



PARK PRACTICE

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Grist





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Commentary

PROFESSIONALISM

In our halcyon days back in our home town, there was a man who owned and operated a machine shop. He was a professional machinist. Moreover, he was a perfectionist. He was so good at his work, in fact, that instead of buying a 500-horsepower Diesel to run his plant, he built one—bolt by bolt and casting by casting.

When you took a job to this man to be repaired, or engaged him to build a piece of machinery, his first words were, invariably: "It can't be done."

This called for patience, for after a while, if he were not pressed, he would pick up his tools and turn out a masterpiece in metal.

He got to be known as "It-Can't-Be-Done-Vern", and people around town used to make bad jokes about him and his cynicism.

But he was a near-genius, though of little formal education.

We got to wondering about this fellow and his penchant for the negative approach to everything, and came to the conclusion that he could no more help it than he could help the involuntary process of breathing. It seemed to come naturally—a compulsion, one might say.

Now, when you search deeply enough into the matter, and turn it over in your mind, you begin to understand his motivation. He was shy and rather retiring and terribly fearful of failure, and he thus believed he had to establish an alibi at the outset of every job. More importantly, however, he must have believed that by this approach he was creating an aura of professionalism about himself. You know the type—how needless, this mannerism.

This man's work always carried the hallmark of the professional, else he would not let it go out of the shop. Too, he earned his living through his skill and, according to Webster, that made him a 'professional' as opposed to an amateur who does things for the joy of doing.

The question is: Does the true professional need alibis, or must he feel compelled to impress others with his

capabilities?

We strongly doubt it, though there is a subconscious, yet very real, human need for recognition—an important component of professional pride. With pride and confidence, the craftsman's work will improve, partially as a result of his attempt to maintain his status as a craftsman.

Our machinist friend had achieved this status and needed only to have said "I'll try." His work was known and his abilities had been demonstrated down through the years. These are factors that always attach to the true professional and they are recognized much more swiftly and much more truly than purposeful attempts by a person to establish a status. They are not phony.

While appreciation of his talent, when openly stated, is as leavening to him, the true craftsman—the professional—knows that he doesn't have to prove anything save through his consummate effort. Then, as in the case of the proverbial mousetrap maker, the world shall beat a path to his door.

—I.B.L.

VOID WORKSHEET

Irwin Cowley, Acting District Ranger, Painted Desert District, Petrified Forest National Park, has designed a reduced-size version of the standard form, Register of Voided Transactions, which has proved to be very useful as a time-saving worksheet.

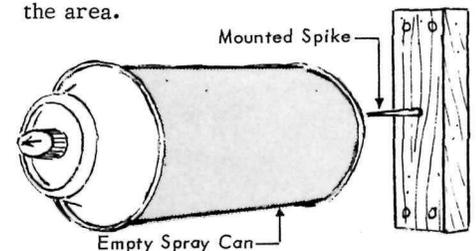
The Register of Voided Transactions is a form on which entrance station cash handling or money recording errors must be noted for accounting purposes. When the reduced-size form (worksheet) is used, each error is recorded on it and the form is then placed in one of the bill compartments of the cash register. At the close of the day's operations the small worksheet is attached to the tape which has been removed from the cash register. The information from the worksheet can be transferred to the full-size Register of Voided Transactions on a weekly basis and the worksheets can then be discarded.

SAFE DISPOSAL OF AEROSOL SPRAY CANS

Aerosol spray cans can be as lethal as hand grenades. Many people are killed or maimed every year because they didn't know the danger of cans of this type. Full or empty, aerosol cans should never be placed near a hot stove, heated radiator, in hot water, or near any other form of heat. They should never be discarded in trash that is destined to be burned.

District Park Ranger, William Bromberg, Isle Royale National Park, suggests the following as a safe means of disposal.

Wrap the can in old cloth or newspaper and store it overnight in a freezer or refrigerator. Cooling reduces the internal pressure. In the morning, remove the can and its wrappings from the freezer, take them outdoors, then make a small opening in the wrapping to expose the bottom of the can. Point the bottom away from yourself and puncture it with a nail or pointed tool. An easy way to do this is to mount a pointed tool on an upright, push the exposed bottom of the can into it. In this way you can puncture the can without even your hand being exposed to any possible chemical spray action. Now the can may be safely discarded in the trash without fear of explosion. **WARNING:** If you permanently mount a tool such as is sketched here be sure it is securely covered when not in use to prevent its being a hazard to children playing or adults working in the area.



Bill suggests that everyone, especially persons in an area where the procedure is adopted, should be made aware of the dangers of the aerosol cans and should become familiar with this safe disposal method. Wives, teen-age children, and relatives should all become aware of the safety precautions required.

