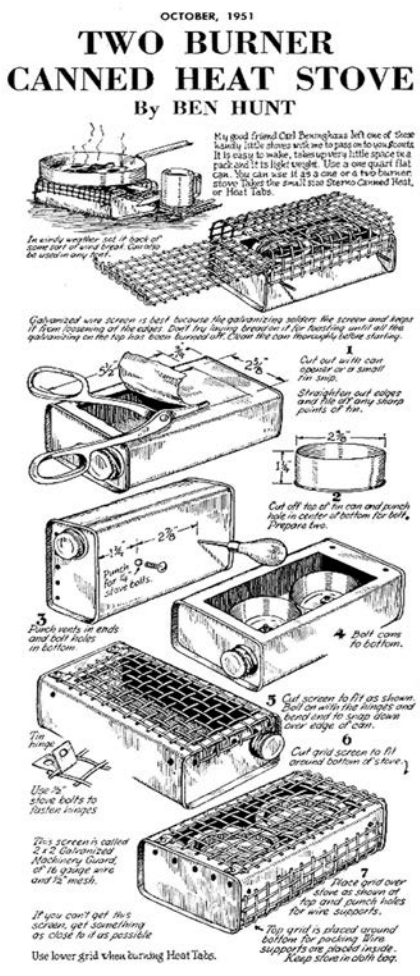
Everybody Needs a Hero

By Steve Watts and David Wescott, 2016

If you grew up in the 40s, 50s or 60s and were a registered Boy Scout, you automatically received a subscription to a *Life* magazine-sized publication called *Boy's Life*. Lots of us back then didn't – and still don't – take time to wander through large articles full of text, we'd rather do what a friend calls *"reading the pictures"*. Those of us who made a practice of that were instantly attracted to the graphic panels created by contributors with colorful names like Lone Eagle, or Whittlin' Jim. These were illustrated instructional plates that were always engaging and appealed to anyone with an interest in craft: Lone Eagle specialized in projects known as Indian Lore, and Whittling' Jim added his monthly project – mostly neckerchief slides – that we couldn't wait to try out.

But the real hero of the bunch was a man by the name of W. Ben. Hunt. His panels were filled with handicraft and campcraft skills that had real application for those of us who liked to spend time outside. He illustrated plans for camping gear, watercraft, leathercrafts, "wrinkles" for winter outings, primitive and woodcraft skills, nature lore, cooking tricks, fishing tackle and more. They were a treasure trove of crafts designed to make any do-it-yourselfer kid take notice.

These were half-page panels – 5"x13", fully illustrated with explanations that had been kid-tested, and simplified to a *"common-sense approach"* that would still challenge anyone's skills, yet allow kids to develop a pride in craftsmanship. It wasn't until years later that we figured out that W. Ben. Hunt also wrote under the pen names of Lone Eagle and Whittlin' Jim – imagine, 3 heroes in one. His Indian Lore projects have been reprinted in countless books and are still in print to this day – nearly 90 years later.


OCTOBER, 1951

TWO BURNER CANNED HEAT STOVE

By BEN HUNT

My good friend Carl Bennighaus left one of these handy little stoves with me to pass on to you. It is easy to make, takes up very little space in a pack and it is light weight. Use a one quart flat can. You can use it as a one or a two burner stove. Select the small size Sterno Canned Heat, or Heat Tabs.

In windy weather set it back of some sort of wind break. Can also be used in any fire.

Galvanized wire screen is best because the galvanizing solders the screen and keeps it from loosening at the edges. Don't try leaving it on. Burning will free galvanizing on the top but soon burned off. Clean the can thoroughly before starting.

1 Cut out with can opener or a small tin snip. Straighten cut edges and file off any sharp points of tin.

2 Cut off top of tin can and punch hole in center of bottom for bolt. Prepare two.

3 Punch vents in ends and bolt holes in bottom.

4 Bolt cans to bottom.

5 Cut screen to fit as shown. Bolt on with the hinges and bend over to hug down over edge of can.

6 Cut grid screen to fit around bottom of stove.

Tin hinge

Use ½" stove bolts to fasten hinges

This screen is called 2 x 2 Galvanized Machinery Guard, of 16 gauge wire and ½" mesh.

