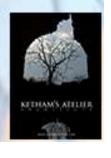
# INTERNATIONAL COMPETITION TO DESIGN AN INNOVATIVE FURNITURE FOR NEGLECTED COMMUNITIES IN INDIA & AFRICA 2020

# RESULTS





We've had an overwhelming response and some great ideas from participants across the globe who had taken part in competition - an innovative furniture design for neglected communities in India and Africa.

This shows humane efforts of designers to provide better opportunity to the people to lead comfortable life. The deeper thinking and understanding the brief of competition by the participants is commendable and the innovative solutions / approaches are a welcome sign for a better future. While acknowledging all the participants, we are happy to announce the results of international competition 2020.

Congratulations to the winners and special mentions. It was a tough task for jury to come on consensus, however combination of critical review and appraisal by the jury has resulted in the following as winners.





## WINNERS

FIRST PLACE: INCDFIA829 (Atlas) Louie Harvey-London

SECOND PLACE: INCDFIA202 (Turniture) Bijan Damavandi-USA

THIRD PLACE: INCDFIA189 (office donkey) Liang Tung chen-Taiwan

## SPECIAL MENTIONS

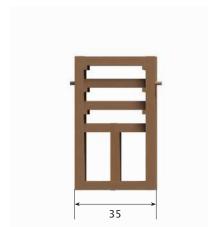
INCDFIA348 (Accordion) Ari Choe-USA
INCDFIA707 (Place) Joe Barfield-UK
INCDFIA603 (Arca) Ruth Spitzer-Canada

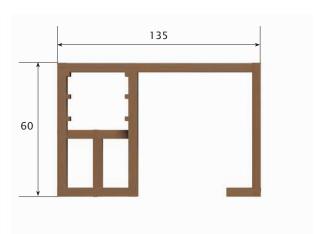


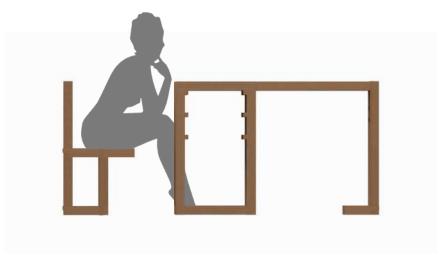




NO. INCDFIA829 Designed to improve homes situated in Slums.







SIMPLE

**ADAPTABLE** 

**FUNCTIONAL FURNITURE** 

## FIRST PLACE

## **ABOUT**

The goal of the project is to improve the quality of life in slums where homes are much smaller.

When it comes to slum living, it's difficult to design a product that is useful for everyone; design a chair and they might have no table to sit at, or design a table and they might have no chair to sit on.

Practicality is paramount.

That is why I designed ATLAS to function not only as a table, but to function however the owner sees fit. It can be a bedside table with shelves, or it can triple its length and become a cooking station.

Being VERSATILE maximises its potential to be useful in any household.

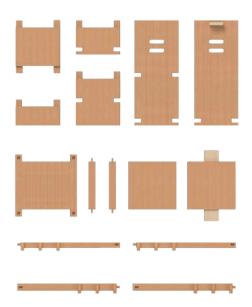


ATLAS is 35x35x60cm when collapsed, and 135x35x60cm when expanded.

The shelf sticks out and creates a handle to lift the table easier.

The bottom "T - Shelf" slides out to become the chair.

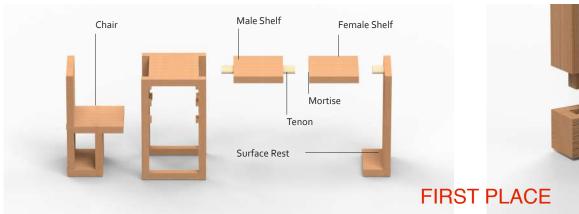
The Table is made out of pine - a readily available RENEWABLE resource. It also creates a sturdy table.



### **EXPANSION**

The image below is an exploded view of the table. As you can see, the chair slides out from the side, and the surface rest is pulled out on the other side. Once this is done the shelves are able to slide out and slot together using mortise and tenon joints for rigidity.

This process is EASYTO DO and enables the product to be purely SIMPLE.



#### **ASSEMBLY**

ATLAS uses strong - friction fit wood joints and NO SCREWS . This means it can be assembled in the house without special tools which may not be available in some households.



### FLAT PACK

Because of its simple assembly, it is possible to transport ATLAS disassembled to the home - which is ideal since it makes long distance travel easier for the customer. It also makes it easier to walk through tight spaces which are a common occurrence in slums.

The image above is the collection of parts used to make the table.

