUSTIC RECEPTACLE

If you are trying to maintain as natural an appearance about your park as possible, the folks at New Salem State Park, Illinois, suggest that a 20 qt. or larger trash container can be successfully disguised in a hollowed out section of log.



FUSTATS REDUCE FIRE HAZARD

Tampering with fuses by placing pennies or other metal behind them or by replacing 15-ampere fuses with 20-ampere fuses is extremely dangerous. This is particularly true where electrical appliances, such as portable heaters, draw more current than was intended when the building was wired.

You can't say that too many times, Thomas K. Garry, Assistant Chief Ranger, Yellowstone National Park, insists. Almost every inspection of buildings for fire hazards reveals fuses of too large amperage being used, he finds. But better than just words of warning Tom suggests the use of fustats where plug type fuses are now customarily used. The adapter permits use of a 15-ampere replacement fuse only in a 15-ampere receptacle.

PLASTIC AS TRACING PAPER SUBSTITUTE

Frank B. Bellinghausen, Assistant Park Supervisor, S. P. Taylor State Park, California, reports that Ranger Bill Brown was looking for some large size tracing paper to make an overlay of a sign he was redoing, but found nothing large enough. Putting his ingenuity to work, Bill tried using some clear plastic left over from another job. He used a ball point pen, and it worked real well. You might want to try it even if you have some tracing paper.

Speaking of Interpretation -

PUSH-PIN LIGHTS FOR CHARTS AND MAPS

Map or chart boards on which you may place colored lights as easily as using push-pins are now available under the "Lite-Tronics" system. Panels are available with from one to six circuits, with each circuit capable of carrying as many as a hundred lights, all controlled from the power supply box which also provides dimming and flashing equipment.

A typical Lite-Tronics panel is size 3 by 4 feet, with two circuits, selling at \$300. The surface is cork and the "Glo-Pins" which light up may be inserted anywhere on the panel.

The panels could be used to show location of selected park tours, or to demonstrate trends on charts.

Information about the Lite Tronics equipment may be secured by writing William F. Drake, Suite 11, 1500 Massachusetts Avenue, N.W., Washington, D. C.

THE BLOOMING RECORD

Wildflower blooming period records will be readily available in a ten-year, consoli-

FLOWER BLOOMING PERIOD													
SPECIES: _____													
Scientific name						Common name							
PARK: _____													
ELEVATION _____													
Legend: S - start of bloom period D - bloom declining													
I - bloom increasing E - end of bloom period													
F - full bloom period Example: $\frac{SS}{17}$ IIIFFFF DD $\frac{E}{20}$													
YEAR	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	Remarks Heavy, light
	:	:	:	:	:	:	:	:	:	:	:	:	
	:	:	:	:	:	:	:	:	:	:	:	:	
	:	:	:	:	:	:	:	:	:	:	:	:	
	:	:	:	:	:	:	:	:	:	:	:	:	
	:	:	:	:	:	:	:	:	:	:	:	:	
	:	:	:	:	:	:	:	:	:	:	:	:	
	:	:	:	:	:	:	:	:	:	:	:	:	

dated, read-at-a-glance, handy file, if the suggestion of Harold J. Brodrick, Chief Park Naturalist, Dinosaur National Monument is followed. (In the sample card illustrated here, space for only the first couple of years is indicated in order to save space, but the form described here will carry ten years of records.)

The record will show the start, the end, and the period of full bloom. When it has been in use a few years, Park personnel can begin to strike an average and possibly predict bloom, when considered with current weather and moisture conditions. For flowers with shorter bloom periods, some

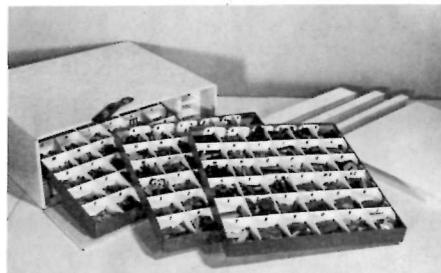
months can be eliminated, giving a wider spread of space for recording the summer month observations.

No longer will it be necessary to look through long lists of observation records as they are usually kept. This time-saving 5 x 8 card record form will provide statistics for interpretation reference, for use in replies to inquiries, in talks, and in the preparation of publications.