If you can't get this screen, get something as close to it as possible

7 Place grid over stove as shown at top and punch holes for wire supports.

Top grid is placed around bottom for packing. Wire supports are placed inside. Keep stove in cloth bag.

Use lower grid when burning Heat Tabs.

Illustration from *Boy's Life* magazine. October 1951

Unfortunately, very few of the handicraft and almost none of the campcraft panels have been reprinted since their original publication. Hunt's main goal was to develop hobbies and fun leisure time activities, not the preservation of old skills. In fact it's been written that *"He presented old-fashioned skills not as a means of making one's living nor as romantic or historic oddities, not even as educational tools to teach about the lives of our forefathers."* To us "picture readers" who still look fondly at those panels and wonder if they can really be accomplished nearly 100 years later, the preservation of the traditional arts that Hunt collected seems just as valuable as the mastery of new skills.

"I made everything I wrote about. If you don't make it, you better not write about it, because those kids are just looking for a chance to trip you up."

So, let's take a deep dive into these "classics of do-it-yourself literature" and spend time walking in the footsteps of this master teacher. Let's see if these old skills can still be done today and determine if some of these old traditions still have application to us old kids. Can we still find the materials at a reasonable price, and more importantly, have we got the skill base to do them? That's an important question.

If you look at old camping skills books there's lots of information about axe, saw and other edged tool use, but almost nothing about pocketknife use. Why's that? Because every kid had one in his pocket and its use was almost second nature: same with many of the other simple tools that Hunt's projects call for. Recapturing and honing skills may be a valuable outcome to this project as well.

When the Boy Scouts took over the publishing of *Boy's Life* in 1912, one of the leaders of the Scouting movement, Dan Beard, a trained and skilled illustrator, became the main source for scoutcraft projects. Beard's inspiration came from his boyhood hero, Daniel Boone - a direct link to a legacy of frontier traditions and skills. Beard became Ben Hunt's hero when he was a kid – Hunt spent hours following the plans illustrated by Uncle Dan. In 1942, Ben Hunt became the fulltime illustrator for *Boy's Life* and replaced Dan Beard. Hunt's illustrated panels have become classics and are the inspiration for this project. Ben Hunt is our hero, and his legacy should help us reconnect with the original sources and traditions.

"… field equipment is a most excellent hobby to amuse one during the shut-in season. I know nothing else that so restores the buoyant optimism of youth as overhauling one's kit and planning trips for the next vacation… The best way is to make many of the things yourself. This gives your pastime an air of thrift, and propitiates the Lares and Penates by keeping you home o' nights."

Horace Kephart - Dean of American Camping, 1916.

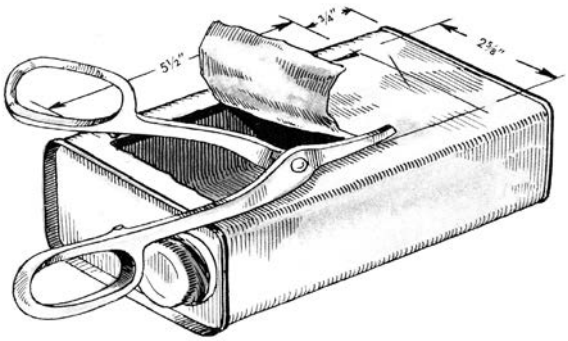
Springtime gives us the perfect excuse to get our camp gear in order, and nothing is better at adding that *do-it-yourself* touch than making and field testing the items that are unique to your kit. So, assemble your workbench and let's get started.

