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Low Sun Altitude Co...

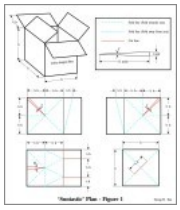

High Sun Altitude C...


Very Low Sun Altitu...


Side View of Suntas...


Low Sun Altitude Co...


High Sun Altitude C...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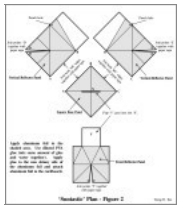
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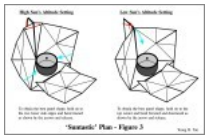
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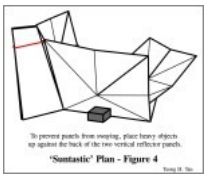
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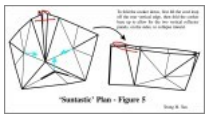
Suntastic Plan - Fi...

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SUNNY COOKER

Simple Homemade Solar Cookers

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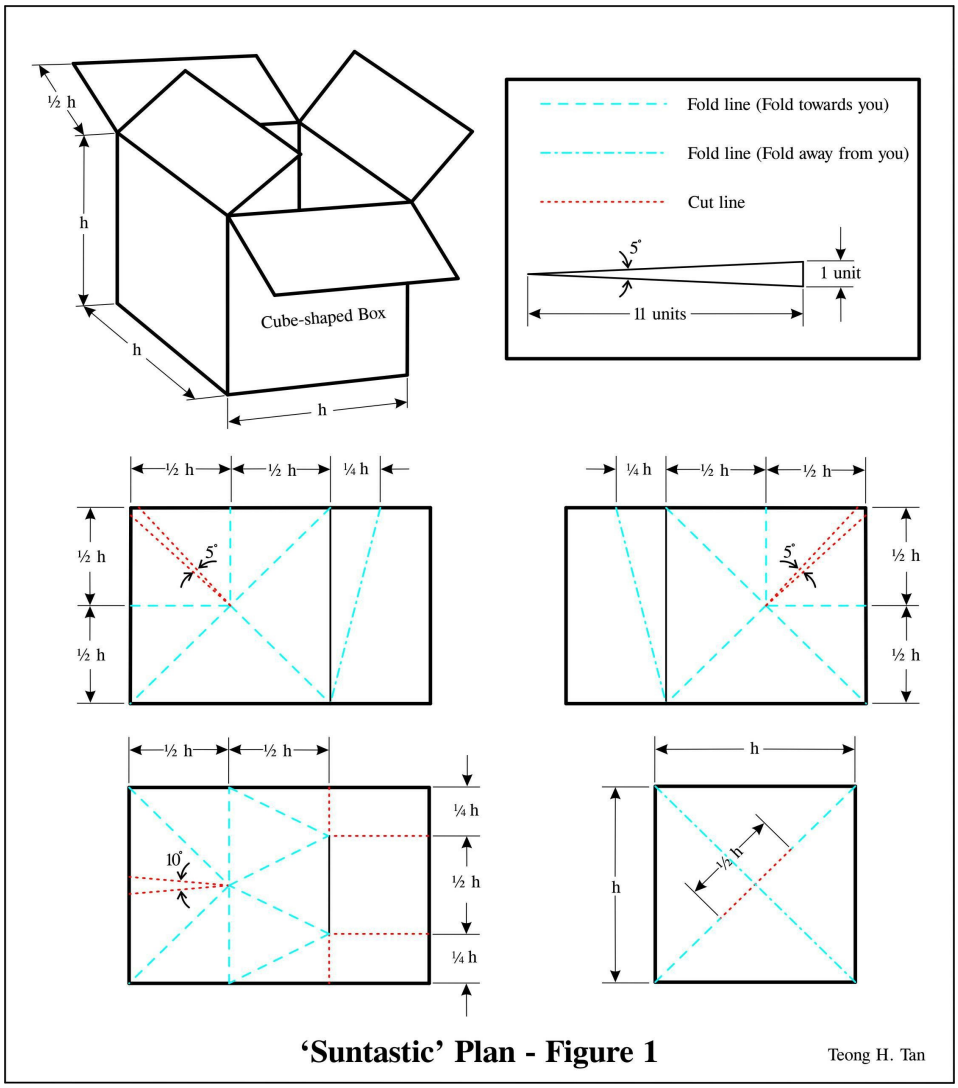
Suntastic Panel Cooker - Construction Plan

The 'Suntastic' panel cooker is the result of my effort in creating a simple solar cooker, which is capable of cooking without a greenhouse enclosure. Such a cooker would allow people, having no access to suitable greenhouse enclosure material, to solar cook as long as they have good

continuous sunshine.

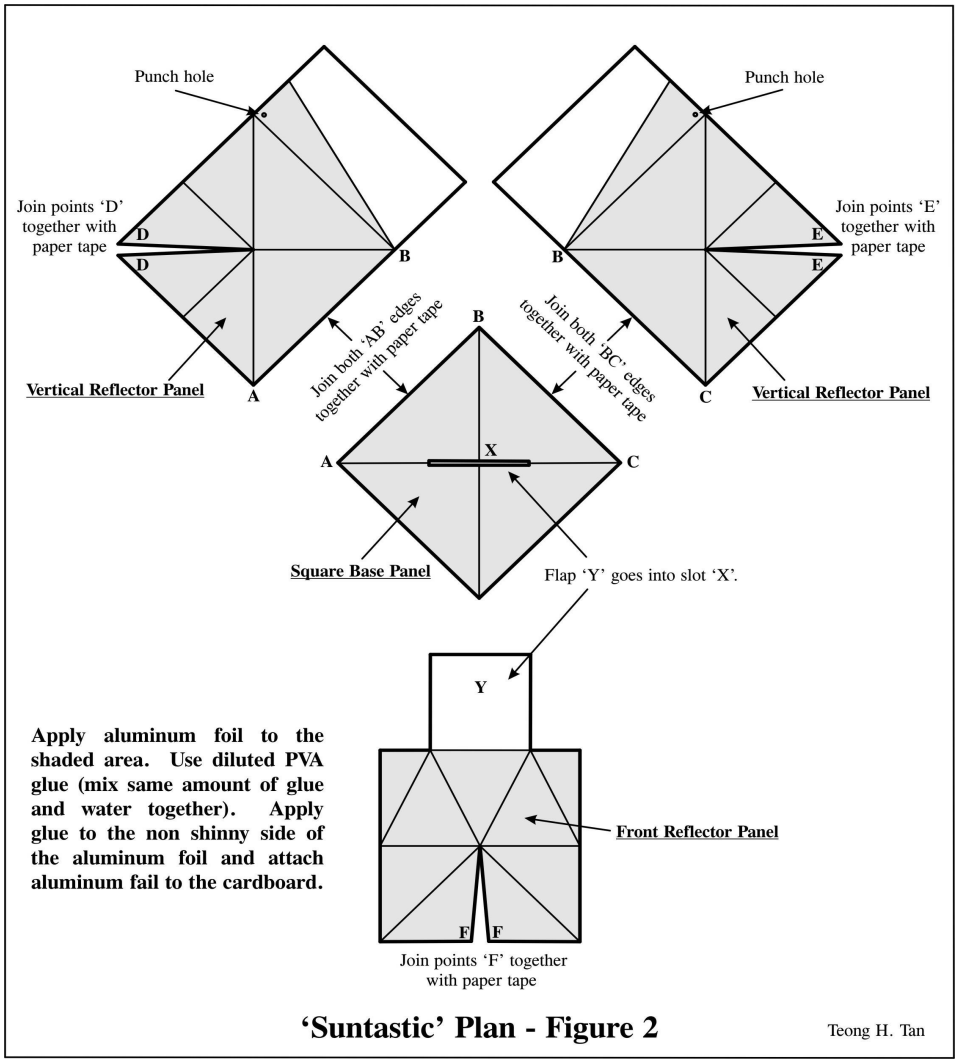
The 48cm tall 'Suntastic' panel cooker, which I have originally constructed, is capable of raising the internal temperature of an empty, 4-liter black metal pot, with a clear glass lid, to 150^{o} C in about 30 minutes. If a greenhouse enclosure is used, the temperature can reach about 180^{o}C. 2 cups of rice can be cooked, without a greenhouse enclosure, in about 100 minutes, and 3 liters of water heated from 26^{o} C to pasteurization point, 70^{o} C, in about 50 minutes.
The 'Suntastic' panel cooker is made from a used, cube-shaped, cardboard box. The width of the box should be about twice the diameter of the pot. Other materials required are one short cord, paper tape, aluminum foil and glue.

Start by cutting the cardboard box to obtain four panels as shown in Figure 1. Draw fold and cut lines, as indicated in Figure 1, and then cut and fold the four panels accordingly.



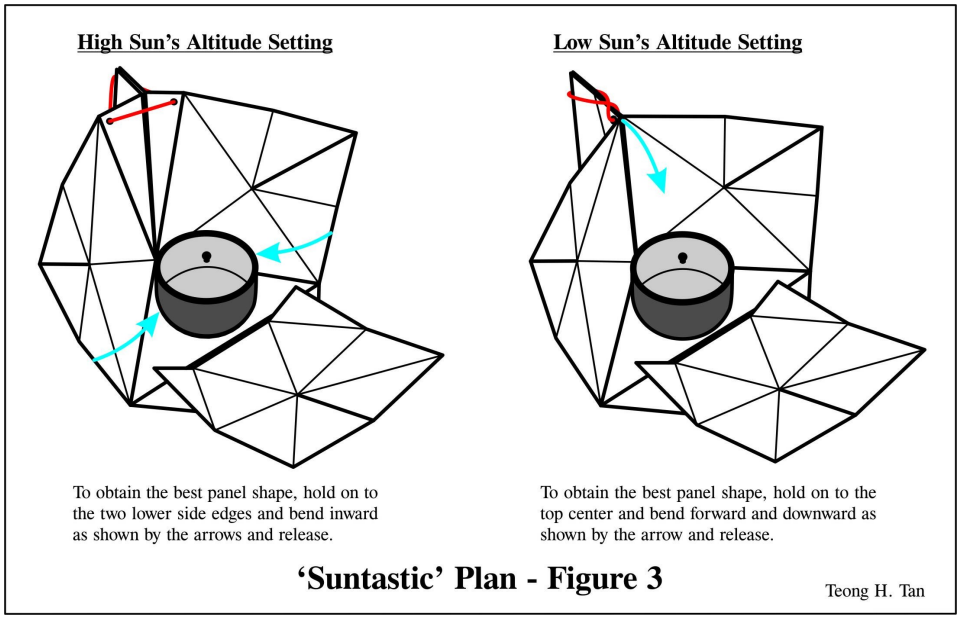
'Suntastic' Plan - Figure 1 Teong H. Tan

Attach, using paper tape, the two vertical reflector panels to the square base panel; see Figure 2. Glue aluminum foil onto the concave side of the cooker as shown by the shaded area in Figure 2. Join the forked tips, shown as D, E and F in Figure 2, together using paper tape on the back face. Punch two holes through the two vertical panels as shown in Figure 2.