Instructions for use: Forms can be mimeographed or printed. Prepare a separate card for each plant species to be recorded. If elevations at which the plant is found are sufficiently different to affect bloom period, have a separate card for the same species for each elevation level. Draw a straight line through the period of bloom as it progresses, starting the line at approximately the point in the 15-day section of the month where date would be and ending the same way. For greater accuracy, the first and last dates observed can be placed at the beginning and ending of the line (See "Example" in sketch). Place the letters denoting "Increasing" (I), "Full" (F), and "Declining" (D) bloom as nearly as possible at the proper position in the monthly column.

FAST, EFFICIENT SIGN MAKER

Are you looking for a fast way of making signs for your interpretive displays, or your training program--or 101 other purposes? Look no further than the Webway sign cabinet. Consisting of a fiberboard



cabinet with drawers filled with 3,500 letters and 1,400 numerals in three sizes, this sign-making device lets anyone put together a neat, attractive sign in a matter of minutes.

The letters, numerals and symbols (the largest being 2" high, the smallest 3/4" high) have adhesive on the back. The cabinet comes with mounting strips and cards that are delicately lined so that the letters may be applied in straight lines.

Letters and numerals are cut from 20 point cardboard with a highly polished, glazed surface. They may be painted any color you desire, if black or red does not fill your needs.

The accompanying photograph shows the sign cabinet and its contents. If further information is required, address: Holes-Webway Co., St. Cloud, Minn. Price of the cabinet is \$29.75 plus tax and postage.

REDUCING MATERIALS

FOR USE WITH PROJECTORS

Park interpreters and others who may reproduce large quantities of printed material and line drawings for use with projection equipment will find that Ozalid Projecto-Viewfoil provides a quick, easy, and economical method. So says Harold A. Hubler, Superintendent, Acadia N.P.

Reproductions can be made in black and white or in an assortment of colors. The first step is to obtain a black and white negative of the material to be reproduced. The negative is fastened to the Projecto-Viewfoil and run through a Rotolite machine. Then the negative is removed and processing completed by placing the Projecto-Viewfoil in a closed container with ammonia gas.

A black and white negative will produce a clear text on a black or colored background. Direct positive films may be used to produce colored text on a clear background.

A package of 25 sheets, size 8 1/2 x 11, of Projecto-Viewfoil, which is available from distributors of Ozalid Products, sells for about \$6.50.

TO THE RESCUE OF

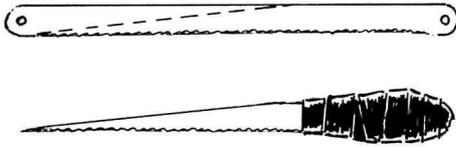
DISTRESSED SHUTTER BUGS

No darkroom facilities available for park visitors who may be having jammed film or other problems with their cameras? Don Morris, Archeologist, Wupatki, suggests keeping a large black film changing bag handy. The bags are generally available from photo supply houses in several sizes. Don uses one 26" x 29", with a double lining. The cost is about \$8.00.

You'll be amazed by the visitor surprise and gratitude generated by this lifesaver, and besides it may save some of your own valuable film someday.

KEYHOLE SAW MADE FROM HACKSAW BLADE

A simple keyhole saw may be made at low cost by grinding down a hacksaw blade and wrapping the wide end several times around with friction tape, adhesive tape,