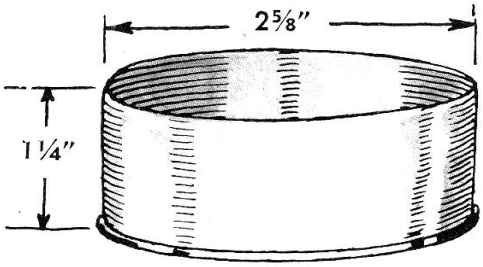
Illustration from *The Golden Book of Crafts and Hobbies*, 1962

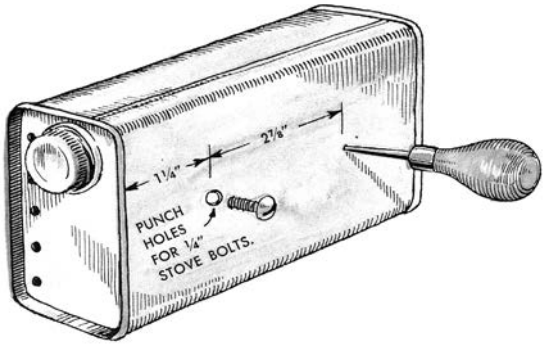
"He presented old-fashioned pioneer skills not as a means to make one's living nor as romantic or historic oddities... Instead he introduced subjects such as rustic woodworking, whittling and carving, and metal-working as hobbies and handicrafts for fun and leisure time activities. He would assemble a particular craft project by himself. Then, he would work to simplify the instructions so he could pass these talents along to young people..." Strekow and Zeit

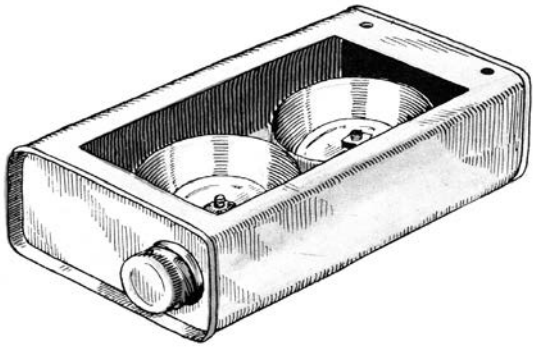
Ben Hunt stressed that we should use what is at hand - make do. When it came to historic crafts , he taught that we live in a different time, we use different materials and different tools. He said of authenticity, "*We merely try to follow the lines of authenticity.*" So, if you deviate from the plate, hold to the "spirit" of the project.

Hunt's Guidelines	Today's Realities
1-Everything can be done with a few simple tools.	1. We have power tools to speed up some processes, but stick to those tools you have around the house. Remember, some projects were represenative of the past.
2-Materials should be easy to obtain.	2. Today, some materials may be hard to find or are expensive to purchase. Many are only available at "antique" prices.
3-Projects should be inexpensive.	3. If you follow Hunt's plans, things should be relatively cheap to do.
4-All descriptions are simplified but complete.	4. Some processes that were "second nature" then, may have to be relearned by the modern craftsman. The loss of Manual Arts training requires that we reclaim many basic skills.
5-Projects are field tested. *"I made everything I wrote about." B.H.*	5. Test it against what was available for comparison "then". Is it useful today?









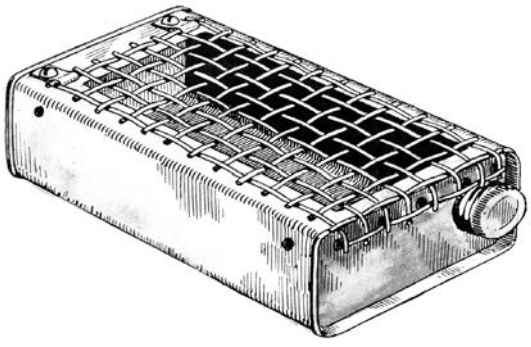


Illustration from *Boy's Life* magazine. October 1951

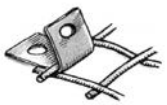
Step 1-Cut out the opening 5 ½ x 2 5/8 - 1qt can
- It's easiest to start the cut by drilling a fairly large hole.
- Cut the opening dimensions 1/4 inch smaller all the way around if you plan to turn the edges back.
- Cut small 45˚cuts in the corners to allow the turn.
- Turn the edge -hammer against an anvil or squeeze flat.