'Suntastic' Plan - Figure 2 Teong H. Tan

Tie the two vertical panels together, using a short cord, according to the diagram for high sun's altitude setting in Figure 3. The high sun's altitude setting is for cooking when the sun's altitude is above 60°, and the low sun's altitude setting is for cooking when the sun's altitude is below 60°. To switch between high and low sun's altitude settings, simply lift the cord loop off the cooker's rear vertical edge, reconfigure the cooker, and hook the cord loop back onto the rear vertical edge, and slide it downward until tight.



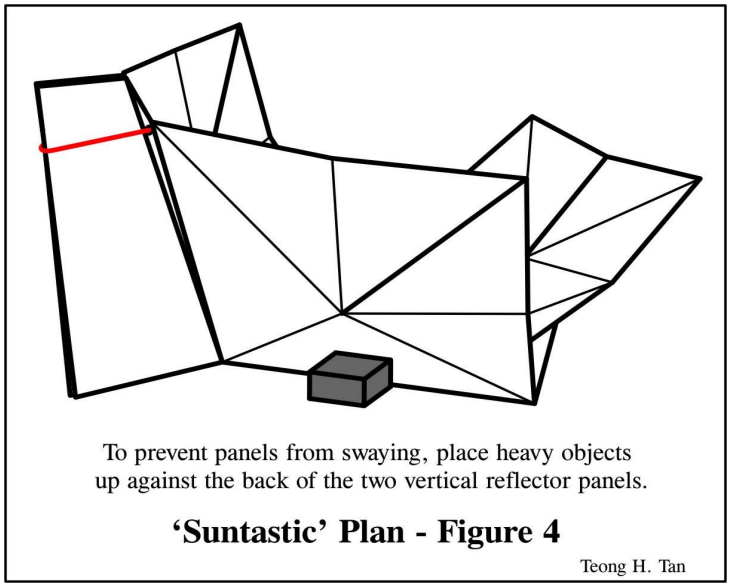
'Suntastic' Plan - Figure 3 Teong H. Tan

For best panel shape, gently bend and release the two vertical reflector panels, according to

instructions in Figure 3, whenever the cooker is reconfigured.

Install the independent front reflector panel by inserting its flap into the square base panel's slot. Whenever the independent front reflector panel is removed, the triangular front of the square base panel can be used as a reflector; but the cooker will be less efficient this way, and a greenhouse enclosure is required.

To prevent the two vertical panels from swaying in the wind, place two heavy objects up against the back face of the two vertical panels as shown in Figure 4.



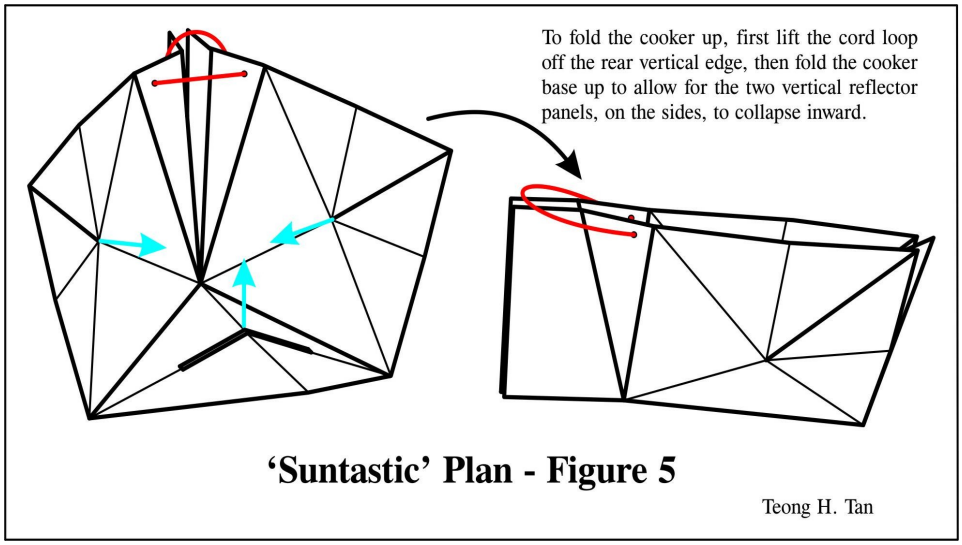
To prevent panels from swaying, place heavy objects up against the back of the two vertical reflector panels.

'Suntastic' Plan - Figure 4

Teong H. Tan

To cook, put foods inside a black metal pot and cover it with a clear glass lid. Black metal lid works too, but a clear glass plate works better when the inside of the pot is dark in color. A pot with taller sidewall works better than a shallow one because of additional surface to capture sunlight. Do use a greenhouse enclosure, if it is available, for higher temperature cooking. Set cooker up according to the sun's altitude, and face it towards the sun. Place pot on top of the cooker base. Shift the pot towards the rear of the cooker when cooking with low sun's altitude setting, and towards the front with high sun's altitude setting. Shape and tilt the front reflector panel to obtain the most reflected sunlight onto the front face of the cooking pot, and hold it in position by wedging something below it.

When not in use, the 'Suntastic' panel cooker can be folded up by first removing the front reflector panel. Next lift the cord loop off the rear vertical edge, and then fold the square cooker base upward, see Figure 5, to allow for the two vertical reflector panels to collapse inward.



'Suntastic' panel cooker is made using simple and widely available materials, so that it can be easily duplicated elsewhere. It is my hope that as the material required for panel type solar cooker becomes simpler; more people will be able to benefit from making and using their own panel solar cookers.

Fun-Panel Cooker Construction Pla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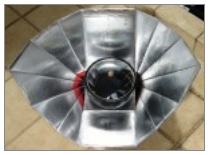

Fun-Panel Cooker - ...


Fun-Panel Cooker - ...


Fun-Panel Cooker - ...

The Funnel solar cooker, originally introduced by Professor Steven E. Jones, is very efficient in capturing sunlight with its 60 degree conical reflecting surface. However, the Funnel solar cooker has an unstable shape that makes it difficult to keep the cooker and the pot in position. In addition, it is also not possible to fit a regular size cooking pot into a regular size Funnel cooker because of limited space at the lower end of the cooker. In order to retain the very efficient conical reflecting

surface, but eliminate the above mentioned disadvantages, I came up with a hybrid Fun-Panel solar cooker.

style="width: 411px; height: 337px;" src="http://webzoom.freewebs.com/sunnycooker/Fun-Panel%20LAS%20Image.JPG" width="411" border="0" height="590"

The Fun-Panel solar cooker incorporates features from the Panel cooker into the Funnel cooker. The Fun-Panel cooker can also be placed in two different positions to better capture sunlight at different Sun's altitudes.

CONSTRUCTION METHOD:

The construction materials required to make a Fun-Panel cooker are simple and low cost. I made my Fun-Panel cooker from a used cardboard box that measures about 50cm on all edges. One cube-shaped cardboard box has enough cardboard material for making two Fun-Panel cookers. Other construction materials required are one short string, paper tape, aluminum foil and glue. If you use cardboard box with different dimension, all you need to do is to factor the dimensions given in this instruction to suite your box's dimension.

To construct, cut the cube-shaped cardboard box to obtain two large rectangular panels and one small panel as shown in Figure 1 below.