PARK PRACTICE *Grist*

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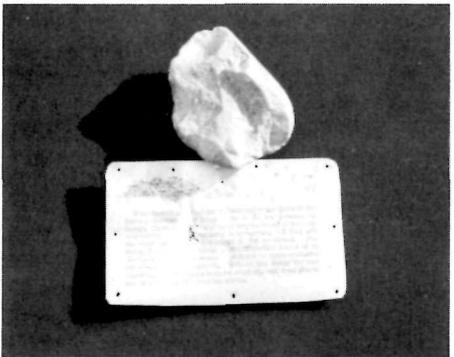
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Speaking of Interpretation -

MAINTAINING SELF-GUIDING NATURE TRAILS AND LABELS

How can you protect light weight aluminum signs from vandals who throw or pound with rocks? Caretakers John Cooper and Curtis White of the Rock Creek Nature Center, National Capital Region, N.P.S., have worked out a solution. Aluminum photo labels used on the "Edge-of-the-Woods" trail were constantly being damaged by persons using the plentiful rocks in that area. So, as can be seen in the photograph, each label



ment. About 50,000 visitors, mostly children, walk each of these quarter-mile long circular trails in Washington, D.C. every year. Because use is so concentrated, the trails are inspected several times a week by a naturalist and/or caretaker, so that damage can be immediately corrected and undesirable shortcuts disguised or eliminated.

FINE LINE INTERPRETIVE LABELS

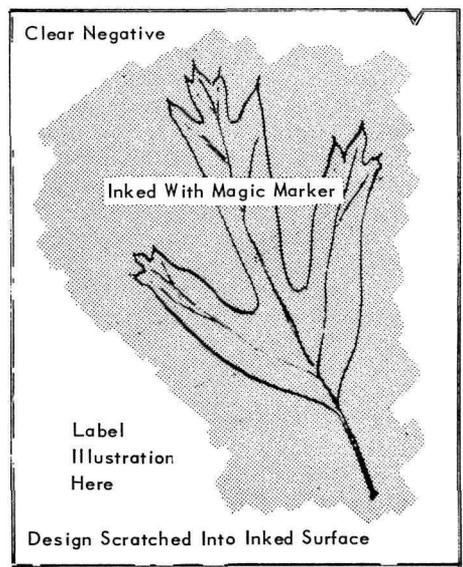
Searching for an inexpensive way to produce fine line interpretive labels or illustrations for publication, Park Naturalist Donald M. Black, Shenandoah National Park, worked out a new way of doing the job.

"Sometimes when your film comes back from the developer one or more of the 4x5 negatives will be clear—unexposed," Don writes. "I took some of these and rubbed them with a black felt Magic Marker (or I could have used a Sanford's Marker). When the ink was

has now been recessed a quarter inch into a wooden holder. Each is covered with a piece of 1/16-inch clear acetate. The holder is bolted to a locust post by recessing lag bolts through the cap. Posts are securely set in the ground by two reinforcing rods criss-crossed through the bottom.

Robert Bruce, Supervisory Park Naturalist, and Dale B. Engquist, Park Naturalist, report also on the attractive handcarved trail markers shown here, which were made by Rudy Bauss, retired Chief of the Regional Branch of Museums. On the Woodland Trail, where the visitor is guided by a folder and the numbered trail signs, old painted identification posts were replaced by these alternately placed tulip tree leaf and white oak acorn numbered camps. The tulip tree leaves are appropriately carved from tulip tree wood and the acorns from white oak. The caps are fastened to the post with lag bolts recessed through the back of the post into the cap, using a socket wrench. So far, only one has been broken or removed, and since rocks are fortunately scarce in the area, little other damage has occurred.

The Woodland Trail was recently reconstructed, using tamped, rotten-rock surfacing and log steps, cribbing, and run-off rails. The Edge-of-the-Woods trail will soon be given similar treat-



dry, I scratched through it with the sharp point of a knife, using clean quick strokes. The area where the wording is to appear should not be covered with ink, but left clear and the lettering inked on." The photograph illustrates the results.



Using some old outdated film which he exposed to light for a minute or so before developing, Don found that it makes a very good scratch board for scratch negatives.

We wouldn't mind the meek inheriting the earth if we could be sure they would stay meek after they get it. —The Office Economist

CARRYING CASE FOR DISPLAYS



You can carry your display right with you and the case becomes part of the display set up.

Arthur T. Wilcox, former Director-Secretary, Metropolitan Park District, Akron, Ohio, shares the idea with GRIST readers.

The case is constructed like a suitcase, with a piano hinge along one edge and closing snaps and a carrying handle along the other. A wooden frame supports hard-board sides. The carrying space is 18x24 inches, by about 3 1/2 inches deep.

The case is equipped with flat photograph displays set against the back on each side. When open at a wide angle the display can be set up on a table. The depth of the case makes it possible to use three dimensional displays, and to carry panels to be hung on walls or put on tables, or to transport pamphlet display racks such as those shown. The latter are held upright by simple wooden stands which may also be carried in the case.

A variety of interchangeable displays can be made and set up in different combinations to suit the type of meeting.

Art says a further refinement of the pamphlet racks shown in the photograph has been made. Two slots are made in the back top edge. The racks can then be hung on unobtrusive permanent studs at convenient locations on walls of meeting rooms where pamphlets are to be distributed. The two hanging studs assure good alignment.

PROFESSIONAL LOOK FOR A PROGRAM SCHEDULE BOARD

The program schedule board shown here is a "do-it-yourself" product, but it has no homemade look.

Park Naturalist Robert G. Whistler, Rock Creek Nature Center, National Capital Region, N.P.S., lets GRIST readers in on the secret.

