

**PACKAGING DESIGN
FOR
PHILIPS CFL 14W BULB**

-URSULA UDAY

Ursula

1. SECONDARY RESEARCH

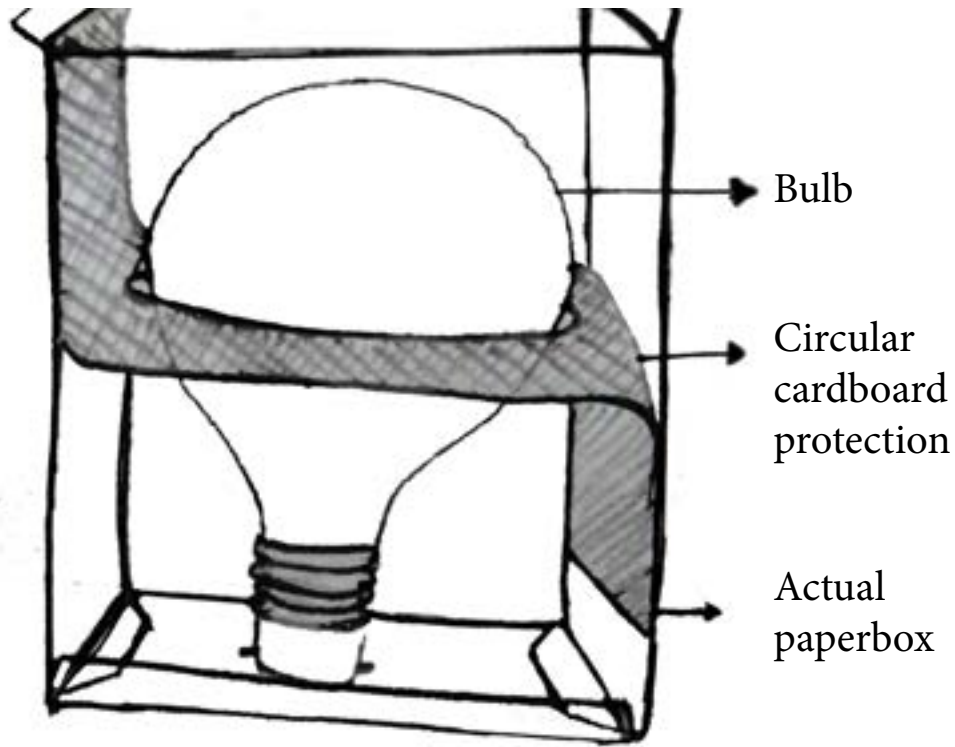


REFERENCE:

- a. <http://fcapackaging.com/solutions/>
- b. <http://www.unisourceworldwide.com/solutions/Packaging/Pages/packaging-solutions.aspx> <http://www.ernestpackaging.com/solutions-and-products/>
- c. <https://www.google.co.in/search?q=light+bulb+packaging+template&biw=1349&bih=618&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKewjM-sDkmqzPAhWDIROKHUID-CEAOsAOIGg&dpr=1>
- d. <https://www.google.co.in/search?q=tiffin+box&respv=2&biw=1349&bih=618&source=lnms&tbm=isch&sa=X&ved=0ahUKewjM-7iVnKzPAhWCXROKHbvZDHkO AUIBigB>
- e. <http://www.thekitchn.com/plasticfree-lunch-boxes-113751>
- f. <http://electronicsb2b.efytimes.com/eb-specials/top-10-led-bulb-brands-india/>



SUSTAINABLE PACKAGING FOR LIGHT BULBS



PACKAGING OF LIGHT BULBS

In my personal experience I haven't come across a safe packaging for light bulbs. The safe inner packaging shown in the sketch, are only observed for expensive light bulbs, that you don't get under Rs. 400.

The inner cardboard securing the light bulb is still flimsy.

The existing thin outer cardboard packaging is made to fulfil 'use and throw' purpose, as its disposed off immediately after taking the light bulb out.



PRODUCT/PACKAGING: TIFFINS

Tiffins are available in materials like plastic, stainless steel, wood (bento box), etc. Each tiffin can only carry certain items and still risk leaking oils or curry etc.

Tupperwares are used to carry liquids.

Design for securing the tiffin using rubber stoppers and locking system is usually available. But there is no all-in- use tiffin that can carry most of the things. Many times, office users need to carry many tiffins to carry their food items. It becomes an inconvenience when they carry them in such a scattered manner.

2. PRODUCT SPECIFICATIONS

I HAVE CHOSEN TO IDEATE FOR PACKAGING LIGHT BULBS AS MY PROJECT? WHY?

As mentioned in the previous slide descriptions, packaging for tiffins is quite vague idea and I find more opportunities to ideate packaging for light bulbs. There seems to be a greater challenge to create a packaging for light bulbs which is sustainable, aesthetically appealing and that can be reused for other purposes after its traditional use at purchase. Packaging for light bulbs in foreign countries have already developed, so I would like to ideate one that seems cost effective, sustainable and that can be used qualitatively after its initial use.

- **I CHOSE PHILIPS ESSENTIAL(14W) BULB AS THE PRODUCT. IT HAS A BOX PACKAGING.**
- **THE BULB HAS ONE YEAR WARRANTY.**
- **THE BULB COSTS Rs. 170/-**
- **CAUTION NOTE (WRITTEN ON THE BOX):**
The lamp contains a small quantity of mercury and can be harmful if mishandled. Please ensure safe and proper disposal of it. One must hold at the socket and not the lamp/bulb part.
Bulb isn't suitable for dimmers or electronic switches or remote controls nor in enclosed fixtures.

REFERENCE:

- <http://www.ledlightsinindia.com/information/indian-led-bulbs-comparison>
- http://www.lighting.philips.co.in/prof/lamps/led-lamps-and-systems/led-lamps#pfpath=0-EP01_GR-EP01LSSL_CA



3. RESEARCH AND INSIGHTS



I PURCHASED A PHILIPS ESSENTIAL (14W) BULB FROM *JAGADAMBA ELECTRICALS*. A ELECTRIC/HARDWARE STORE CLOSE TO *MANSI STATIONARIES* NEAR N5 SRISHTI CAMPUS.