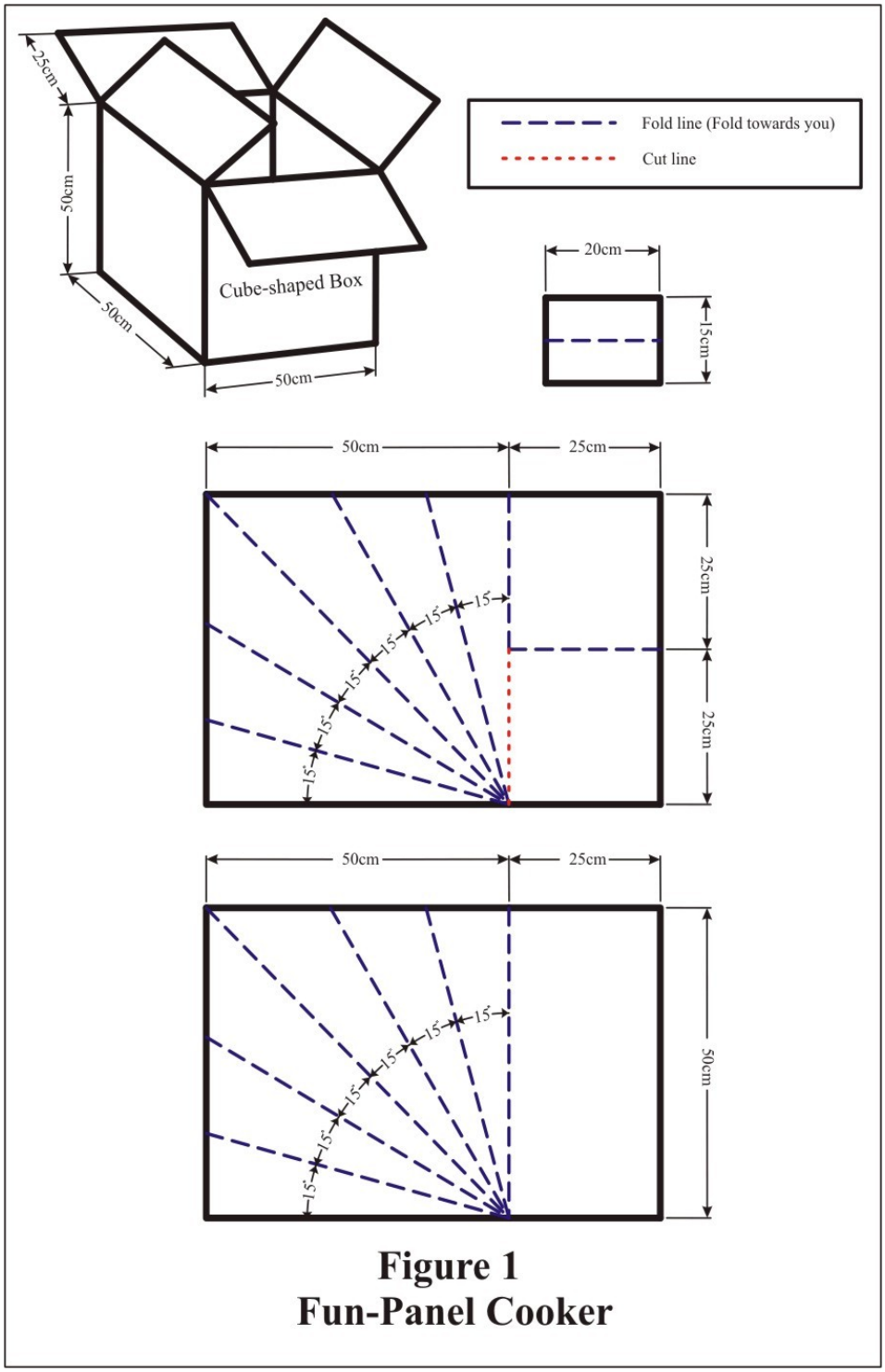
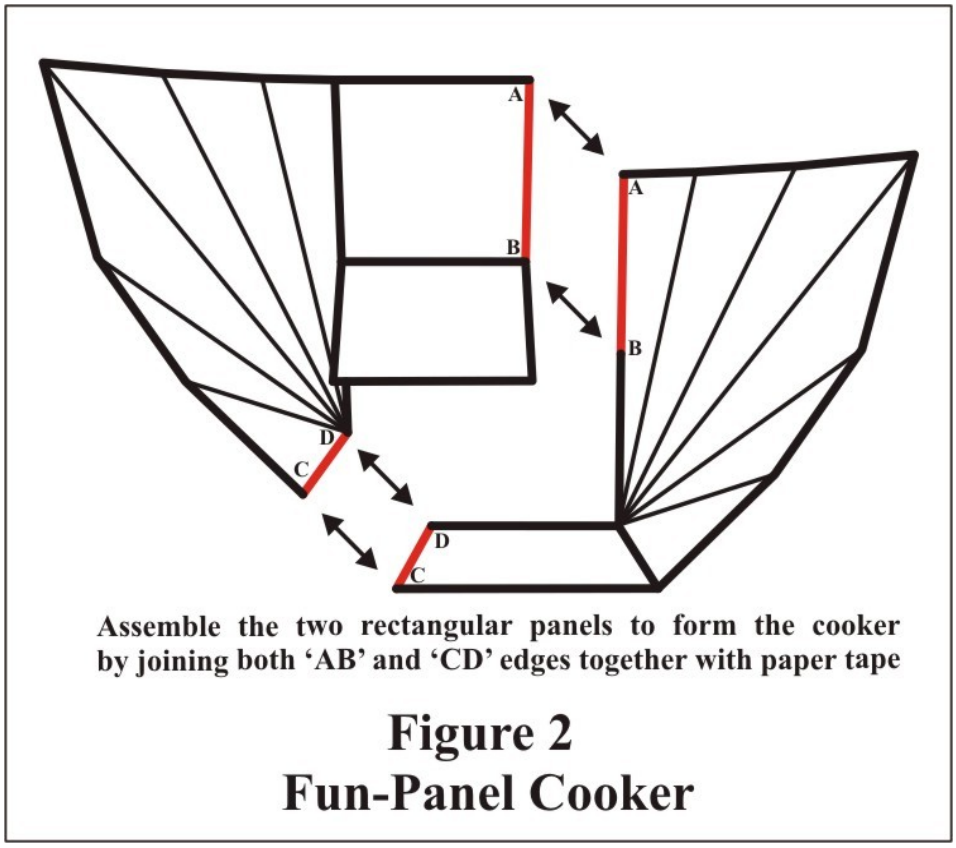


Figure 1
Fun-Panel Cooker

Each large rectangular panel is made up of one square face of the box together with one cover flap. Next glue aluminum foil onto one side of the two large rectangular cardboard panels. Draw all the fold lines and cut lines, according to Figure 1 above, onto the rectangular cardboard panels. Next cut along the cut line and then fold along the fold lines.

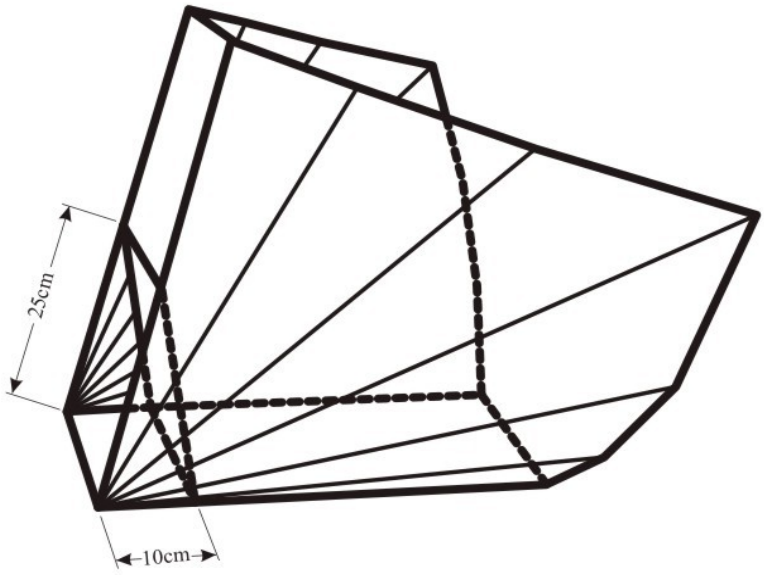
Join the two large rectangular cardboard panels together, according to Figure 2 below, to form the cooker.



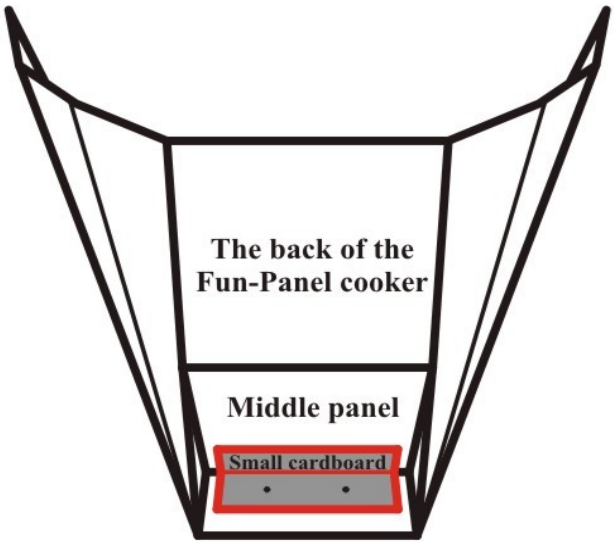
Assemble the two rectangular panels to form the cooker by joining both 'AB' and 'CD' edges together with paper tape

Figure 2
Fun-Panel Cooker

Next glue the small cardboard panel to the lower edge of the square panel, located in the middle of the cooker, according to Figure 3 below.



Push forward the lower edge of the center square panel by a distance of 10 cm from the rear edge, and keep it in that position.



Glue the small folded-cardboard to the lower edge of the middle panel only. Punch two holes through the horizontal face of the small cardboard and its adjacent base. Tie them together with a string to keep the middle panel in this desired position.

Figure 3
Fun-Panel Cooker

After the glue has dried, bring the lower edge of this square panel forward by a distance equals to 2/5 the length of the square panel's edge (this ratio is critical as it defines the final shape of the cooker). Punch two holes through both the small cardboard panel and the adjacent rectangular panel, and tie them together with a short cord in order to keep them in position. The construction of the Fun-Panel cooker is now completed.

SETTING and COOKING:

For low Sun's altitude cooking, between 35 and 50 degrees, place the cooker down, with the rectangular panel on the floor, as shown in Figure

4 below. For very low Sun's altitude cooking, below 35 degrees, raised the pot by 2 to 3 inches above the base to better capture the sunlight.