The board itself is 2x4'x1/4" decorator-type moulded masonite available at hardware stores. The bold titles are made with pure white Hearnard three-dimensional display letters, Futura 1 1/2-inch upper case and Lydian style, 1 1/4-inch upper case. Bob found the



letters at a local art supply store. They are glued to the board.

Under the main headings are detachable 1 1/2"x12" time and title strips cut from art drawing board and held in place by spread brads. The board design was followed for proper positioning. The strips were lettered with a LeRoy Scriber, using different color inks for various programs.

The display board is attached to the wall with 90° angle screws, so it can be tilted to permit easy replacement of time strips.

MAKING TEMPORARY POSTERS

Robert G. Bruce, Supervisory Park Naturalist at Rock Creek Nature Center, National Capital Region, N.P.S., shares with GRIST readers a couple of ideas used at the Center in preparing bulletin boards.



Cut-outs from the "Golden Nature Guide Series" of \$1 pocket-size books, which are available generally, add color and interest to posters for the monthly program schedule board. A LeRoy Scriber, with its various sizes of pens and guide rulers is used for the lettering. Colored inks are used, too, but Bob recommends no more than two colors to a poster.

Park Naturalist Robert Whistler so designed the bulletin boards at the Nature Center that display materials can be slipped behind a thin acetate sheeting, which protects them from smudging, pencil marks, or other damage. Newspaper or magazine clippings last a long time when protected this way with clear acetate.



FOLDING METAL FRAME
FOR PICNIC TABLES

A strong and steady folding metal frame for park picnic table and bench combinations has been developed by Dyco, Inc., P.O. Box 3181, Eugene, Oregon.



The iron framework without wooden table top or seats sells for about \$68, FOB Eugene, Oregon. If pre-drilled wood for a 7-foot top and matching benches is

included, plus necessary hardware, the price is about \$86.

The kits are tough enough to be dropped by parachute into remote areas without damage, the manufacturer claims.

When we drink of the fountain of life, nature or the universe, it, in turn, drinks of us. —Frances Hanks

FASTER INSTALLATION
OF PICNIC TABLES

A lot of the manhours formerly needed in installing prefabricated picnic tables can be saved by using a pair of the special positioning bar clamps designed by a Bureau of Land Management employee, John L. McFarland, in Price District, Utah. John's system requires about half as much time as the old method.

The prefabricated tables usually are installed by measuring and then blocking up the supports to allow concrete footings to be poured around them. When the McFarland clamps are used, detailed measuring is no longer necessary, and the clamps hold the parts in place to permit fast concrete pouring.

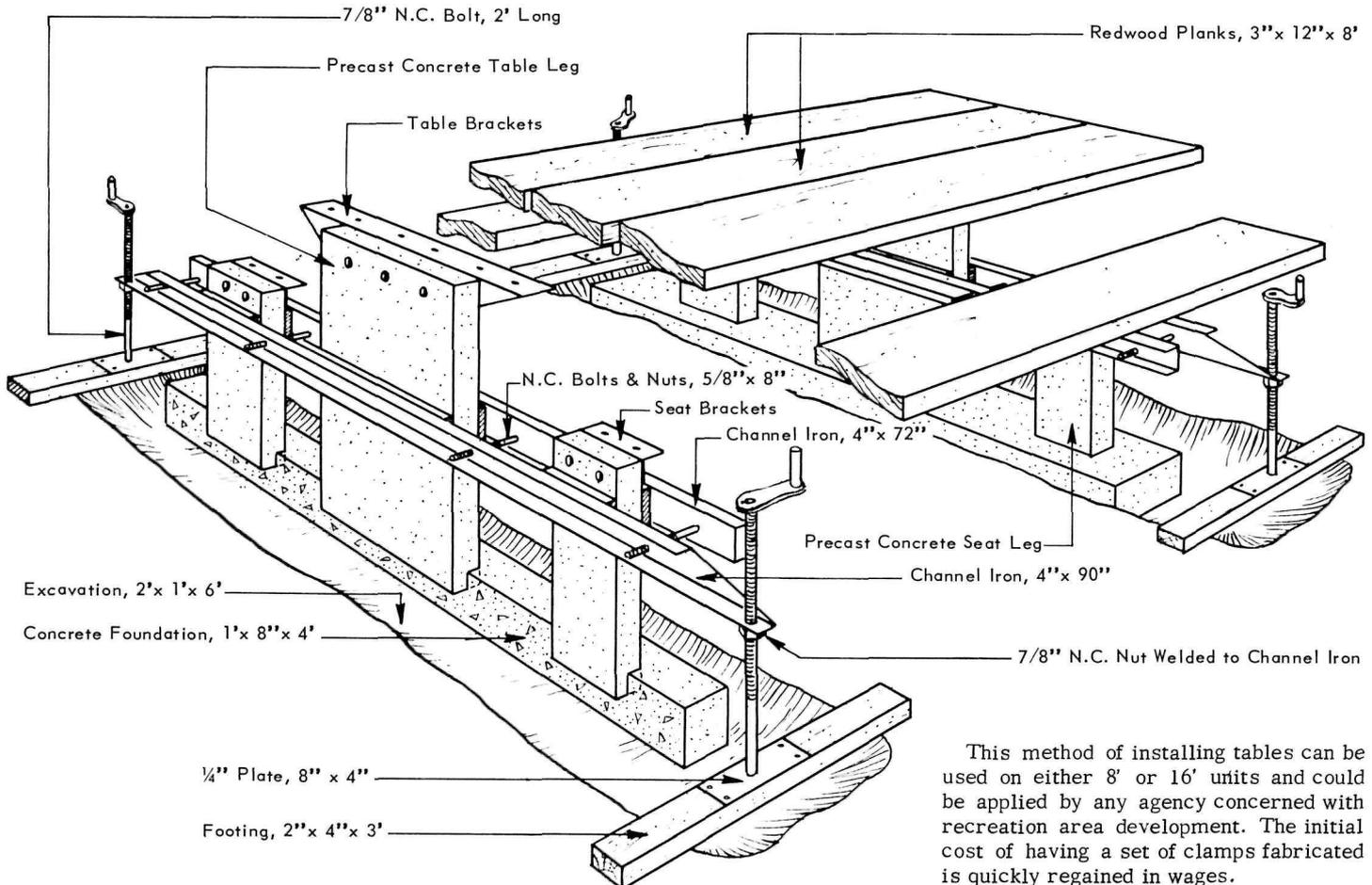
The accompanying sketch shows how the system works. Here is what you do:

1. Bolt leg components together.
2. Place one table leg and two seat legs in clamps and adjust clamping bolts snugly.
3. Position legs in correct location on wooden table top and seat tops. Tighten clamping bolts firmly.

Note: DO NOT exert excessive pressure on clamping bolts as this will force the channel irons out of alignment and greatly reduce their accuracy.

4. Attach legs to table top and seat tops with lag screws. DO NOT TIGHTEN.
5. Turn the unit right-side up over pre-excavated trenches and loosen the two inside clamping bolts.
6. Adjust seat tops to desired height relative to table top.
7. Tighten clamping bolts firmly.
8. By adjusting the four screw jacks, level table at desired height and pour concrete around base of legs.
9. Remove clamps only when concrete has had sufficient time to set, (minimum of 12 hours) and tighten lag screws fastening table and seat tops to legs.

Exercise care during step 6 to insure proper alignment of components.



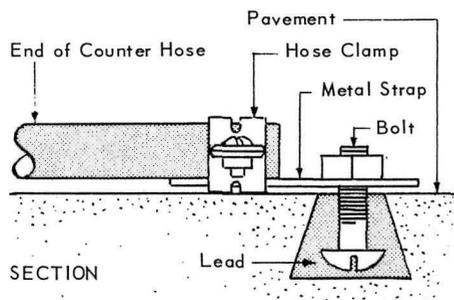
This method of installing tables can be used on either 8' or 16' units and could be applied by any agency concerned with recreation area development. The initial cost of having a set of clamps fabricated is quickly regained in wages.

HOLDING TRAFFIC COUNTER HOSE IN PAVEMENT

If you've experienced trouble in securing traffic counter hose in pavement, you'll be interested in the solution submitted by Robert White, Chief Ranger, Cabrillo and Channel Islands National Monuments.

Bob says that in their experience, the hose clamp has a tendency to pull out of the pavement even when expansion bolts are used to stake it down, so here is the method they have worked out:

Use a cold chisel to cut a bell shaped



hole (flare down) in the pavement and then pour molten lead, heated on the spot with a blow torch, around the bolt, thus obtaining a permanent fixture for the clamp. By inserting the bolt head down, the user can remove the nut and change the clamp if necessary. The bolt need not protrude from the pavement more than enough to hold the clamp and bolt, and thus presents no serious hazard to tires.

STEP SAFELY

With a concern for the dignity as well as the safety of persons entering the Visitor Center at Fort Clatsop National Memorial, Jack V. Houston, Administrative Assistant, went to work with his trusty spray can.

The one-inch step-up from the entrance walk to the floor level of the Visitor Center was causing a large number of park visitors to stumble. Jack sprayed it with fluorescent orange paint which, when dry, he covered with a protective coat of clear lacquer. Attention is immediately drawn to the step-up and, so far as is known, no one has stumbled since the orange glow was applied.

GRILL WARNING LIGHTS FOR POLICE CRUISERS

When police cruisers approach vehicles from behind, the car-top flasher on the cruiser is not always visible in the rear view mirror of the pursued car. This is especially true during daylight hours when the sun is shining.

For these reasons Pvt. Gary E. Treon of the U.S. Park Police, National Capital

Region, N.P.S., suggests that two flashing red lights be placed in the grill of the cruiser. Against the dark background the lights will be visible day and night and can be seen up to a point considerably closer to the pursued vehicle than the car top flasher.

BOAT LAUNCHING MATS

Launching small trailer-borne craft into a lake or river without using dock and pier launching facilities is made



easier with B and T (boat and trailer) Launching Mats.

The mats, which are somewhat like landing mats used by the Armed Forces, come in sections three feet wide and fifteen feet long and are easily handled by two men. The number of mats to be used depends, of course, on the amount of beach to be covered and the shallowness of the bottom or how sharp the drop-off. Interlocking hinges hold the mats securely in place. The sections are interchangeable and stack, requiring minimum storage space.