DATA RECEIVED ON THE PRODUCT AND ITS PACKAGING (INTERVIEWING THE SHOP OWNER AND CUSTOMERS):

- Fine with the box, has a circular cardboard layer around the bulb. (Maybe if the box could have two layers surrounding the bulb to secure it)
- Box is flimsy. Risk of breaking within. If not sealed properly, risk of slipping out of the box. Have to be careful while carrying the box.
- People buy bulbs and instantaneously use it, they don't contemplate on the design or reuse of the box. The box serves us use and throw purpose.
- There should be signs or symbols signifying to handle the bulb and its packaging carefully.
- 8W bulb(not durable, may burst out on a short circuit)-wwwRs. 20. People don't buy this as they want a durable one.
- 14W bulb(one rear warranty; durable; people usually buy this; energy saving; Rs. 150-Philips essential)
- Risk of breaking if it falls down; the shop owner asked me to keep the bulb in the backpack rather than carrying in hand.
- Above Rs.300 bulbs have circular cardboard packaging inside the box.
- Different brands of bulbs were stacked on different shelves in the electronic shop.

4. DEFINING YOUR TARGET USER AND THEIR AGE GROUP AND DESIGN PACKAGING AIM

Frequent buyers: People aged 35 above

Teens or students buy cheaper dim lights rather than the bulb

Locals and residents of Yelahanka are regular customers of this brand.

TARGET AGE GROUP CHOSEN:

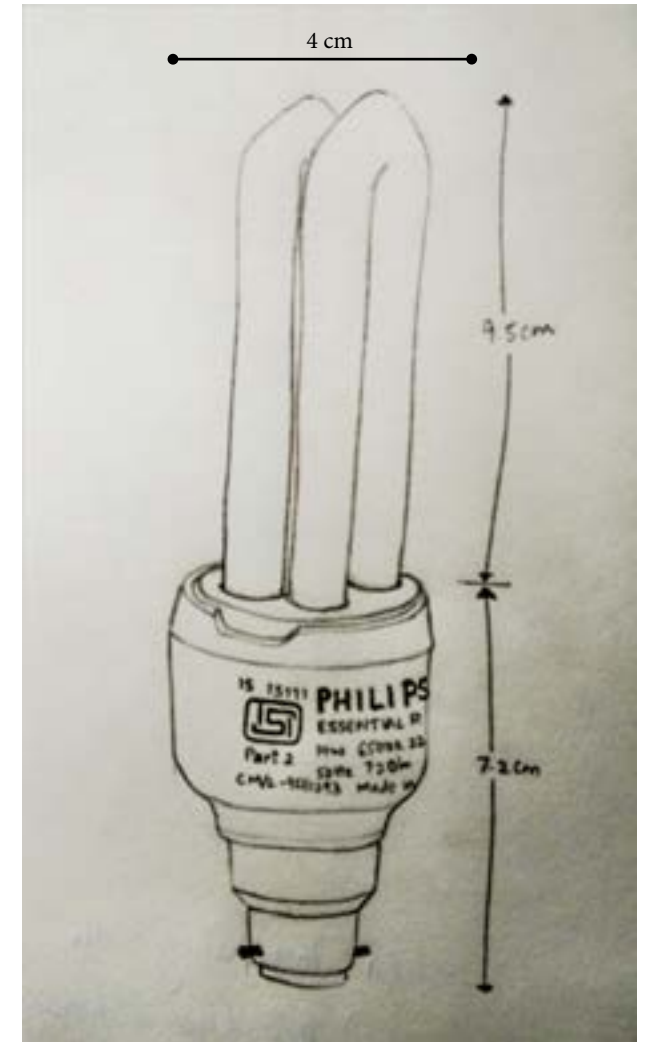
40-65 years (gender non-specific)

DESIGN PACKAGING AIM:

Durable, recyclable material, sturdiness, sustainable, reuse or secondary use, aesthetics,

MATERIALS:

Bamboo stalk/strands-weaving, recyclable paper, paperboard, HDPE and PET plastic, etc.



5. IDEA GENERATION

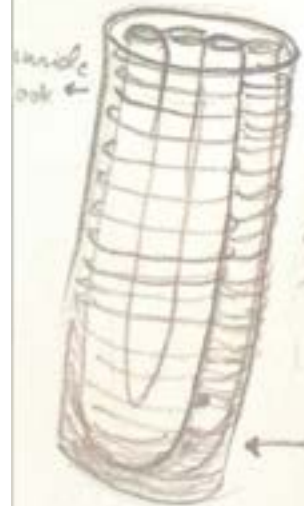
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→ outer look

Pouch made by bamboo fibres / thin strands fitting in the filament

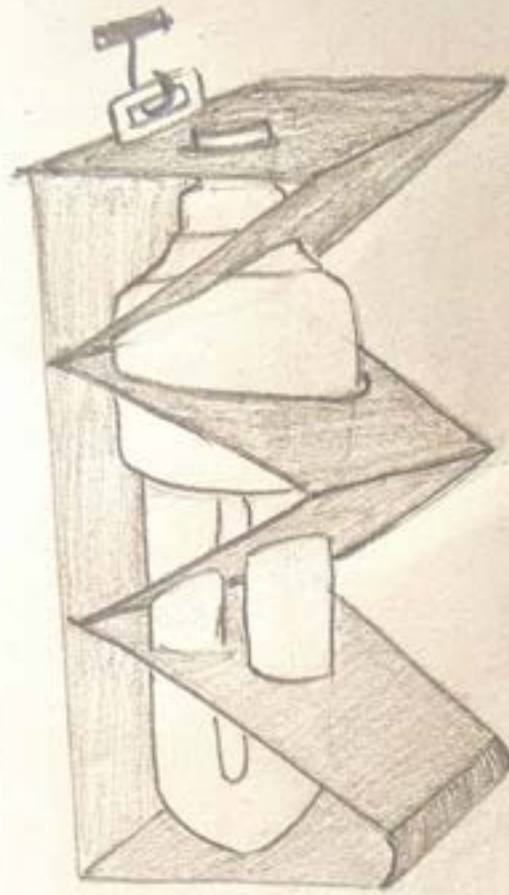
(illuminating portion).
Not giving it space to move.