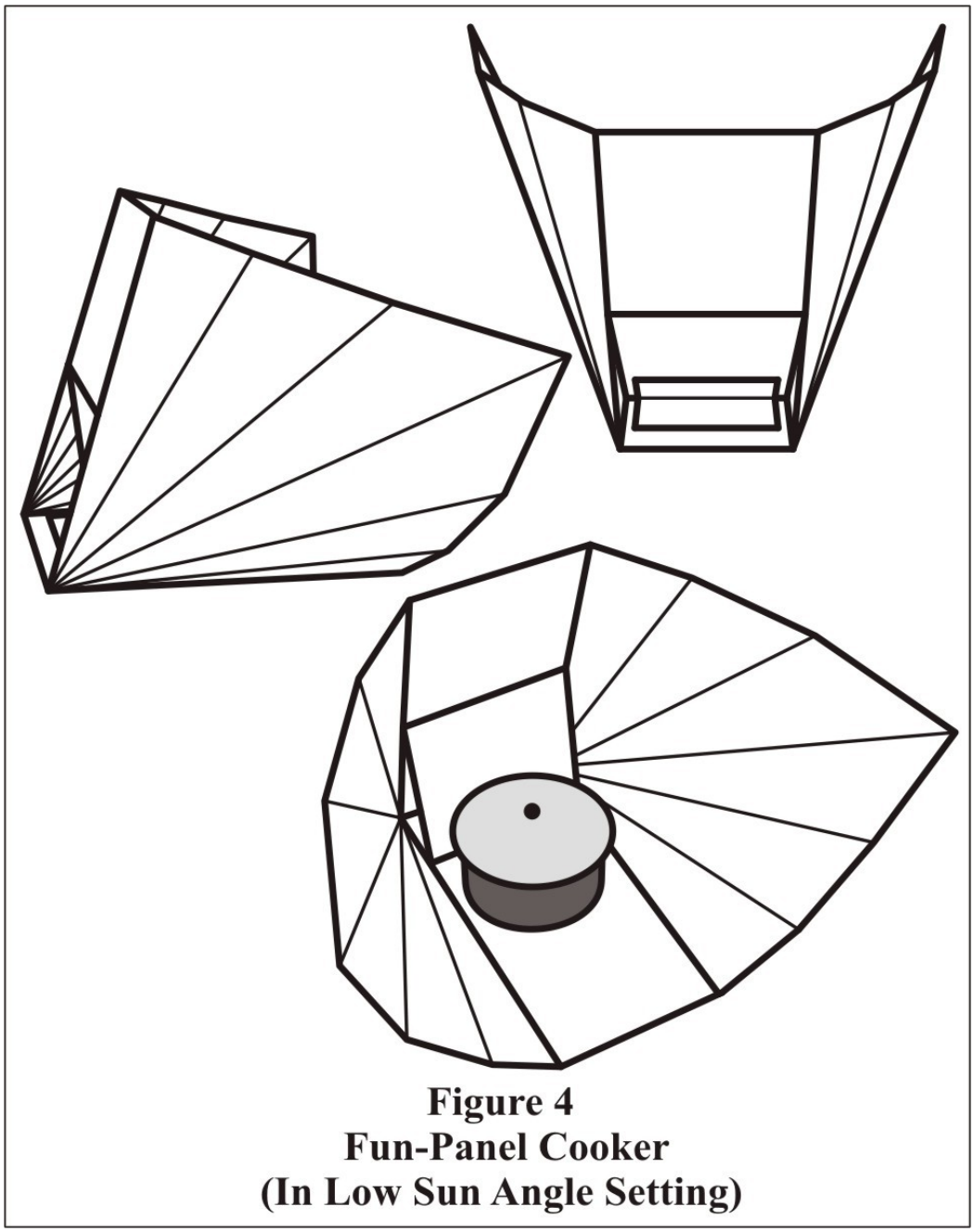


Figure 4
Fun-Panel Cooker
(In Low Sun Angle Setting)

With rising sun angle, between 50 and 70 degrees, flip the cooker around such that the square panel, in the middle of the cooker, is now horizontal, and place the cooker on top of a small box (a box with 5-6 inches in height is now required). See Figure 5 below.

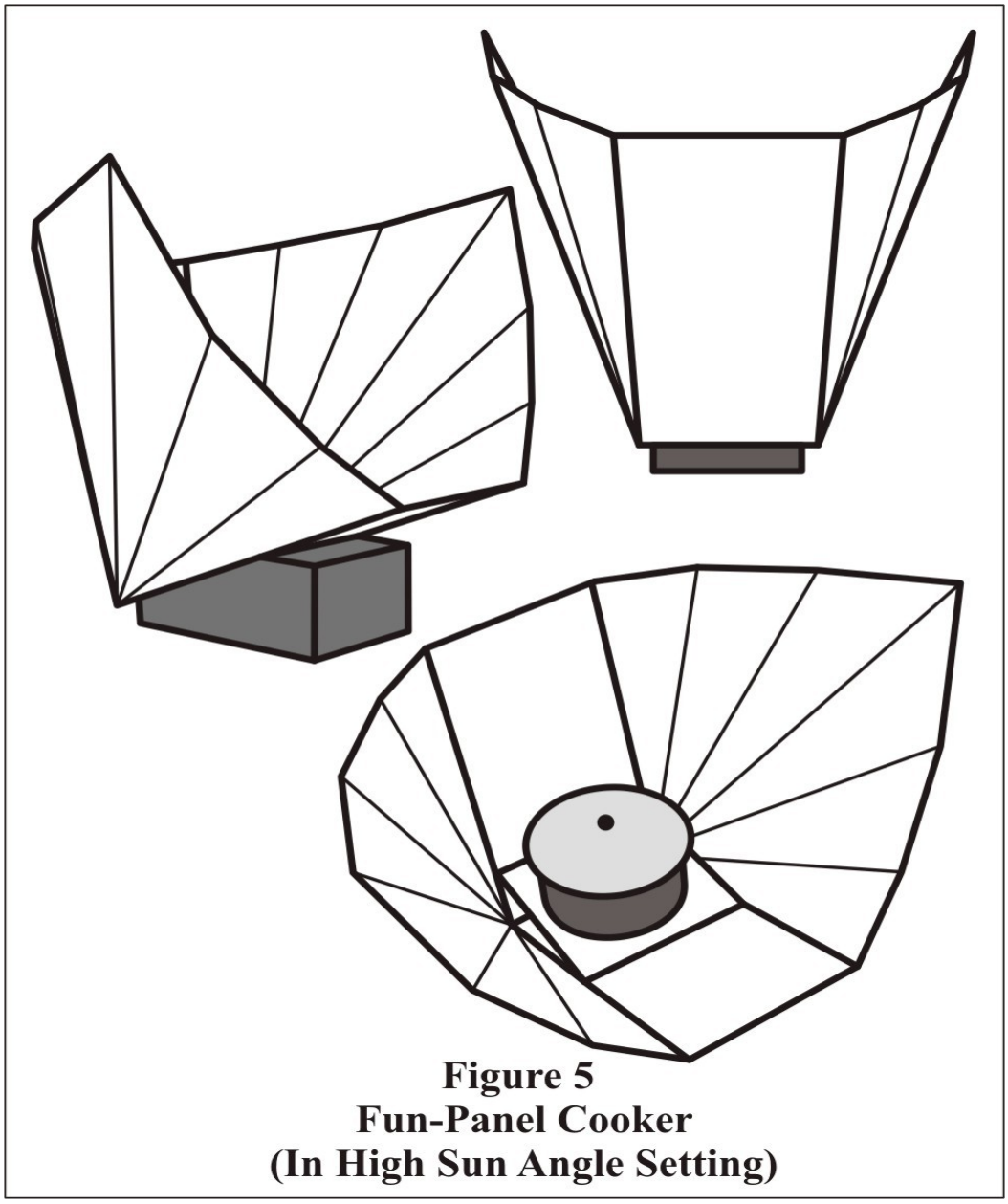


Figure 5
Fun-Panel Cooker
(In High Sun Angle Setting)

The small box serves to support both the cooker and the cooking pot in this high sun's altitude setting. For very high sun's altitude cooking, above 70 degrees, loosen the short string that holds the small cardboard panel to the rectangular panel. Tilt the vertical, rectangular panels slightly backward until the pot receives maximum reflected sunlight. Tie the two ends of the string together to hold the rectangular panel in that position.

To cook, put foods inside a black metal pot, and cover it with a clear glass lid. Enclose the pot in a clear heat-resistant plastic bag. Set the cooker according to the Sun's altitude, and face it towards the Sun. Place the cooking pot in the cooker and start cooking.

The Fun-Panel cooker is also capable of cooking, without the clear plastic bag enclosure, if you have good sunshine. A test in Singapore, without the use of a greenhouse enclosure, have recorded a maximum empty pot temperature of 130 degrees C. The 4-liter size pot used has a clear glass lid. The cooker was set to the high-sun angle setting, and the Suns's angle was at 55 degrees when the temperature was taken.

Fun-Panel cooker can be folded flat by first untying the string and then

folding the middle square panel upward so that the cooker can be drawn together for ease of storage. I hope that you will find the Fun-Panel cooker to be an interesting and user-friendly solar cooker.