To prevent the mats from sinking into sand or mud when the vehicle with its trailer and boat backs into the launching position, flotation plates two feet wide welded to the underside of the mats keep them on top of the sand. The plates are spaced far enough apart to give the vehicle driver a visible track as he backs onto the mats and moves toward the water.

Rockwell Standard Corporation, Grating Division, 4000 East Seventh Avenue, Gary, Indiana, is the manufacturer of the B and T Launching Mats.

BEACHES MADE TIDY MECHANICALLY

Keeping beaches free from debris and pollution is a growing problem, and methods in use to clean the sand and control sanitation have been ineffective and costly. Allis-Chalmers has now put on the market a rig called "Beach Sanitizer" which makes the job easier.

The unit, towed behind a tractor, lifts debris-laden sand and scours 6-foot swaths to a depth of 6 inches. Scooped up by a paddle wheel at the front, the sandy mass moves up and along the 27 1/2-foot conveyor apron of reinforced spiral weave wire. Clean sand filters back to the beach through the screen conveyor as it moves toward a 2-ton capacity trash receptacle, carrying with it tin cans, bottles, broken glass, rocks, driftwood, and other debris, as well as seaweed, algae, decaying marine life and sewage picked up with the sand. Wet, heavy sand is pushed through the wire screen by sets of sturdy plastic brushes.

Teamed with the Sanitizer is a 75 hp industrial tractor, the "Beach Master," tailored to beach operation requirements, riding on 23.1 x 26 eight-ply, non-directional rear tires and 11 x 16 multi-rib front tires for maximum flotation. A three-position hand clutch allows the operator to vary forward speed of the tractor while power take-off runs at constant speed. This action provides positive, non-slip footing even in the loosest sand. A traction booster system automatically transfers the weight of the Beach Sanitizer to the rear tractor wheels for additional traction when needed and also prevents "burying" the tractor in sand.



The tractor is equipped with a 12-tooth hydraulically controlled front-mounted scarifier to tear and loosen sand ahead of the Sanitizer. A 6-foot wide float with drag chains smooths loose sand into wheel tracks and levels the beach behind the unit.

The Sanitizer is completely roadable for travel on city streets or highways. One man operating the teamed rig can clean about an acre an hour.

For more information write to Allis-Chalmers Manufacturing Company, Box 512, Milwaukee, Wisconsin 53201.

GLOW FOR SAFETY'S SAKE

Rangers on night patrol and other park personnel on night duty where traffic is a hazard can carry in their pockets a stick of chalk which might be a life saver. It looks just like a stick of school blackboard chalk, but there's a difference. A simple mark on a sleeve or trouser leg or an X on the back of a jacket made with "Codit", a reflective chalk, will glow brightly in auto headlights at night, alerting motorists. It can provide protection against oncoming traffic at the scene of an accident or at road breaks.



Codit contains the same tiny optical elements used in traffic signs and pavement markings to make them visible at night. Using light "borrowed" from the headlights of approaching vehicles or flashlights of pedestrians, these optical elements return the light to its source in a concentrated cone.

This instant, easy means of reflectorizing men, machines, or after-dark hazards was first used by the armed forces to mark the clothing of troops marching along dark roads at night. Later it was applied to air dropped materials for easy night time identification, to flight line personnel and equipment, and to temporary construction zone hazards.

Almost any surface can be marked with Codit, and it has been used to mark equipment parked on road shoulders, and even boulders which have fallen into a roadway. The chalk is designed for temporary marking and will brush or wash out of most clothing material and off exposed surfaces out of doors.

Available also in liquid form, Codit can be used to provide a reflective surface on trees, posts, and abutments. A special

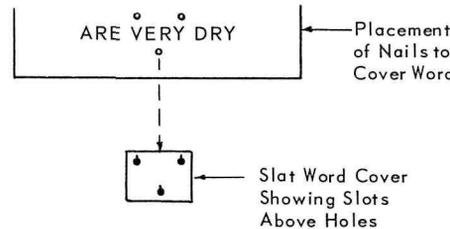
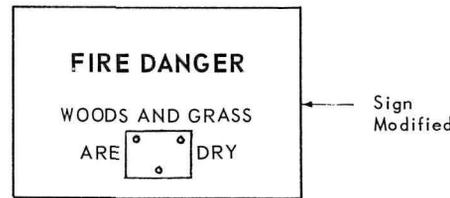
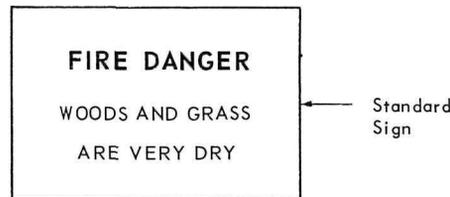
cream-colored type, made exclusively for the National Park Service, is used on letters of park entrance signs. A brown background of 3M brand velvet coating, a special nonglare finish, is used on wooden routed signs to provide contrast.

If Codit is not available locally, write Reflective Products Division, 3M Company, 2501 Hudson Road, St. Paul, Minn.

ARE YOUR SIGNS DOING THEIR JOB?

What's the purpose of a sign? To get a message across in the most effective manner, of course. At the same time it should be aesthetically pleasing and economical to make.