← inside look

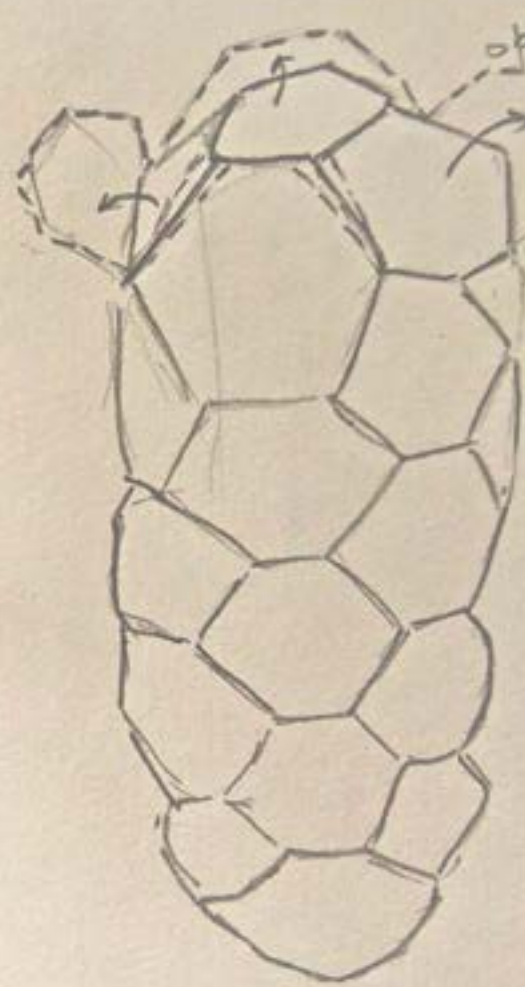
← inspiration: bird nest

②



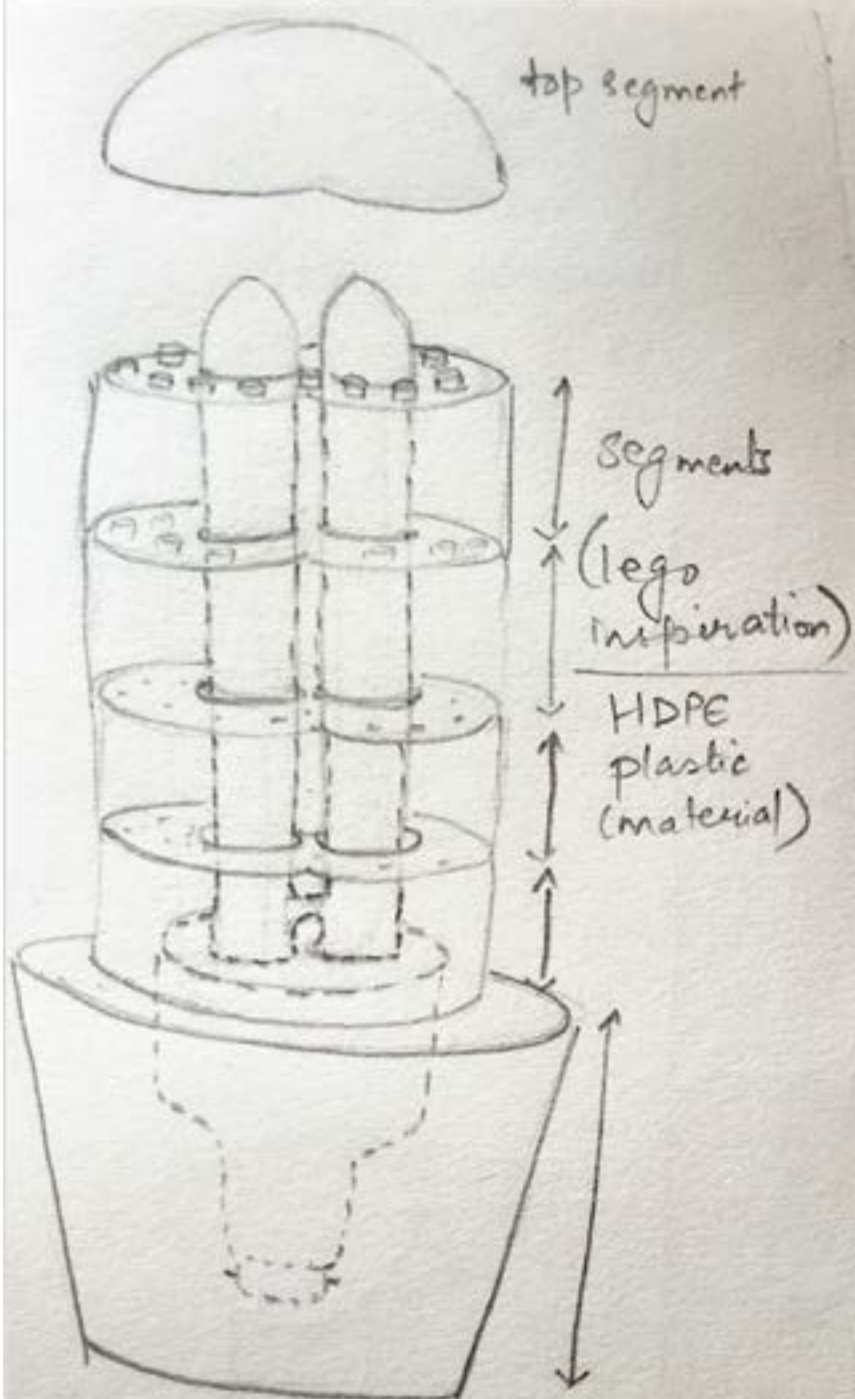
material: cardboard
housse: carrying hanger