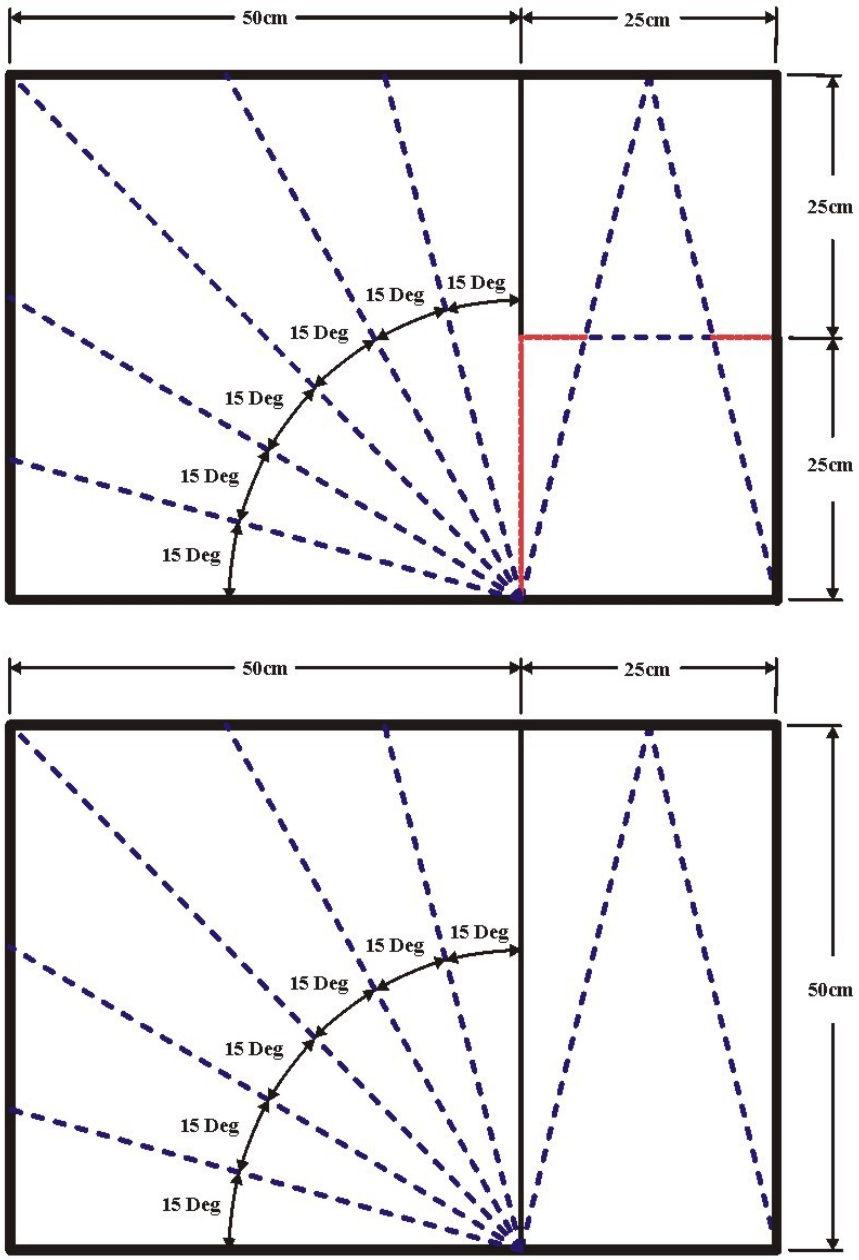
Teong Tan
6 January 2008

Fun-Panel Modifications/Upgrades

I have received several success stories from people who have built and used the Fun-Panel cooker. Their positive feedbacks have prompted me to take a closer look at the cooker design for further enhancement. Several modifications have been identified for incorporation, individually or together, into the original Fun-Panel design.

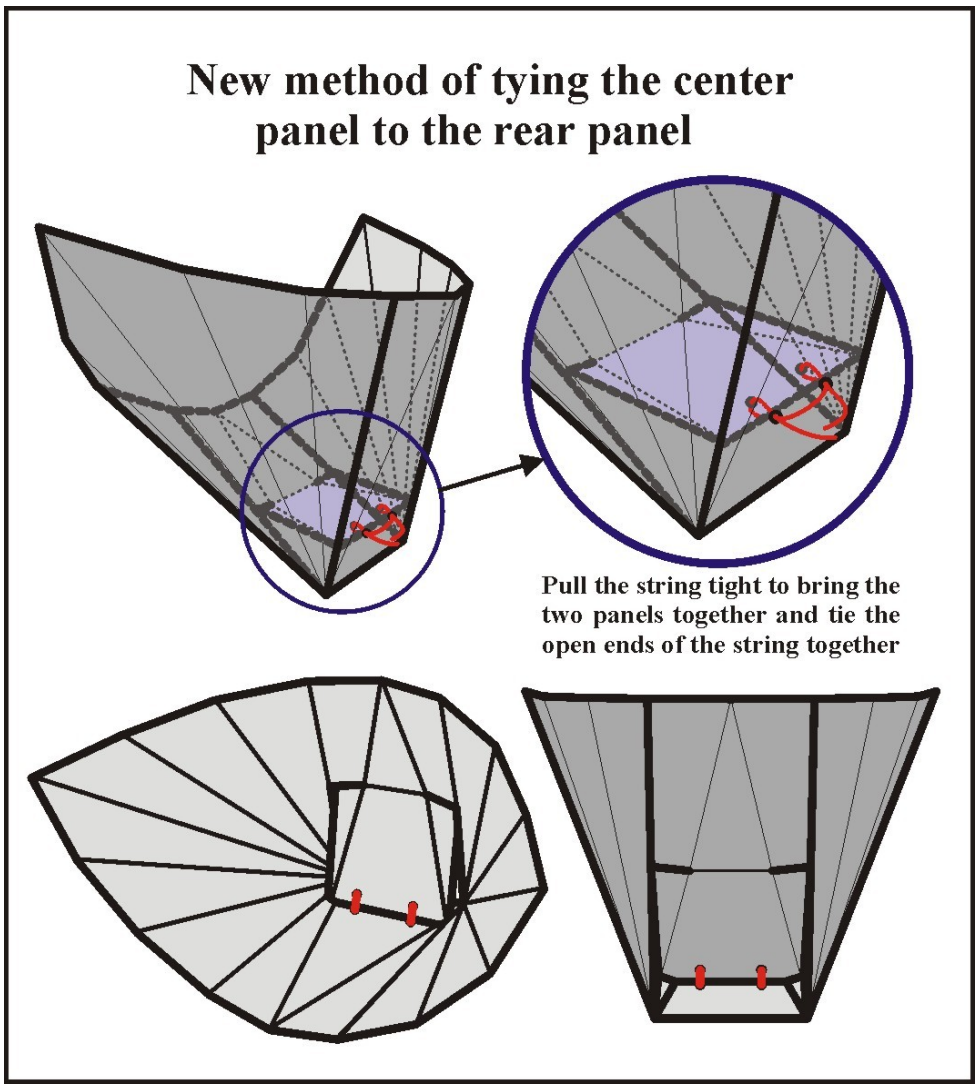
The first modification is to add a few more folds and cuts to the three flat panels, located in the middle section of the cooker. This modification will further enhance the efficiency of the cooker reflectors. See diagram below for the additional folds and cuts required.

Modified Fun-Panel Plan
(with additional fold and cut lines)

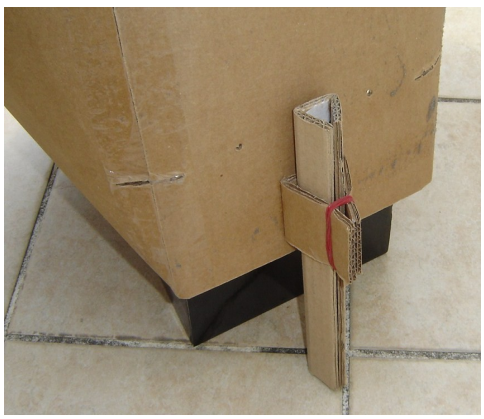


Picture of the Modified Fun-Panel reflectors

The second modification is a new method of tying the center panel to the base panel in order to eliminate the requirement for the small cardboard piece, which was attached to the bottom edge of the center panel in the original design. See diagram below for details.



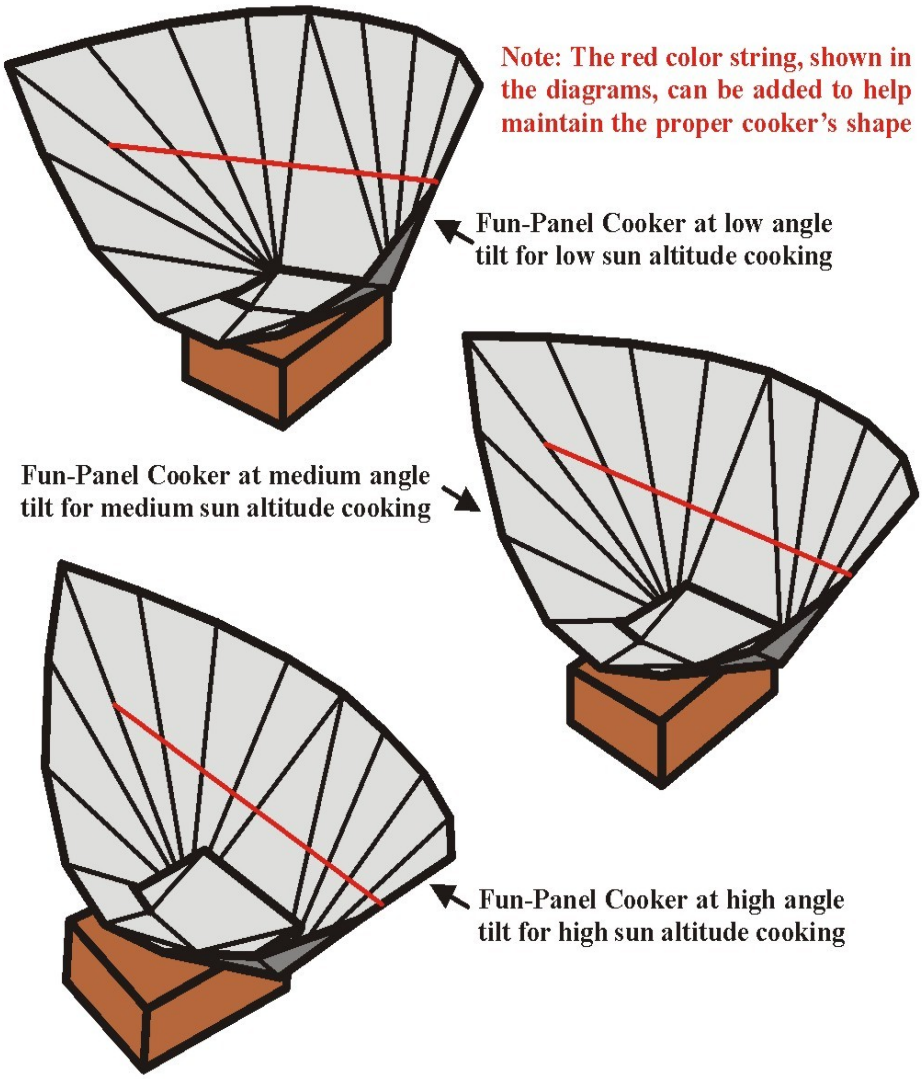
The third modification is to add an adjustable reflector support, made from cardboard and rubber bands. The adjustable reflector support eliminates the need to tie the center panel to the base panel. This allows the cooker to tilt at various angles to better capture the sunlight. The center panel becomes the permanent base for the pot with this change incorporated. The photos and diagram below show the adjustable reflector support in action as well as the cooker set at different tilt angles.