Take, for instance, a sign like the one sketched here, "Fire Danger—Woods and Grass are Very Dry". If this sign is left just like this throughout an entire fire season its effectiveness is subject to the law of diminishing returns. The local people see it on bright sunny days and when the area is fog-bound or drenched with rain. Human nature being what it is, they soon pay no conscious attention to the sign.



But suppose they discover on a wet day that the sign, which has become such an accustomed part of the landscape on their route, is hooded. People will notice it that day. And suppose the degree of fire danger can be further indicated by blocking out the word 'very'. Then only when the fire hazard is greatest is the whole sign exposed to view. Even such a small change will keep the sign from becoming just part

of the scenery, will keep its message in the consciousness of passersby.

Park Ranger Albert E. Werking, by using this procedure has the fire signs really doing their job at Rocky Knob District of the Blue Ridge Parkway. The idea, of course, can be used in a lot of other ways.

Al suggests a simple way to block out words or phrases. Three nails, with large heads (like roofing nails), are driven into the sign above and below the word or the phrase to be deleted (see sketch). Matching holes are then drilled into the covering material (such as thin slat wood, fiberglass, plastic, or metal) just large enough to allow the head of the nail to pass through, then a slot is made for each hole, the same size as the diameter of the nail shaft. The covering material can then be shoved down into place on the sign after it slips over the nail heads. Three nails are recommended to prevent the wind from blowing the cover free from the sign.

In contrast to either removing and replacing signs as the danger changes, or the construction of a number of signs, Al's procedure saves expense and effort, and keeps each sign working at getting its message across.

TECHNICOLOR SMOKE SIGNALS

Communication by smoke signals is native to America, but Park Ranger William F. Donati, Blue Ridge Parkway, Asheville, District, suggests a way to update it.

By using chemicals capable of coloring smoke, either in powder, tablet, or liquid form, together with a preset code, signals can be sent to fire towermen, alerted observers, or base camps. The code can be worked out for single colors and combinations. Signals could be given in this way to towermen during a forest fire. If a controlled burning operation were under way, towermen would recognize it as such by the color of the smoke.

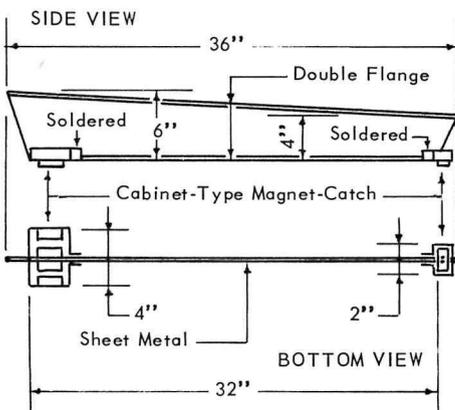
A back country smoke chaser without a radio would be able to communicate with towermen, with this system. It could be used also to communicate with base camp during rescue operations. In these cases a small can of "Stern" would probably be sufficient to generate smoke and ignite the coloring substance.

PARK PATROL SIGN FOR MULTI-USE VEHICLE

If your pickup truck must serve a number of uses, including the role of enforcement car, you may wish to use the type of sign in the photograph when the vehicle is being used for patrol.

John W. Djuplin, Conservation Aid III, Potawatomi State Park, Wisconsin, designed and made the removable sign shown in the photograph and sketch. John

used heavy gauge sheet metal, double flanged at top and bottom edges for stiffness. Cabinet-type magnetic catches



were used. Four brackets for the catches were soldered nearest the windshield and one toward the front.

FIRE DETECTOR AND SPRINKLER SYSTEM

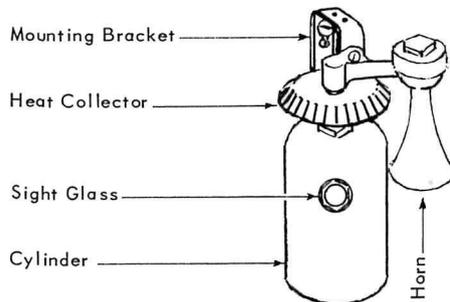
From Sequoia and Kings Canyon National Parks come two good suggestions for fire prevention and detection. Ray W. Murphy, Chief of the Branch of Forestry and Wildlife, suggests that government quarters for park personnel be equipped with automatic fire detectors. Milo F. Caza, Procurement and Property Management Officer, suggests that you can build your own sprinkler system for frame buildings in areas where fire hazard is great.

Ray recommends the fire detection and alarm system put out by The Falcon Alarm Company, Inc., 343 Broad Street, Summit, New Jersey, which is listed by Underwriters' Laboratories, Inc.

This gas powered automatic fire alarm and warning device consists of a welded steel cylinder containing 12 ounces of compressed and liquified Freon gas. A dye added to the liquid makes it visible through a hardened glass window. This sight inspection makes it unnecessary to weigh the unit periodically to be sure it is ready to sound its fire warning.

The Freon gas is confined in the cylinder by a pellet of fusible eutectic metal in a brass fitting screwed into the

top of the cylinder. Rising heat waves are trapped by the umbrella-shaped heat collector, causing the pellet to soften and to be ejected by the gas pressure. The escaping gas causes the diaphragm horn to give a loud piercing sound that can be heard a quarter to a half mile away.