③

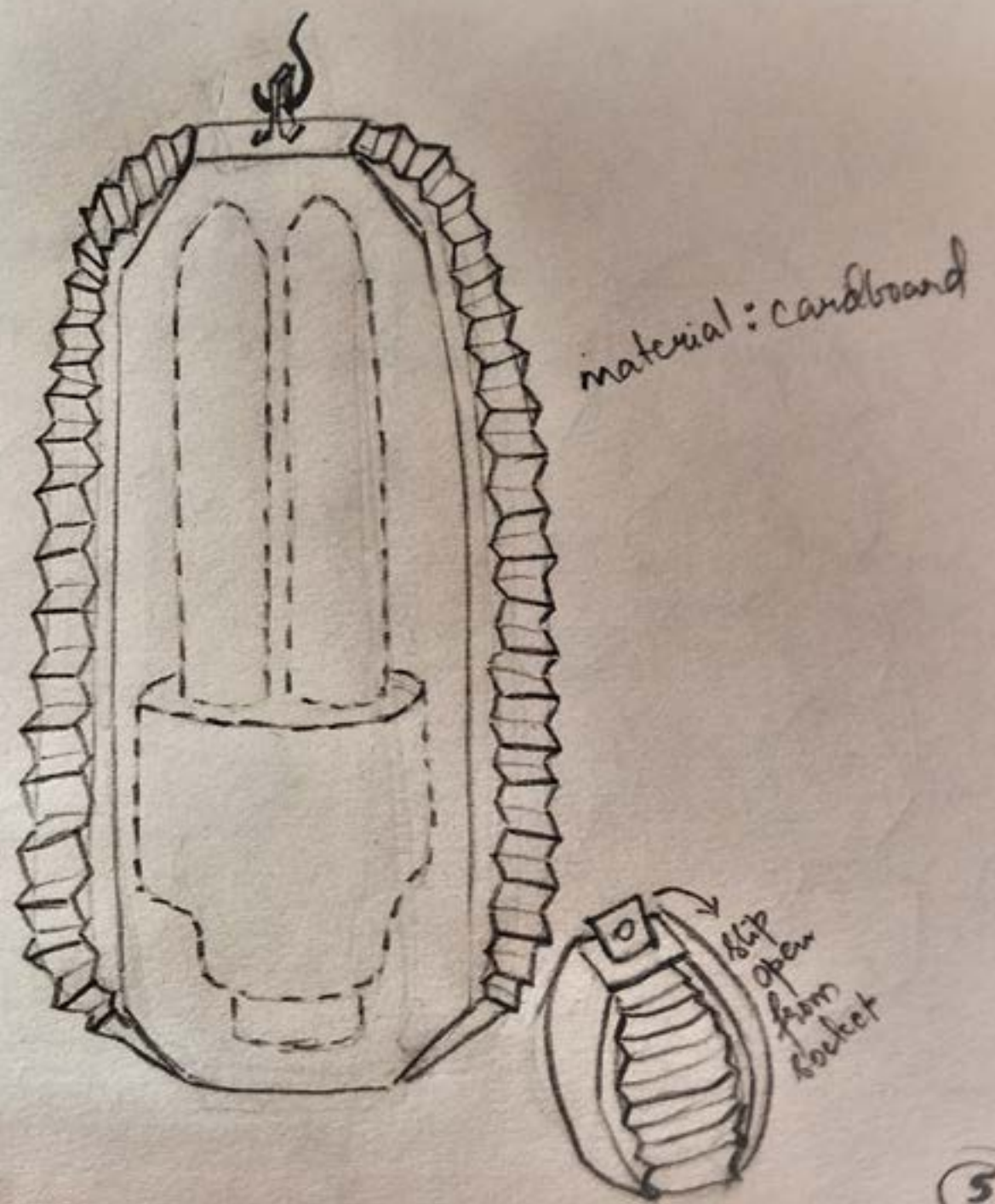


opening to pull out bulb

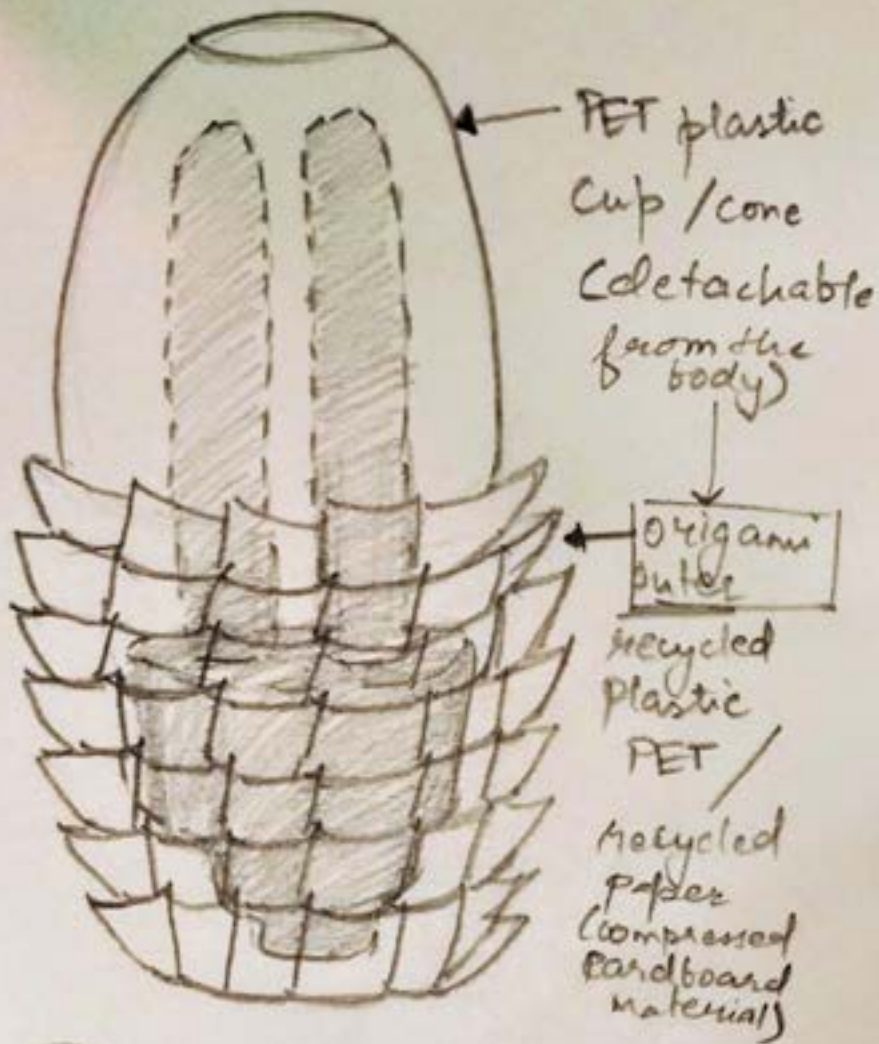
(hollow case made from mount board)