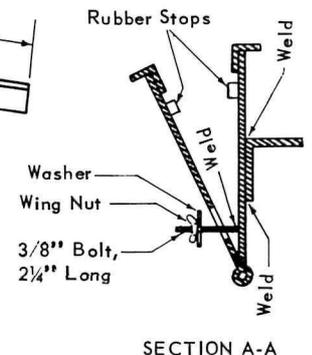
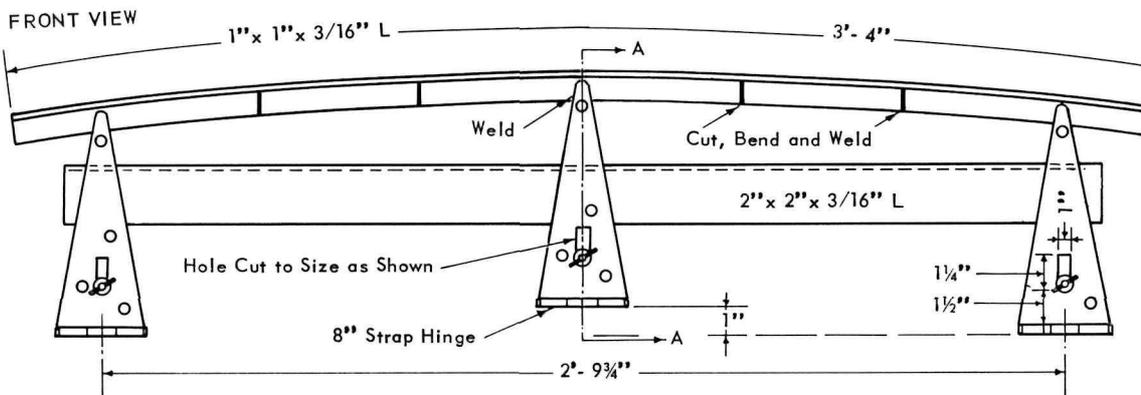
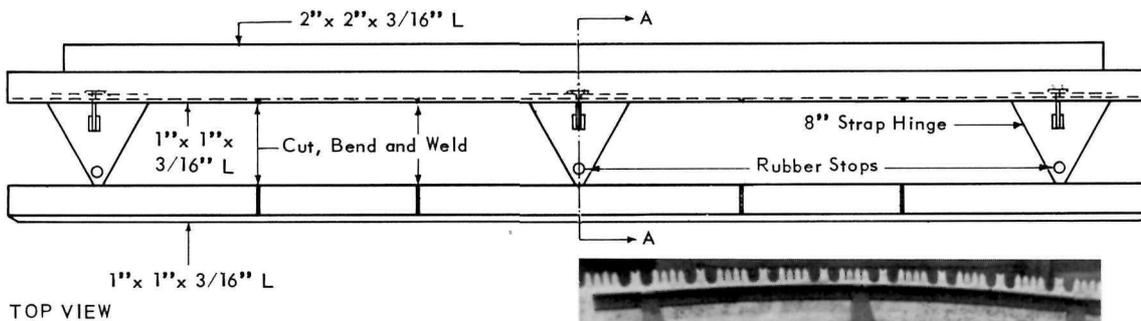


or plastic electrical tape. We have made good use of a broken hacksaw blade using this method, which was suggested by F. Gawne, Assistant Manager of East Tawas State Park, in Michigan.

WISE FOR CROSS-CUT SAW

The sharp teeth of a cross-cut saw makes handling always a safety risk—so any device for reducing the danger is worth a second look. The special vise designed by Raymond R. Adams, Foreman II, Rocky Mountain National Park, can speed up and make safer the job of sharpening and setting the teeth.

As the photographs and sketch show, Ray's saw-holding vise is made up from angle iron and three large strap hinges and can be put together by anyone who can handle welding equipment. When this vise is used, the saw need be placed in position just once, and the whole line of teeth can be worked on without taking the saw out to move it again.

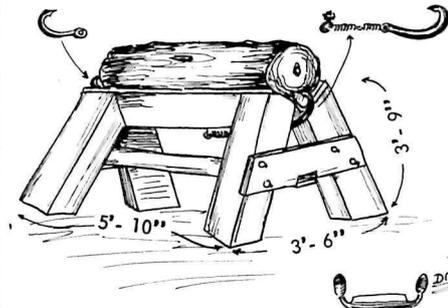


It is important to scientific study and to the health and sanity of man, that there be preserved some unique areas for scientists to observe nature's continuing evolution; for future generations to know historic landmarks as they were when history marked them; for dwellers in a crowded planet to have resort to the grandeur and peace of nature.

—Samuel H. Ordway, Jr.

TWO DOGS AND A HORSE FOR POST PEELING

Peeling post stock has been an awkward and tedious job, being virtually a wrestling match between the post to be peeled and two men working at ground level.