Below is an example of a cloth carry bag with ATLAS in

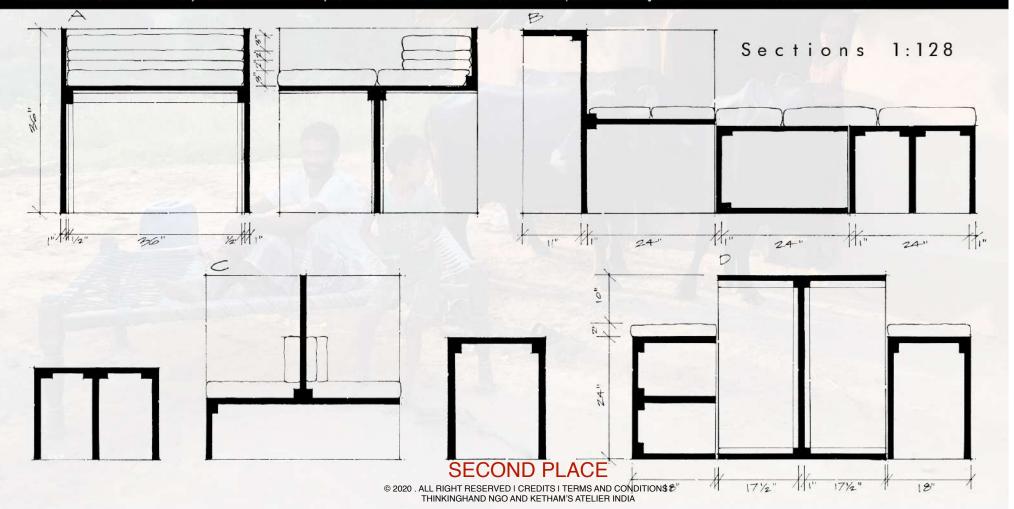


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## INNOVATIVE FURNITURE FOR NEGLECTED COMMUNITIES IN INDIA & AFRICA

Many communities in India and Africa are faced with severe poverty, small living spaces, and waste. By developing a sustainable furniture design. I hope to help these underdeveloped communities. My design will utilize two materials that often end up in landfills causing pollution and waste. The first material is left over waste from construction sites that can be upcycled. This includes oriented stranded board, bamboo matt board, or plywood that will be fastened with glue, hammer and nails. The material should be at least % inch thick, so it is strong enough to build and support the furniture design. The second material is made from old textiles. I chose textiles because "fast fashion" is one of the world's largest pollutants. Although used clothes from all over the world are sent to India to be repurposed, many still end up in landfills. I also chose to use textiles in my design to provide comfort. I wanted something soft that could be layered to provide a place to sleep and a cushion for sitting.

This piece is called "TURNiture" and the design is a 36" x 36" cube. The furniture piece transforms into multiple different configurations; a lounge chair, table/desk, child workstations with two benches, a bed, and storage. The most compact configuration forms a large chair with two storage drawers hidden away when not needed. The cushions are quilted from used clothing and textile scraps and stuffed with upcycled denim insulation material. This denim insulation is flat and when stacked will provide a comfortable seat cushion or bed pad. The large chair position will be called Position "A" and when turned on any of its sides it becomes a different piece of furniture for a different function. The two drawers may be used as storage containers or seats and although have the same dimensions the openings are positioned on different sides to give more flexibility. These drawers are designed to slide underneath Position "A". When these drawers are turned upside down or on their sides, they become seats for different activities. When these drawers are pulled out there is a small height difference due to the thickness of the reclaimed wood material. The 5 rectangular cushions have two different thicknesses to address this and ensure a level formation when converted into a bed. When you rotate Position "A" forward 90 degrees you have a seat that is 18" high with one small work station behind the chair. The drawers can be positioned on their smaller side in front of this seat to form a bed. This will be called Position "B". When you turn Position "B" 90 degrees to the left side or the right side it becomes a table or desk and the drawers become seats. This will be called Position "C".





Poverty is the worst form of violence. -Mahatma Gandhi



**USP**: Multi-purpose and multi-storage

LIANG-TUNG CHEN



#### CONCEPT

During the COVID-19 outbreak, the school chooses to adopt online teaching methods for class, and I go back to my country. In these months, I feel inconvenient when I working my homework because my desk hasn't storage space.

So, I take inspiration by this situation, I wanted to design the new donkey for the office space, which would stockpile some notebooks, magazines, books, and painting tools.

For someone also need more storage space and increase practicality.

My concept of office donkey is simple and functional and also because I would like to use it. If people have this office donkey, it could make the office place have more storage, and at the same time could also change the workplace at home.

From the close storage element, I wanted to hideaway the sundries to reduce the sense of clutter, like pens or other stationery.

I used eco-friendly materials is corrugated board to created my concept prototype.











I'm researched some eco-friendly materials to use in the furniture such as corrugated board, HiREK® this material made in Italy, and exclusive patent of Abaco SrI, the other one is Recycled PP.

#### [ Materials 1 : Textile Wastes]

There are 2 major materials I want to use to create the Accordion, which is textile wastes and leftover cork from wine bottles.

Every year, there are more than 1000 million clothes being made, consumers throw away 70 pounds of clothing, and 13 million tons of wastes are being made. To make 1 cotton t-shirt, 2700 L of water is used, which is enough for 1 person to use it for 3 years. The cotton farm is causing desertification all around the world such as the Aral Sea.