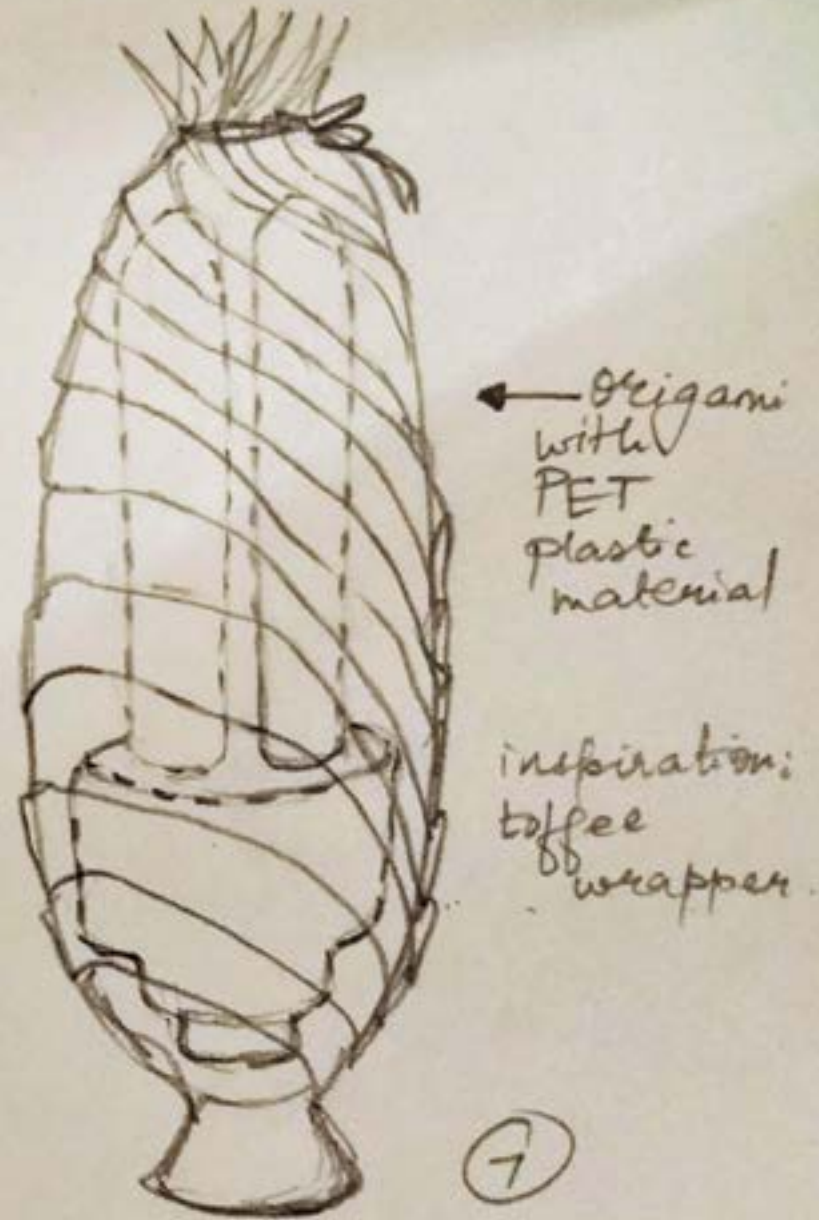
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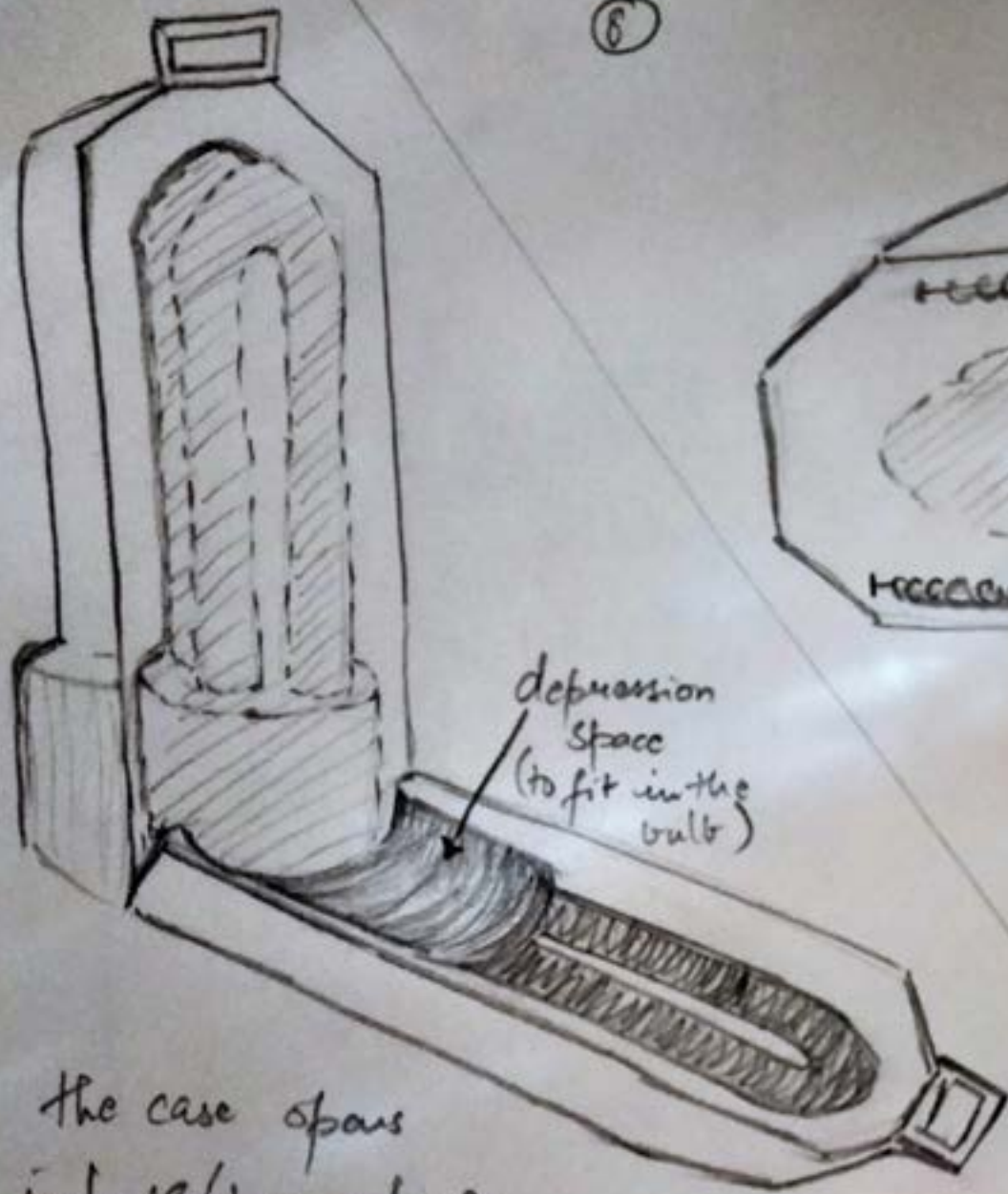