Step 2-Cut the soup cans to 1 ¼ height
- Turn the edges if you want.
- Size is determined by the size of the *Sterno* container.

Step 3-Punch vents in both ends of the 1qt can
- Modern cans have a plastic spout that must be removed so air gets in this way.

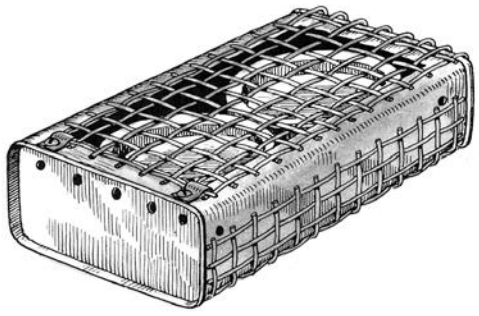
Step 4-Bolt soup cans to bottom
- Punch holes in the center of the bottom of the cans.
- Place them in the tin can and mark the holes.
- Punch holes in the tin can and bolt in the soup cans.
- Cut the bolts as flush as possible

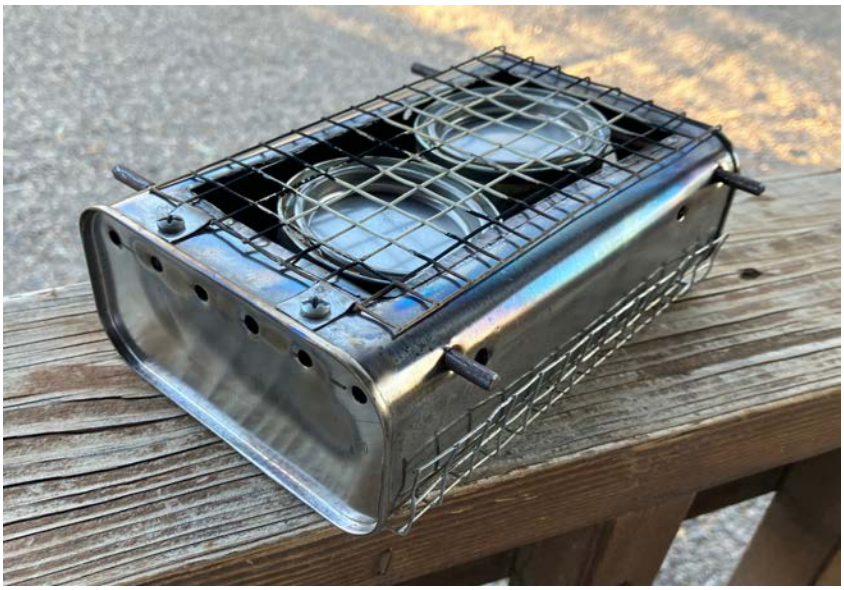
Step 5-Cut screen to fit
- Cut screen – 14x7 segments should do it.
- Make small hinges from the hole scrap ½ x **1 ¼** .
- Punch holes with an awl and screw in place.



Step 6-Cut screen to fit around bottom of stove
- 13x13 segments for length and width.
- Width is determined by how high you want your pots to rest above the flames when using the elevated screen. This measurement is controlled by how many segments are cut, or by where you place the holes for the support wire (Step 7).

Step 7-Punch holes for support wires
- Placement is determined by the size of the fuel cans. If heat tabs are used instead of *Sterno*, the wires can go right over the top of the soup cans. If a lower support is needed, punch the holes so the wires pass by the soup cans.





Completed stove and grates.

Boy's Life has presented simple tin can stove designs for many years – *The Pail Stove* 1945, *The Kriegie Stove* 1949, *Tin Can Cooker* and *Camp Stoves* 1950, *Charcoal Cooker* 1950, *Two Burner Canned Heat Stove* 1951, *Charcoal Stove* 1957, *Double Duty Camp Stove* 1962 and others.