Support at low tilt angle

Support at high tilt angle

Modified Fun-Panel
(shown at various tilt angles)



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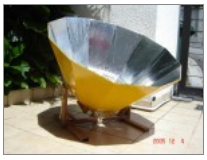
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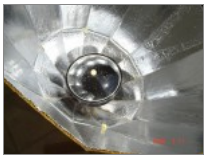
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SUNNY COOKER

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Greenhouse Enclosures Comparison

Introduction
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Several types of greenhouse enclosures are being used for cooking with the Solar Cookers International's 'CooKit'. The two most popular ones are the use of a heat-resistant plastic bag and the use of the Solar Household Energy's 'HotPot'. The 'HotPot' consists of a clear glass lid and a clear glass bowl that form an enclosed greenhouse for a black metal bowl. Many people have also successfully used only a clear glass lid with their pot to solar cook.

I used a pot with a clear glass lid for most of my solar cooking because it was difficult for me to obtain heat-resistant oven bags. Oven bags also require regular replacement due to wear and

tear, and it is therefore not as cost efficient in the long term. On the other hand, the 'HotPot' is very effective and durable, but they are expensive and also not available for sale in most part of the world. I was lucky to find a clear glass bowl, which fits the lower portion of my three-quart size Graniteware enamel pot perfectly. Hence, I have my own little 'HotPot' after adding a clear glass lid to it. Recently, I decided to find out, through a simple test method, how the use of heat-resistant plastic bags, the 'HotPot', the metal lid and the clear glass lid would faired when compared with each other.

Test Method

For the comparison tests, I used a homemade 'CooKit', which is capable of accommodating two 3-quart size Graniteware enamel pots at the same time. The other items required for the tests were two oven thermometers, two identical 3-quart size Graniteware enamel pots with a metal lid, one Reynolds oven bag, two clear glass lids, and one large glass bowl for making the 'HotPot'. The Graniteware enamel pots that I used were black both on the inside and outside. Since most solar cooking pots are black only on the outside, I decided to line the inside of both pots with white color paper for the tests.

Four test runs, with no load, were performed. Each test run consisted of two different pot configurations, placed side by side, in the same 'CooKit' solar cooker. The followings were the four pot configurations used for the tests:

1. A Graniteware enamel pot with a metal lid.
2. A Graniteware enamel pot with a clear glass lid.
3. A Graniteware enamel pot with a metal lid and enclosed in an oven bag.
4. A 'HotPot', which consisted of a Graniteware enamel pot with a clear glass lid and a clear glass bowl.

An oven thermometer was placed inside each of the pots for temperature measurement during the tests.

Each test run started off with both pots at room temperature of about 30 degrees C. Temperatures of both pots were recorded after they had reached the stagnation point, which took about 30 minutes or more depending on the sunshine. The 'CooKit' and the pots were then moved into the shade where the pots temperatures were recorded again after five minutes in the shade.

Test Results

The results of the four test runs are shown in the tables below:

Date: 10 Feb 08 Test Run 1	Stagnation Temperature	After 5 minutes in the shade
'HotPot' (1)	137^{o} C	109^{o} C
Pot with oven bag (1)	109^{o} C	92^{o} C

Date: 10 Feb 08 Test Run 2	Stagnation Temperature	After 5 minutes in the shade
Pot with glass lid (2)	128^{o} C	93^{o} C

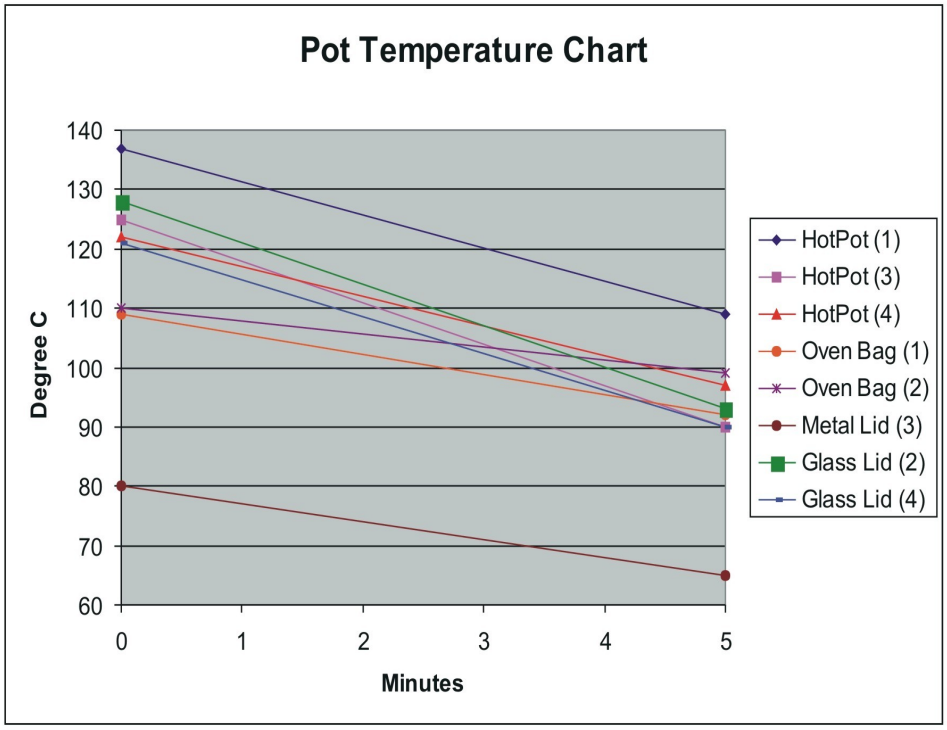
Pot with oven bag (2)	110° C	99° C

Date: 10 Feb 08 Test Run 3	Stagnation Temperature	After 5 minutes in the shade
'HotPot' (3)	125° C	90° C
Pot with metal Lid (3)	80° C	65° C

Date: 17 Feb 08 Test Run 4	Stagnation Temperature	After 5 minutes in the shade
Pot with glass lid (4)	121° C	90° C
'HotPot' (4)	122° C	97° C

style="font-family: Arial;"It should be noted that the sunshine, wind and cloud conditions varied for all the four test runs. In addition, a small amount of heat was lost during the brief periods when the pot with the oven bag was opened to obtain the thermometer readings. We would expect the heat lost to have a slight impact on the subsequent temperature readings taken while in the shade.

The chart below shows how the temperature readings from all the four test runs would look when presented together. The starting points at the y-axis are the stagnation temperatures for the various pot configurations. The ending points, on the right, are the pots' temperatures after five minutes in the shade.



Result Analysis and Conclusions

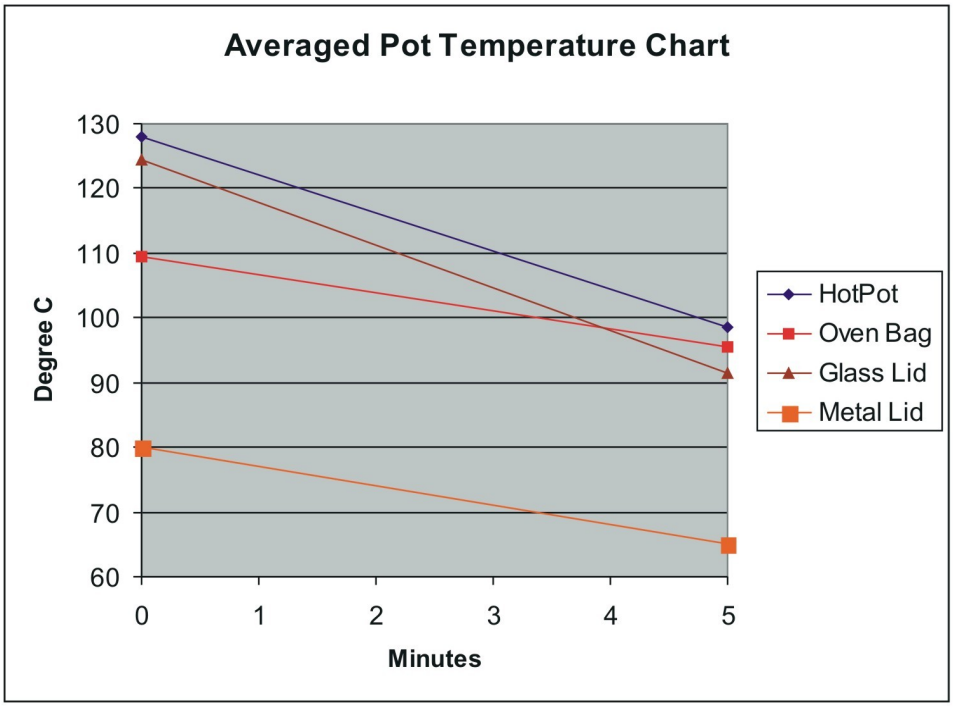
The above test data are meaningful only for the intended relative performance comparison purposes, and they are by no means indicative of the absolute heating and cooling rates for the various pot configurations.

Comparing the stagnation temperatures obtained from the tests, one can draw the conclusion that the 'HotPot' has the best heating rate, followed by the pot with a clear glass lid, then the pot with a metal lid plus oven bag and lastly the pot with a metal lid. The 'HotPot' came in with the best heating rate was to be expected because it has a clear glass lid and a better greenhouse enclosure. What was not expected was that the pot with a clear glass lid had outperformed the pot with a metal lid plus oven bag. The reasons could be due to:

- The metal lid had prevented sunlight from reaching the inside of the pot, where it mattered the most.
- The downward conduction and convection of heat, from the hot metal lid to the lower part of the pot, were not efficient.
- The amount of sunlight coming in from the top was significant, and this had helped to rapidly raise the temperature of the pot with the clear glass lid.