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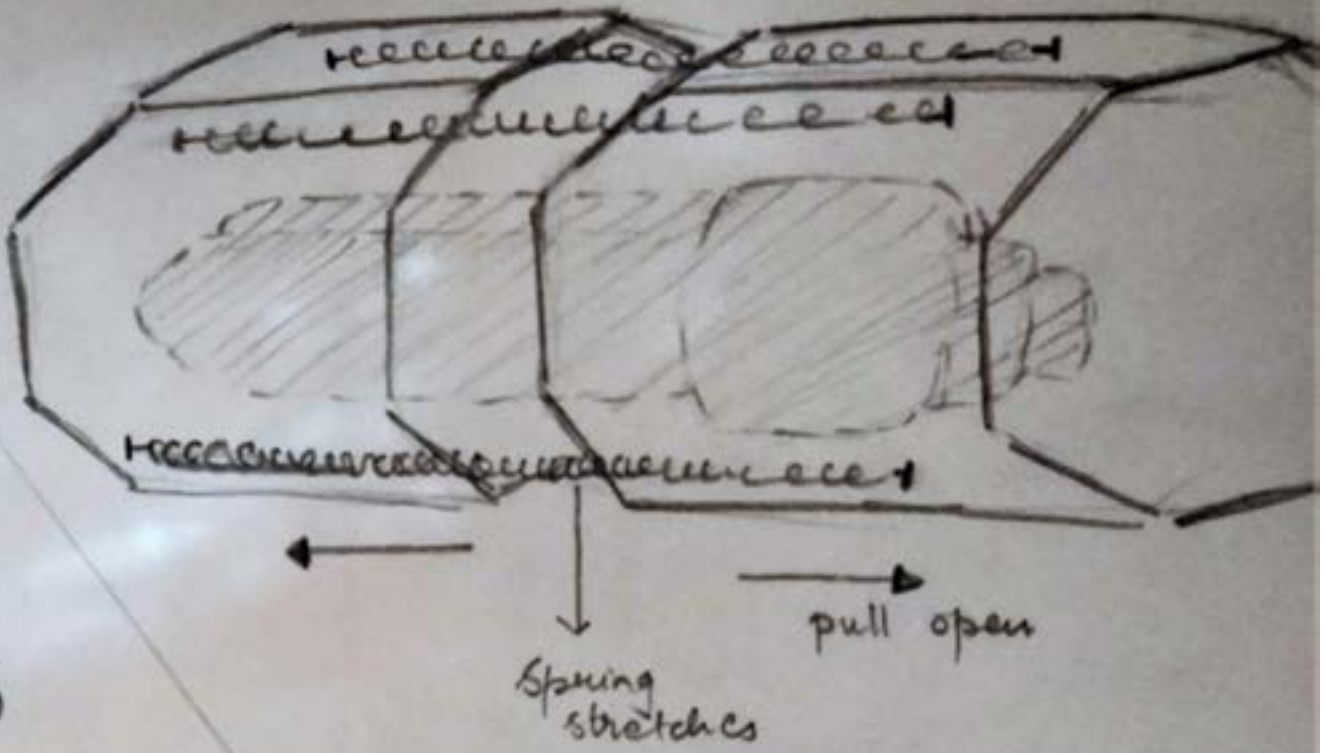
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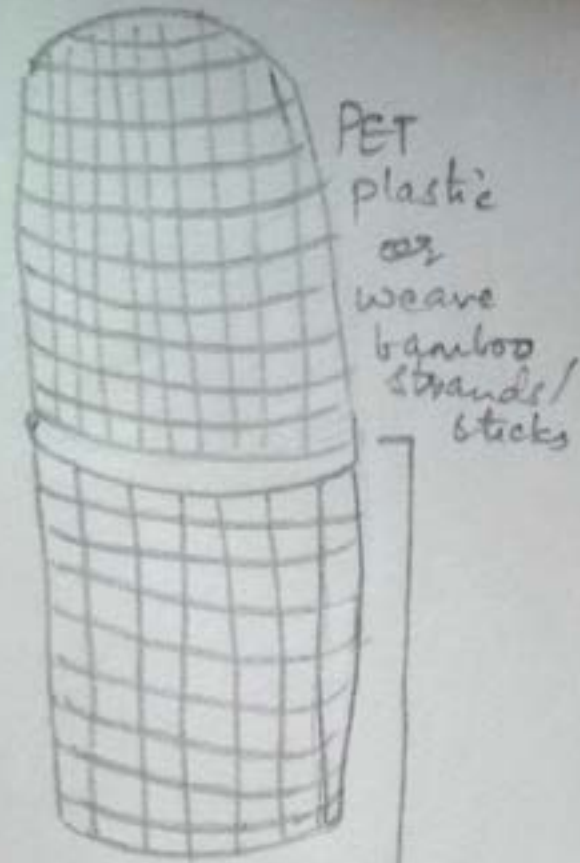


the case opens
in half (has a hinge
at the bottom)
- works like a suitcase

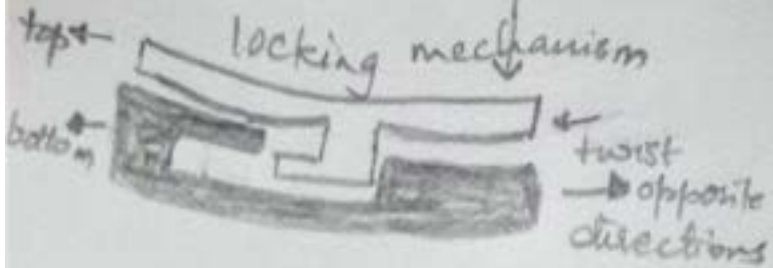
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PET plastic: material