Units should be installed in critical areas such as stairwells, elevator shafts, hallways, storage and furnace rooms, and living and cooking areas. In addition to the single station unit described here, components are available which can be connected to form an alarm system. A single unit station costs about \$36.50.

Milo's homemade sprinkler system requires the following materials if two sprinkler heads are to be installed: 2 brass sprinkler heads (GSA stock number 4730-679-2576), with a 20' diameter coverage, 2 GPM discharge (cost 60¢ each), with a 1/2" female connection. Connection could be made with a 1/2" globe valve (stock number 4820-203-3276) tee, reducing bushing, nipple, and 1/2" copper tubing (stock number 4710-203-3173) (cost \$6.70 for 50' coil). Two adapters, copper tubing to female pipe would be required (stock number 4730-857-5385) (cost 33¢ each, 4 required on a two-sprinkler system).

Milo estimates the cost of a two sprinkler system installation at \$35, but in some areas the labor cost will bring the total up.

By connecting the system to pipes of existing outside bibb faucets, occupants or other persons in the area could easily turn the water on in case of fire.

JET BANDAGE

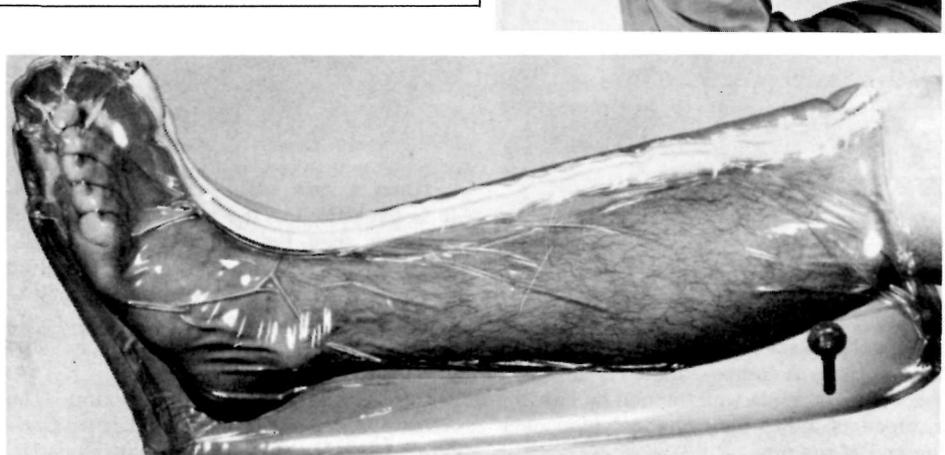
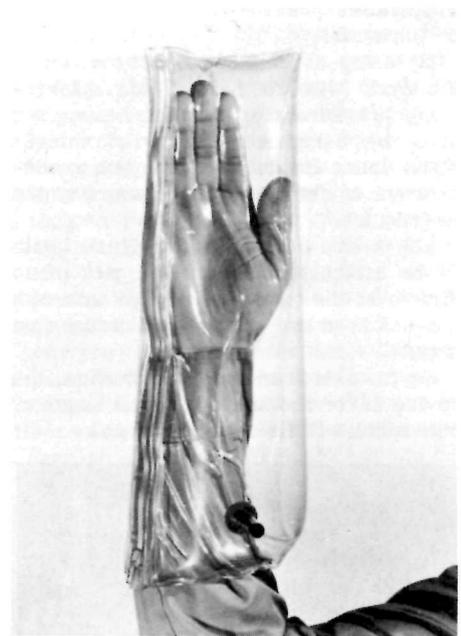
Combination bandaging and splinting is possible through an unusual, transparent device available from Mine Safety Appliances Company, Pittsburgh.

This Jet Bandage employs clear vinyl plastic under pneumatic pressure, providing immediate control of venous bleeding and preventing injury edema. There is no danger of tourniqueting. It is suitable for emergency bandaging of burns. And, the instant splint permits constant observation and X-raying of an injury.

The plastic bandage-splint has proved particularly valuable to campers and those engaged in other outdoor activities, and is self-applied.

In use, zipper of the Jet Bandage is opened, the injured member placed inside, and the zipper closed. The inflation valve is opened by turning counter-clockwise. Mouth exhalation into the valve requires about 10 seconds. The valve is closed by turning it clockwise. To remove the device, valve and zipper are opened.

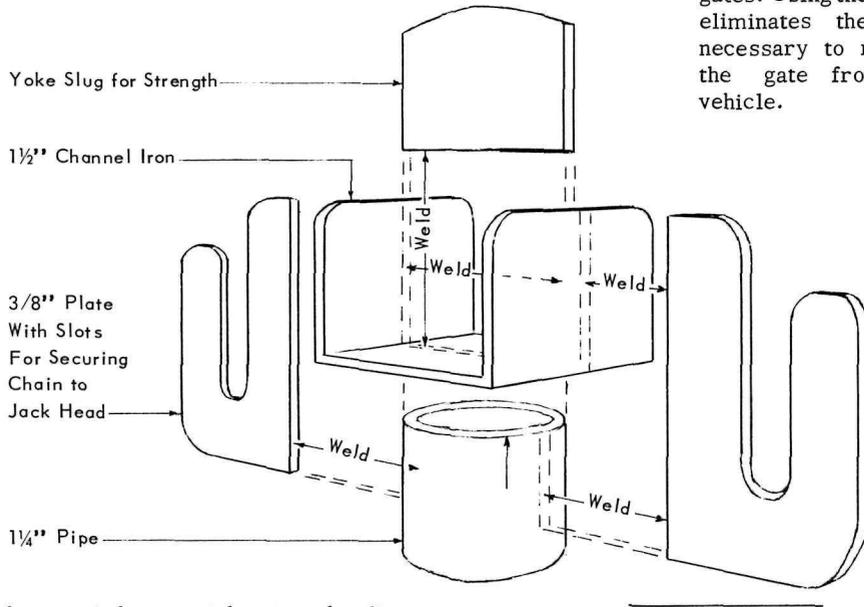
Models of the bandage-splint are available for use on hands, arms, feet and legs.