Donald E. Mitchell, Manager, and John S. Cole, Assistant Manager, Bear Brook State Park, New Hampshire, did a little mental wrestling with the problem and conceived the idea of supporting the to-be-

peeled post in a sturdy frame (horse) at a comfortable working height. The tie-downs for the log are simply two peavey dogs, one set solidly at one end and the other movable, being hooked to a coil spring (John and Don used three bed springs) to give it tension. (See sketch).



The operator grasps the movable dog, pulls it forward to release or turn the post, then lets it snap in again to dog the post in another position. The dogs and the horse have saved the men many an aching back and many man hours as well.

ROLLERS FOR OIL DRUMS

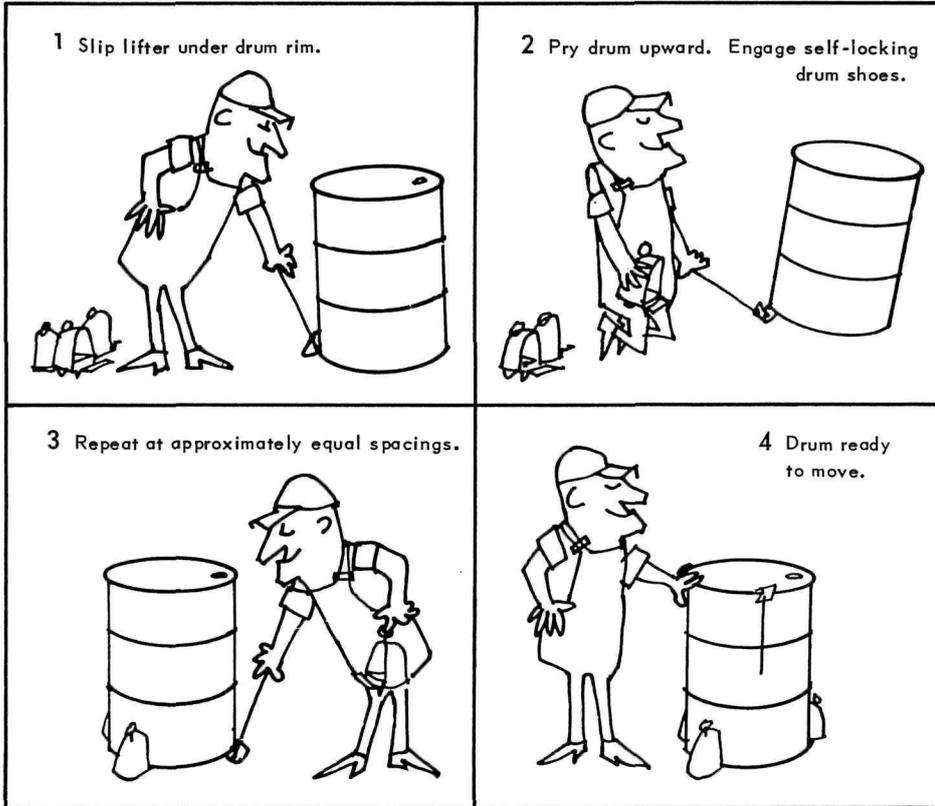
If you have problems moving heavy 55-gallon drums filled with oil or other substances about the warehouse, you might want to consider "Drum Shoes". These are streamlined swiveling casters which

A set of the shoes, with a lifting lever to be used in raising the drum edge to attach each shoe, has been tested in a park shop. The shoes are intended primarily for paved surfaces.

Removal of the shoes after the drum has been moved to its point of use is accomplished with equal ease. The photograph and

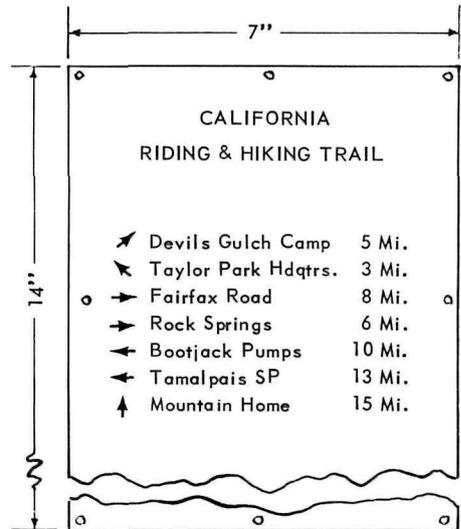
The purpose of conservation: The greatest good to the greatest number of people for the longest time.