To determine the relative cooling rate of the pots, we will compare the slope of the temperature curve for the various pot configurations. A steeper slope means a faster cooling rate. In order to eliminate confusion due to too many curves, I have decided to use only the average temperatures to represent each of the four pot configurations, as shown in the chart below, for the comparison. From the chart, one could deduce that the pot with the oven bag cooled at the slowest rate, the 'HotPot' was next and followed very closely by the pot with a clear glass lid.

style="width: 481px; height: 356px;" src="http://webzoom.freewebs.com/sunnycooker/Average_Pot_Temperature_Chart.jpg" width="1158" border="0" height="985"



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The curve for the pot with a metal lid was at a much lower temperature range than the others. As such, it was not possible to make a direct comparison with the others using the slope method. However, the pot with the metal lid was expected to have the fastest cooling rate should its stagnation temperature were to be at a range comparable with the rest. The reason was due to the complete absence of a greenhouse enclosure for the pot with the metal lid.

The pot with the clear glass lid came in third because of the higher amount of convection heat

loss through its exposed side walls. We would also expect the amount of heat loss to be higher should a pot with a taller side walls was used.

Recommendations

Based on the test results, the 'HotPot' is the best overall pot configuration to use. However, from an economic standpoint, the followings are recommended for those who are using similar type of cooking pots with their 'CooKit':

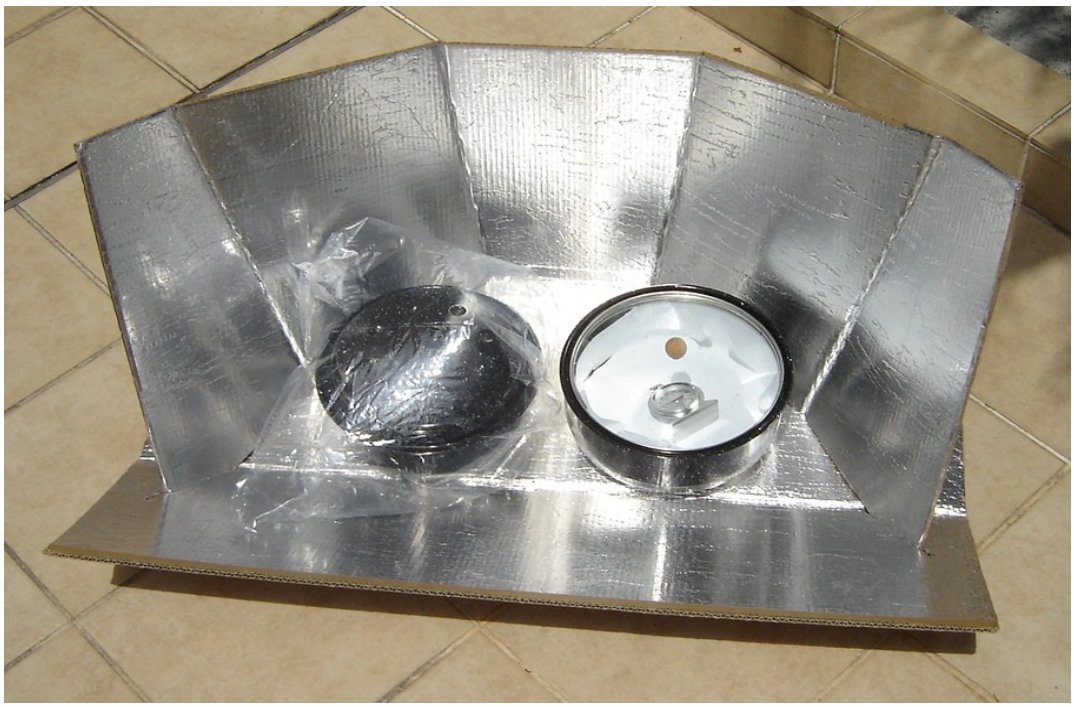
- The use of the heat-resistant oven bag and the metal lid can be replaced with a simple clear glass lid when cooking under good sunshine conditions. This would lead to a better performance as well as long term savings because the glass lid can be reused many times over.
- The heat-resistant oven bag can be saved for use, together with the clear glass lid, on days when the sunshine or wind conditions are not as perfect.

The other advantages of using a clear glass lid are:

- Food content and the cooking process can be observed with the lid on.
- Quick access for stirring of food if required.
- Easy visual confirmation of when the food is cooked.

The above tests were done under the tropical conditions in w:st="on"Singapore with the equipments that I have available. Perhaps similar tests can also be performed at other locations, where 'CooKits' are being used, to see if the local climatic conditions and equipments used would yield the same results and conclusions.

Photos



'CooKit' containing a pot with a metal lid and enclosed in an oven bag next to a 'HotPot'

‘CooKit’ containing a pot with a clear glass lid next to a pot with a metal lid and enclosed in an oven bag

Pot with a clear glass lid

'HotPot'

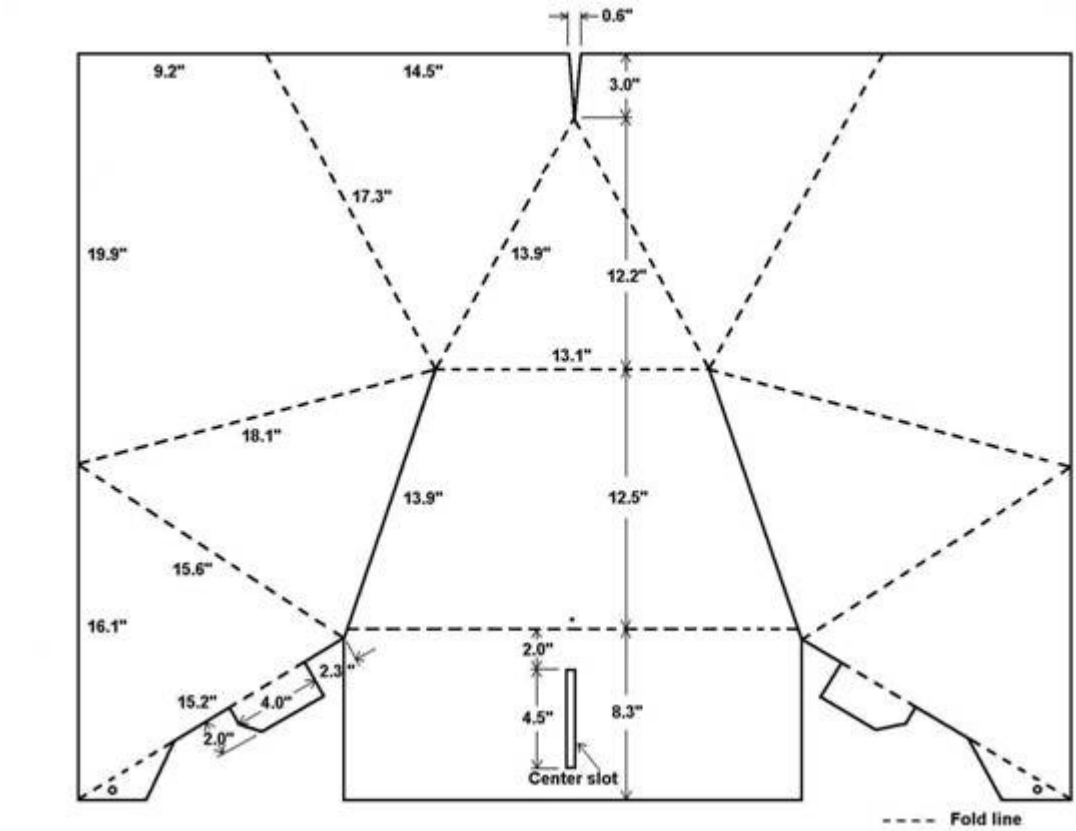
La Cuina de Doble Posició (DSPC)

Per Teong H. Tan

Quan jo vivia a Malàisia, un país molt proper a l'equador, la meva cuina "CooKit" perdia eficiència quan el sol estava massa alt. Resulta ser que l'altitud que atansa el sol entre els tròpics, durant l'estiu, és massa gran per a que una cuina solar amb el pannell fix funcione de manera correcta. La DSPC (Cuina de Doble Posició), ací descrita, està feta de manera que es redueix aquest efecte, mitjançant l'ús de dues posicions diferents, que milloren la concentració de raigs solars depenent de l'altitud del sol.

La DSPC pot fer-se a partir d'un full de cartró o una làmina de plàstic rígid que mesure 4' X 3', amb paper d'alumini per una de les cares (vegeu la DSPC de sota). La DSPC és barata i fàcil i ràpida de construir, i pot fabricar-se de manera massiva fàcilment.

Primer, dibuixeu el patró que hi ha a continuació sobre el cartró (les mesures estan en polsades). Talleu per on hi haja línies sòlides, i doblegueu per les línies puntejades. Assegureu-vos de doblegar bé per les línies, de manera que la cuina prenga la forma correcta quan la munteu. Feu el tall central de manera que càpiguen dues làmines de cartró juntes. A continuació, pegueu el paper d'alumini, i la cuina estarà llesta per usar-la.



Plànol de la DSPC

Per cuinar quan l'altitud del sol siga inferior als 65º, cadascun dels pannells triangulars a cada ala lateral de la DSPC són col·locats sota la base (vegeu la foto de la dreta). En aquesta posició, la DSPC funciona com una cuina "CooKit".

El pannell rectangular pot deixar-se tombat o bé alçar-se amb algun objecte petit, segons es desitge.

Per cuinar quan l'altitud del sol siga major als 60º, cadascun dels pannells triangulars abans esmentats, són col·locats sobre la base les dues pestanyes es ficaran al badall central del pannell rectangular, de manera que es manté la forma de la cuina, així la cuina és més eficient amb aquests pannells suplementaris (Imatge inferior).

Si es necessita, es poden lligar el pannells triangulars de manera que aquests queden més a prop l'un de l'altre.