HYDRAULIC JACK SERVES AS PRESS

C.W. Smith, Shop Foreman at Lassen Volcanic Park, has designed an attachment which permits a hydraulic jack to

One successful use of the jack adapter at Lassen Park has been in straightening truck and pickup tail gates. Using the device eliminates the time necessary to remove the gate from the vehicle.

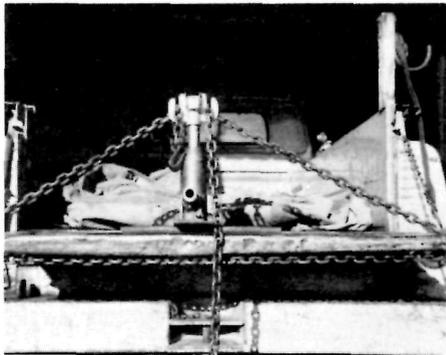


be used for straightening, bending, or exerting pressure in places where use of a hydraulic press would be inconvenient or impossible.

By using a chain to connect the jack to the work (with the help of C.W.'s invention), pressure can be directed to a given area by using steel plates of various sizes under the base of the jack to concentrate or distribute the pressure as the job requires.

The device illustrated permits the chain to be attached solidly to the jack or to slide over the top to center the chain with the jack head and to adjust to the direction of pull.

As the sketch and photograph show, the device is formed around a short length of pipe which will fit over the pressure shaft



of the jack. In the example here, 1 1/4-inch pipe was used. A length of 3/4-inch steel plate with hook-slots cut into it was welded to each side of the pipe. A slug was welded across the top of the pipe, for strength. A flange-saddle for allowing the chain to slide was formed by bending a piece of 1 1/2-inch channel iron over the end of the pipe.

UNDERGROUND UTILITY CONTROL

Buried tape prevents dig-in damage to underground utilities. A color-coded plastic tape has been designed to locate, identify and protect underground utilities in a matter of minutes. The tape is installed 4 inches below the surface of the ground, directly over a utility line. When excavating occurs in the same location as the utility line the warning tape is exposed first, and is readily seen in time to prevent damage to the utility. The Allen System of Underground Utility Control is now in production and is shipping color-coded tapes to utility companies in many parts of the country.



When a new utility line is installed, it is backfilled to the surface in the usual manner; then the track or wheel of the backfilling tractor is run down the ditch line, which depresses the ditch enough to receive the marking tape. The tape is then simply unrolled in the depression and the backfilling completed.

For further information write: The Allen System of Underground Utility Control, 1325 N. Main Street, Wheaton, Ill.

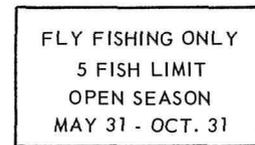
FLOW-PAINTING ROUTED SIGNS

Paint flows from a plastic bottle and tube to color the routed letters of signs in the shop at Yellowstone National Park. James Fisher, Shop Foreman, says that of all the methods they have tried, this flow system is the fastest.

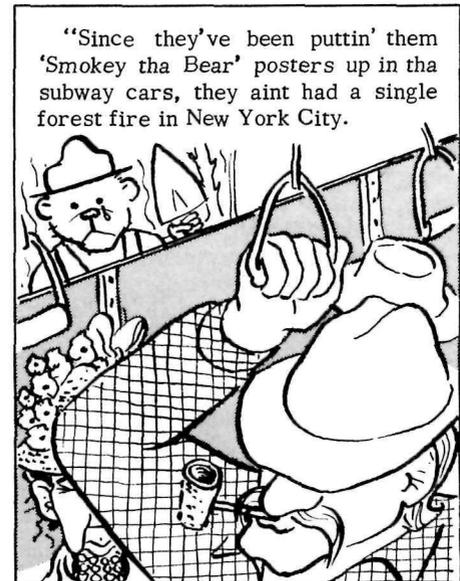


As the photograph shows, the bottle and tube are the type used in hospitals for intravenous feeding. The working end of the tube (needle removed) is plugged to control the point flow according to the size of the lettering. The end of the tube is held like a pen and the flow of paint is stopped by squeezing the tube. The paint is thinned so that it will flow up the sides of the routed letters and will dry smoothly and evenly. Application has to be made with great care, of course, so that paint will neither overflow nor fail to cover any of the routed surface.

Jim says that many small signs with 1 1/4-inch letters are used in the park and that one like the one below can be lettered in four minutes.



RANGER 'RED' sez:-



Jim Burnett & IBL