—Gifford Pinchot



MULTIPLE-USE TRAILSIDE SIGNS

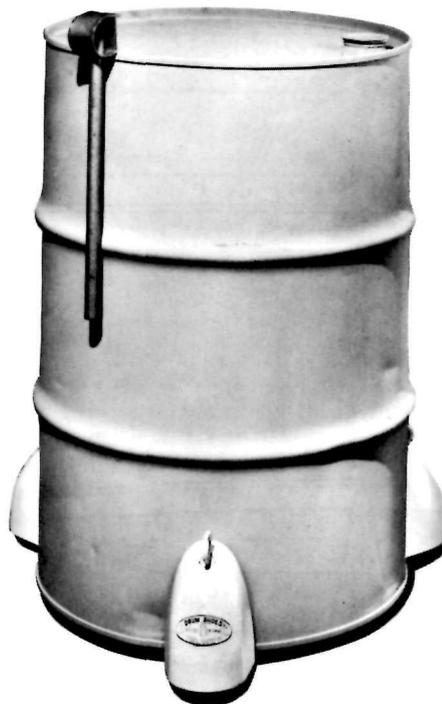
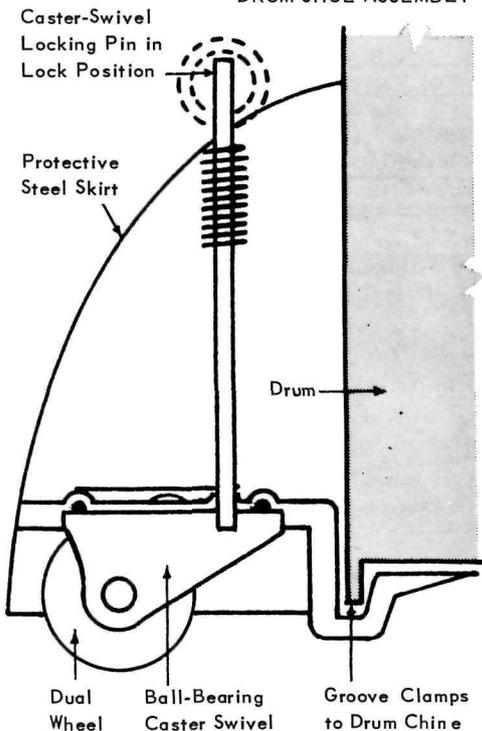
The 7 x 14-inch sign sketched here can be used throughout a trail system. Space has been left to insert appropriate direction arrows and mileages for each location. The signs are enameled metal like those used by highway departments and cost about \$2.70 each.



The small size makes it possible to mount these signs on trail posts, or gate posts, with very little work.

Frank B. Bellinghausen, Assistant Park Supervisor, S. P. Taylor State Park, California, who passes this idea along to GRIST readers, expects that trail sign costs due to vandalism will be reduced, as these signs cost considerably less than the larger "trailer made" type usually put up on trails.

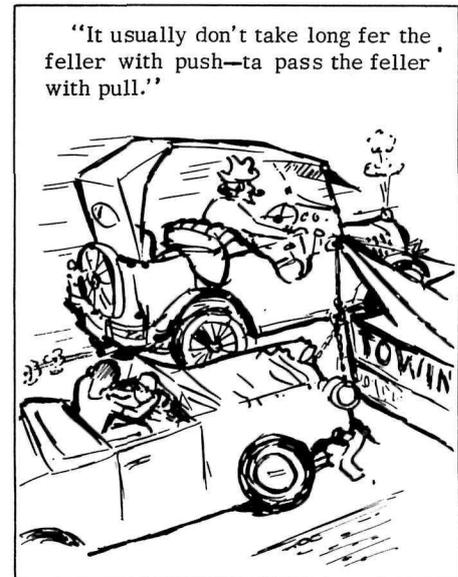
DRUM SHOE ASSEMBLY



fit along the bottom edge of the drum—3 to each drum—allowing the drums to be moved as though they had built-in casters.

sketch show how the shoes, available from Sterling Sales, Box 721, Cortland, N.Y., are attached and used.

RANGER 'RED' sez:-



Jim Burnett & IBL