- **Materials Required**
  - 1 quart can
  - 2 soup cans
  - ½ inch hardware cloth *
  - ** Hunt calls it 2x2 Galvanized Machinery Guard*
  - 2 ¼x1 inch Nuts/Bolts/Washers
  - 2 Sheet Metal Screws
  - 1/8 inch Wire Rod
  - 2 Stern Fuel
  - Heat Tabs - Solid Fuel
- **Tools Required**
  - Tin Snips
  - Scratch Awl
  - Pliers
  - Wrench
  - Screw Driver
  - Drill and bits
- **Optional Tools**
  - Angle Grinder w cut-off wheel
  - Other Fuel alternatives
  - Grozing Pliers
  - Small Anvil
  - Hammer

Simple Principles - Biomass Fuels

- Burning biomass fuels in the open you burn at about 15-30% efficiency.
- Burn the same fuel in a contained area - a stove – the efficiency improves to 30-60%
- Burning the same fuel in a stove designed with secondary combustion, the efficiency improves to 60-70%.

- In the face of the movement to eliminate open fire use in the outdoors, almost all regulations eliminate biomass fuel burning in favor of compressed gas fuels. By educating people to the fact that a renewable resource – biomass fuels - can burn more efficiently, create no charcoal or ash, and is contained to a small combustion chamber, many tin can stove designs are a more ethical solution to some of the arguments against fire use.

- Ben Hunt's *2-Burner Camp Stove* is not the most efficient design, it was 2 generations ahead of its time. It is a viable alternative to non-renewable fuels. It is also efficient enough to boil water and/or cook to rival most modern gas stoves, while using renewable resource fuels.

FUEL	BOIL TIME	BURN TIME	ACCELLERANT	TEST NOTES - 2 cups of water in tea pot
Sterno	10 minutes	30+ minutes	None Needed	Can get multiple meals per can - 2 cans
Esbit	7 minutes	21 minutes	None Needed	Created yellow flame and soot - 2 tabs
Alcohol	7:30 minutes	14 minutes	None Needed	Denatured Alcohol carried in flask - 4oz.
Charcoal	8 minutes	15 minutes	Lighter Fluid	A bit sooty -2 briquettes
Pellets	No Boil	10 minutes	Fire Start Tabs	No air control so not enough heat output.

Note - All fuels boiled best when the pot was on the raised grate.
- The lower grate seemed to restrict air low and damper the heat.
- Cooked eggs in a frying pan on the low grate without any problems at all.

Cooking Test - Eggs

We wanted to test the efficiency of the same bio-fuels we used to test the Four Dog Tin Can Bushcooker* - wood pellets, heat tabs, charcoal, alcohol and Sterno - straight wood fuel was not tested.

Results -

All 5 fuels cooked just fine. The only problem was that the solid fuels burned yellow (inefficient air-fuel mix) and left soot deposits on the frying pan. No soot from the gel or liquid.

Sample 1 quart cans.

REFERENCES

1951 – Hunt, Ben. *Two Burner Canned Heat Stove*, ***Boy's Life,*** Oct, p. 37. BSA.

1962 – Hunt, W. Ben. *Camp Stove*, ***The Golden Book of Crafts and Hobbies,*** p. 74-75. Golden Press, NY.

2012 – Strekow, Alan J. and Robert Zeit. ***W. Ben Hunt: From Whittlin' Jim to Lone Eagle,*** Hales Corners Historical Society.

Note: The entire *Boy's Life* archive is available for research on a number of websites.

Thanks to the generosity and genius of Don Kevilus at Four Dog Stove for sharing his Four Dog Bush Cooker - (https://www.youtube.com/watch?v=pNGpHRqF9aw) - 5 Parts and his #10 Can Bushcooker – Link (https://www.youtube.com/watch?v=eozKyRp6qzs&t=11s).

Stove with *canned heat* and elevated screen in place.

Second stove took less than an hour to make. Shows edges of the hole turned back and used *Sterno* cans bolted in place.

Tea pot ready to boil. See results on the fuel test chart on preious page.

W. Ben. Hunt by-line logos.