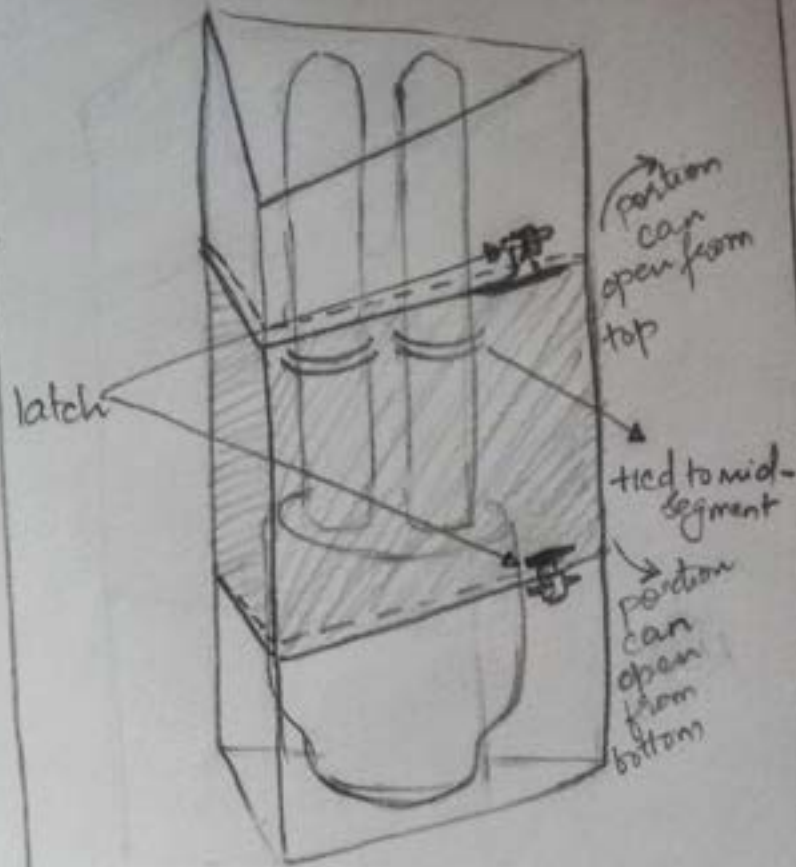
PET plastic
or
weave
bamboo
strands/
sticks



