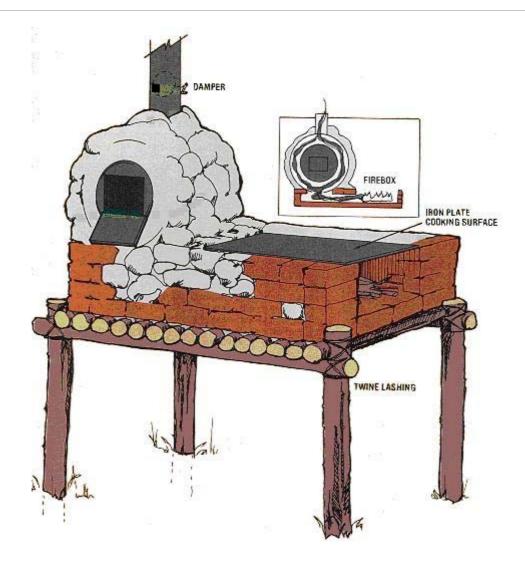
Outdoor Oven



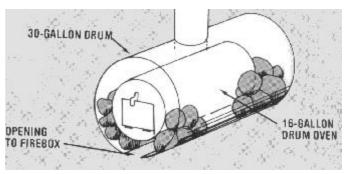
This primitive "kitchen range" is often used in survival skills training programs given to missionaries who intend to set up housekeeping among native tribes far from civilization. Therefore, the practical cooker/baker could serve nicely in any remote area where supplies are scarce and the most common building materials are stone, earth, wood, and salvageable scrap metal.

The first step is to build a platform, which simply raises the cooking area to a convenient working height. This can be done by driving short poles into the ground and tying crosspieces to the uprights with a generous amount of baling twine. When that's finished, top the framework with branches that will be sturdy enough to provide a base for the heavy stove.

Next, construct the bottom and three sides of a stone or brick box, open at one end, that will later hold the fire. To do so, place a covering of stone on the raised platform and cement the rocks together with clay or mortar, keeping the surface as smooth as possible so it'will be easier to clean. Then build up the sides of the firebox as you would a wall and seal all the chinks. To provide a cooking surface, cover about two-thirds of the top of the box (toward the open,end) with a flat plate. A cast-iron sheet is best, but you can use steel or even a large, flat stone. Remember, though, that only hard, unlayered rock will do, and the slab must be dried out by heating it slowly. This eliminates the risk of its cracking or even exploding during exposure to intense heat.

Now it's time to build the oven over the portion of

the firebox that's not covered by the cooking surface. Place a whole 16-gallon drum inside a 30-gallon drum that's had the front end removed. a section cut out along its length, and a hole cut for the chimney. Cradle the smaller drum with! the larger one with rocks and support both containers with stones at the ends. The larger barrel serves as a form for the brick or stone that surrounds the entire oven except for the door and chimney



openings. Before reaching the chimney, the smoke and hot gases pass through the space between the two drums, heating the oven.

The oven must be fitted with a door. This job is most easily handled with an oxyacetylene torch, but if necessary, it can be done with hand tools. Cut a square hole in the metal end of the 16-galIon drum, make a cover (each of its dimensions should be about an inch bigger that those of the opening), thenwith hinges at the bottom so it can swing out of the way-attach the door to the oven and make or buy a latch for the closure.

The chimney, which consists of a pipe set into a hole in the arch above the oven, must fit tightly and be cemented with clay or mortar. You'll also need to put a damper in the pipe so that the draft, and therefore the amount of heat produced, can be controlled.

Of course, this is just one possible form of simple oven. The Indians of the Southwest, and other people around the world achieve the same results by building a stone beehive-shaped structure, with an opening in the front near the bottom and a smoke hole at the top. This chamber is heated through for a couple of hours, the ashes are raked out, and the stored-up heat in its stones can then be used for baking. This form of oven is a little more awkward to use, but it does work well. Although the Indian version is usually built on the ground and therefore requires a lot of bending over, raising the stove on a platform eliminate the need for stooping.

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