Per cuinar, primer col·loqueu la DSPC segons l'altitud del sol, encareu-la al sol. Fiqueu els aliments en un recipient metàl·lic negre, i col·loqueu-lo dins una bossa per a forn o una vaixella amb tapadora de vidre. Poseu el recipient al mig de la base de la DSPC, alçant-la una mica (5 cm) del terra amb una reixeta, filferros encreuats o alguna cosa similar, açò fa que el pot puga escalfar-se per la part de baix com o fa pels costats i per dalt, millorant així els temps de cocció.

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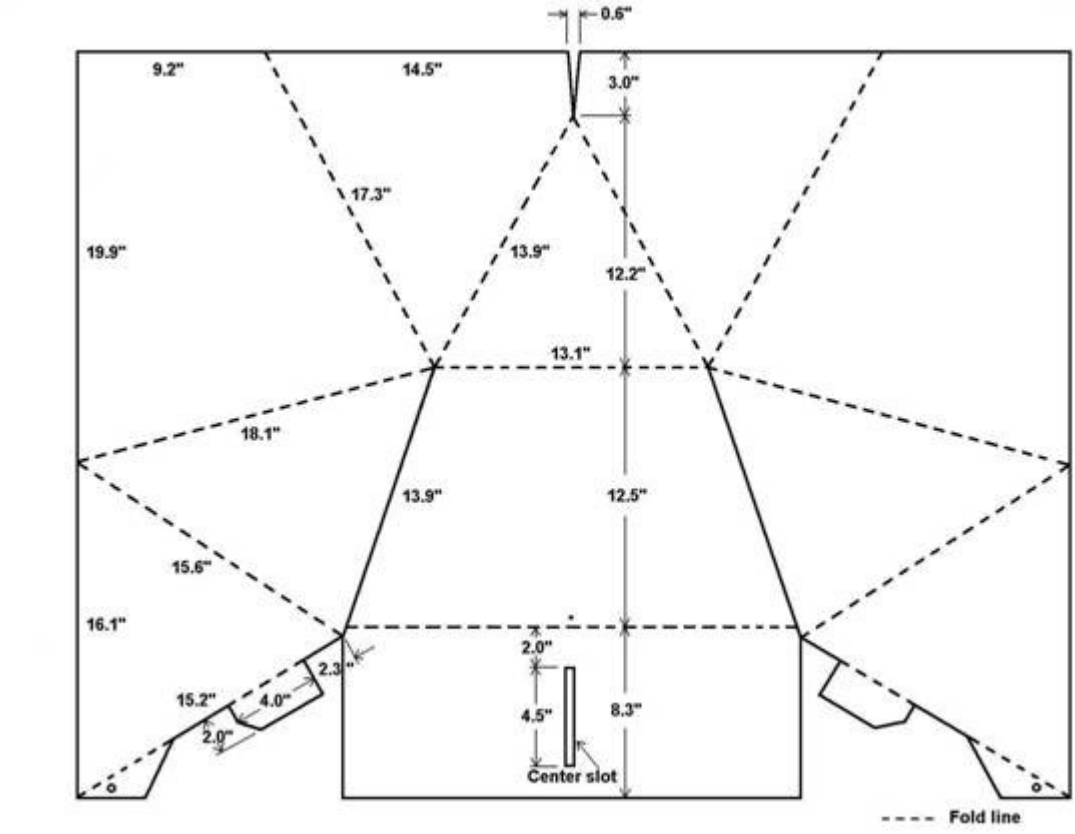

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Cuina Solar Cònica Instantània

He estat experimentant amb diversos models de cuines durant l'any anterior, per introduir en les comunitats indig
al sud de Mèxic, i m'he trobat una manera simple i molt pràctica de fer una cuina "portàtil" i instantània. Prenent
parabrisa (aquests elements que fan ombra, que es posen al parabrisa per què el cotxe no s'escalfe en donar-li el s
de paper d'alumini), podem convertir-lo en una cuina solar fàcilment de la manera que s'exposa ací:

Materials necessaris:

- Un reflector de parabrisa (d'aquests que comentàvem ab
- Una reixeta (com les que s'usen per als menjar calents, a
- 12 cm de Velcro
- Un recipient negre (o ben fosc)
- Un poal/cubell, cistella (o semblant)
- Una bossa per a forn.

1. Posa el reflector a terra amb la cara que no brilla cap amunt.
2. Talla el Velcro en tres trossos, cadascun d'aproximadament 4 cm.
3. Cus la meitat (una de les cares del Velcro) de cada tros, degudament espaiats, sobre la vora esquerra, així mateix, cus les altres meitats (les altres cares del Velcro), pel costat contrari en la vora de la dreta, de manera que en tancar el con, queden encarats (i s'enganxen, vegeu més avall) Nota: Vaig provar de cosir el Velcro a màquina, però el material reflectiu s'esguerra, per la força de la màquina en tirar del fil.
4. Enganxeu les cares del Velcro de manera que munteu el con, i fiqueu-lo en una galleda (poal) o cistell de plàstic.
5. Poseu un recipient negre (o fosc) a sobre de la reixeta dins una bossa de forn. Posarem la bossa per a forn manera que el recipient quede sobre la reixeta, que haurà d'aguantar-lo, perquè així els raigs solars pugue no disposem d'una reixeta d'aquest tipus, podem recórrer a la imaginació i emprar qualsevol andròmina q podem recórrer a muntar-nos la nostra pròpia reixeta amb filferro).

El con pot girar-se per seguir la trajectòria del sol.

Si fiquem una vareta de costat a costat del con, serà més estable front al vent (vegeu la imatge de sota)

Després de cuinar, simplement "enrotlla" la teva cuina i posa-hi gomes elàstiques per transportar-la i alçar-la més còmodament.

Trobe que aquesta cuina és molt simple i molt fàcil de fer, alhora que és molt pràctica, ja que és molt fàcil de transportar enlloc. Però a més, ha atansat temperatures majors en temps inferiors que altres models que he provat (sense contar la parabòlica), una mica més de 350º F. He cogut mongetes negres amb més o menys el mateix temps que en una cuina a gas; L'he usat per fer pa, "lasagna", galetes i tot tipus de verdures, i per depurar aigua. Els reflectors de parabrisa no estan disponibles arre gairebé totes les àrees urbanes, ja que n'he trobat ací al sud de Mèxic. El Velcro també és fàcil de trobar en botig reflector és de 3 Dòlars, el Velcro costa aproximadament 0'25 Dòlars (més o menys, el mateix costaria en Euros)

Kathy Dahl-Bredine
Apdo. 1332
Oaxaca, OAX 68000

kpdbmx@gmail.com

N del T.: Els reflectors de parabrisa són aquells accessoris d'automòbil que s'empren per fer ombra a l'interior del cotxe que tenen una de les seves cares brillants, com folrades d'alumini.

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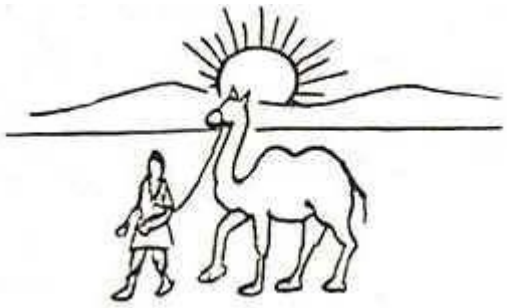
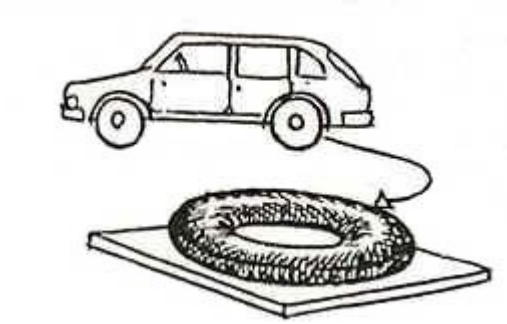
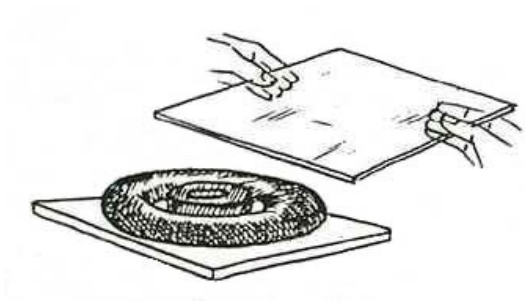
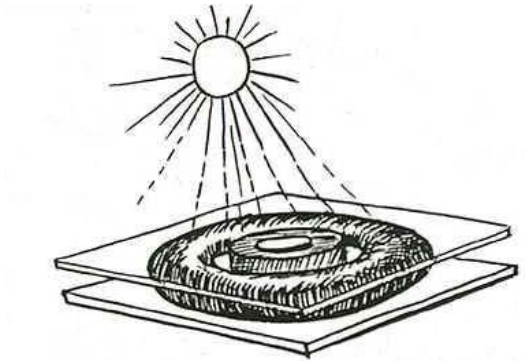
La Cuina Solar Pneumàtica

Aquesta cuina ha estat dissenyada per Suresh Vaidyarajan - un arquitecte, qui ha trobat una manera simple per un problema prou greu. Durant l'últim any ha estat cuinant el seu menjar. Aquesta cuina és la més simple de les que hem vist fins ara.

	1. Hi ha una tremenda manca de llenya, querosè i altres combustibles per cuinar. Però, per què no podem utilitzar l'inesgotable energia del sol per cuinar?
	2. Prenem un pneumàtic vell d'un automòbil. Si el pneumàtic està punxat l'apedacem. Inflem el pneumàtic i el posem a sobre d'una taula de fusta.

	3. Prenem una olla o perol d'alumini amb tapadora. El pintem de negre per la banda de fora. Posem tots els ingredients per cuinar allò que vulguem.
	4. Posem el perol a dintre del pneumàtic i cobrim aquest amb una peça de vidre plana.
	5. Què ocorre? L'espai a dintre del pneumàtic és una cavitat tancada, que, en rebre la llum del sol l'acumula. Poc a poc, l'espai s'escalfa escalfant així els aliments a l'interior del perol.

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