locking mechanism

twist
→ opposite
directions

10



latch

portion
can
open
from
top

tied to mid-
segment

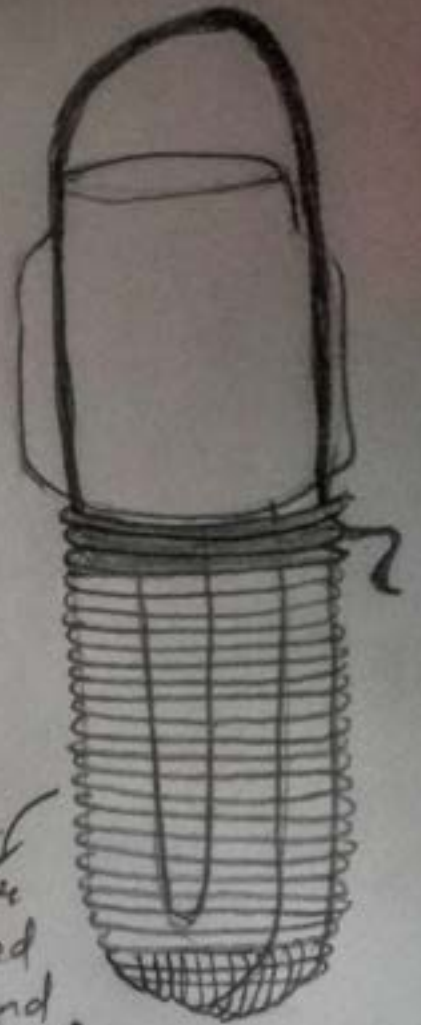
portion
can
open
from
bottom



mechanism

11

material: recycled paper

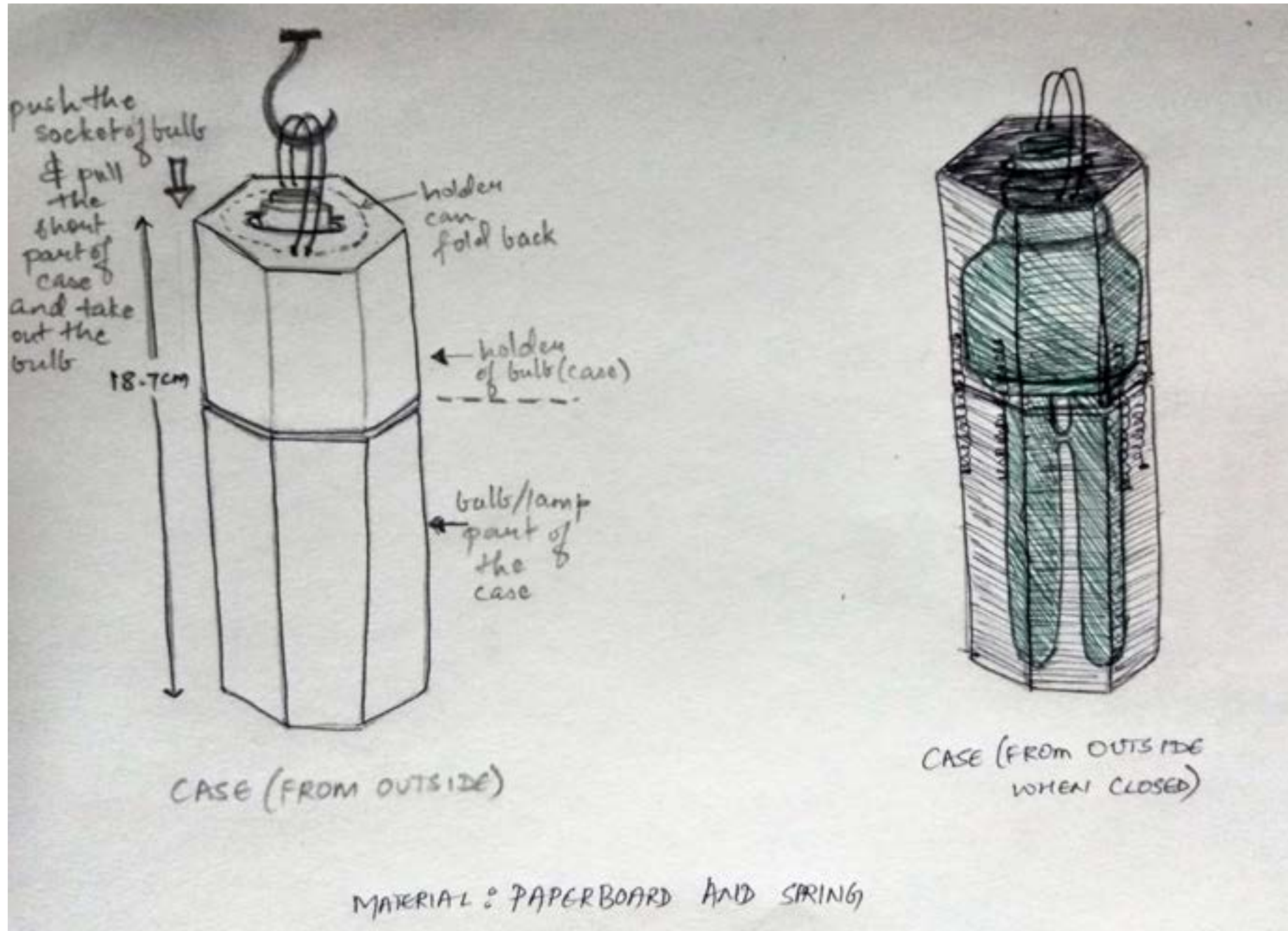


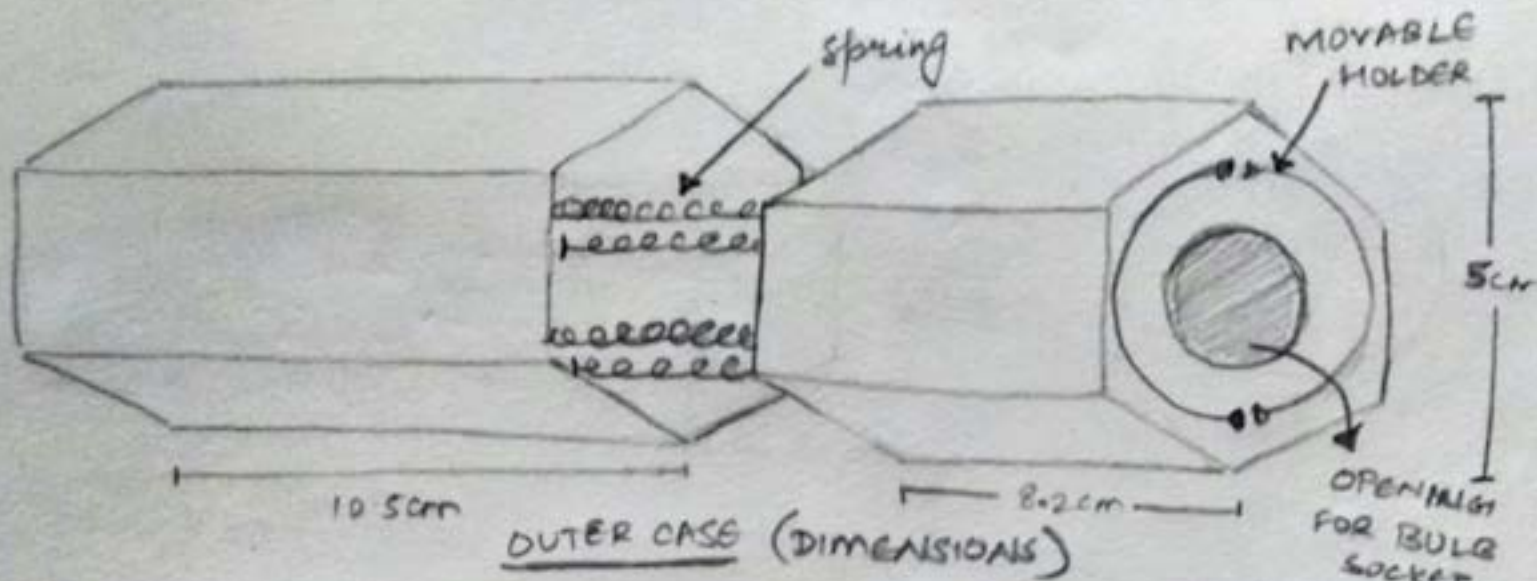
wire
(coiled
around
the bulb)

after uncoiling, the
can can be used
for other purposes

12

6. FINAL CONCEPT (THE 6TH ITERATION)

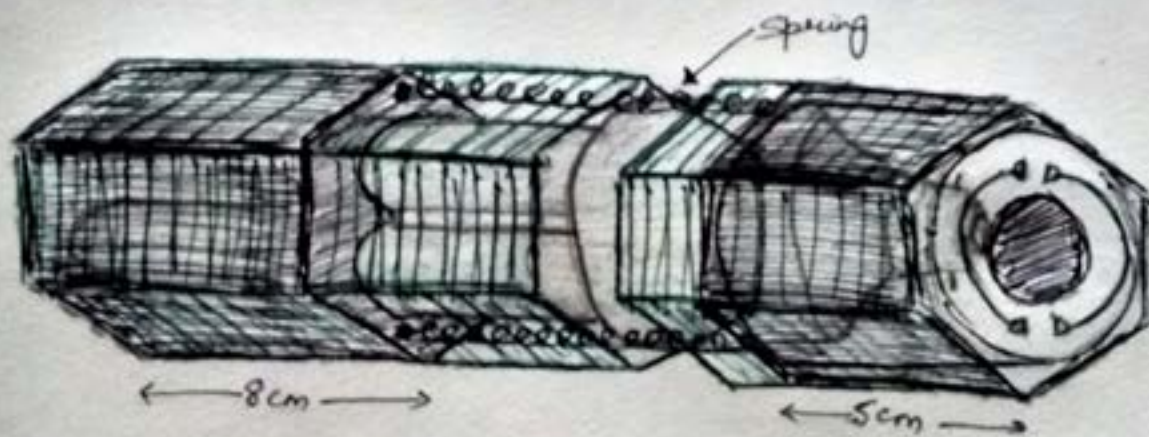




- Four springs are attached on one pair of parallel sides

- User must push in the bulb socket and pull the shorter (holder) part of the case. The case will stretch enough and one can take out the bulb.

(must push in the bulb before opening)



- → case (outer)
- → inner socket
- → bulb fitted in

6. FEEDBACK

- People asked if this was cost effective and which material is used? And whether the addition of spring increases the cost?

Paperboard is recyclable and the packaging is designed to be reused again in a form of storage-object. Addition of springs don't increase the cost as even the smallest object like a five rupees pen has a spring in it.

- They also asked whether they are supposed to store this packaging as before the packaging of bulb can be thrown?

I answered that it depends on the user that if one feels the need that it can be used again then they are free to use it or else dispose it. Since its is made of a recyclable material its adding to sustainability.