## [ Mobility ]

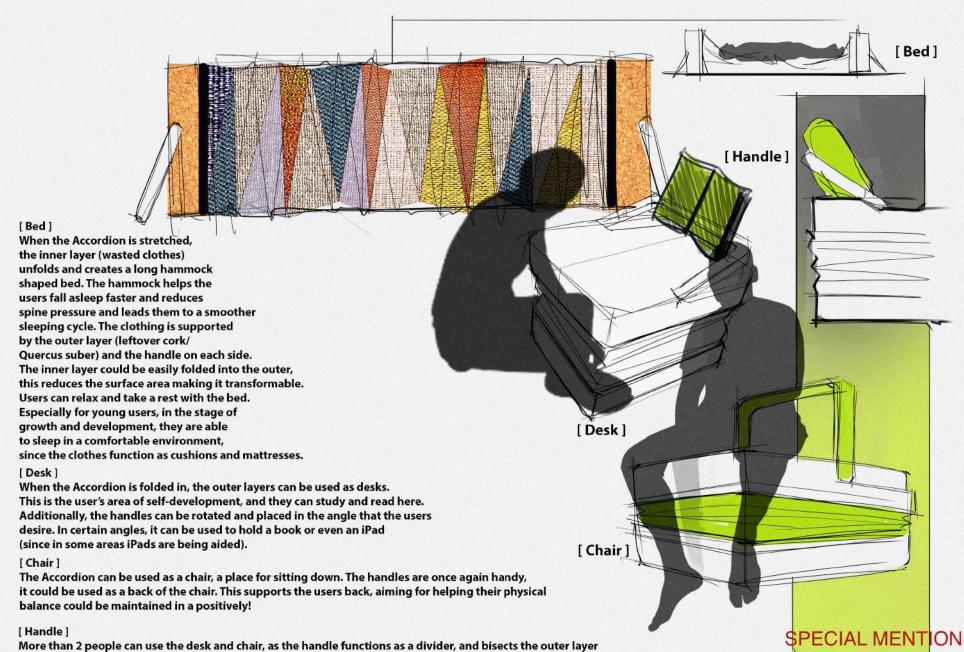
It is easily transportable, because of the 2 handles on both sides. Users can hold both of the handle and carry it together, or a single user could hold it with just one handle. Since it is made of clothes and corks, it is light. Users can carry the Accordion without trouble, regardless of age or gender.

#### [ Materials 2 : Cork]

Also, a lot of people drink wine, and with the wine, follows a cork. I believe cork is one of the common materials which is light and able to maintain the weight and pressure. By reusing the materials that are light, simple, and common material, this design could create the Accordion, furniture that needs to be shared with all people and communities in need.

SPECIAL MENTION

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into 2 parts. Also, young user's books can be stored, when the books are piled together, the handle can hold them together firmly. © 2020. ALL RIGHT RESERVED I CREDITS I TERMS AND CONDITION THINKINGHAND NGO AND KETHAM'S ATELIER INDIA

# INCDFIA707 Joe Barfield

Materials:

Netting/ mesh - Gathered materials/ strong woven (fishing net or similar)

Frame colour is optional - the coloured nets could be warm and playful.

Side panels/ frame - Recycled lightweight plastic (moulded 50mm sheets)

Main frame and support - whichever is better suited ( could use a less strong material if there are more supports) lightweight metal

Place to sit.

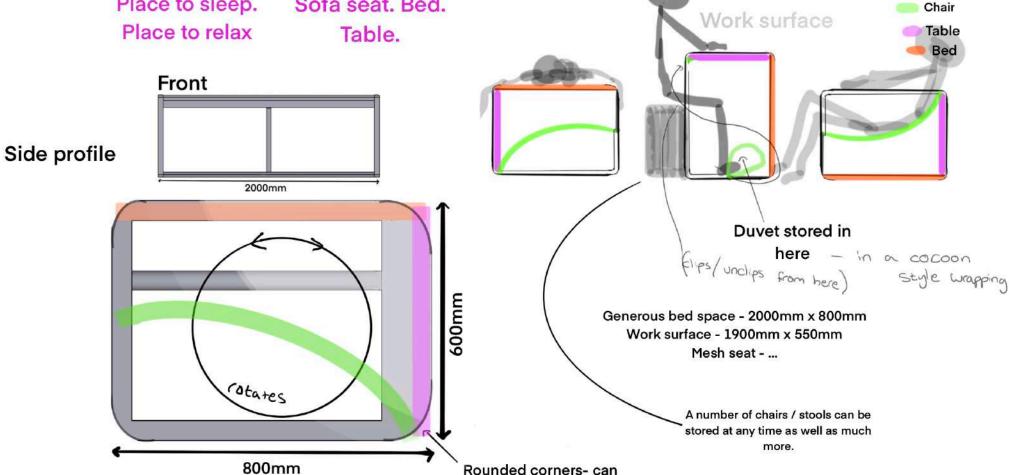
Place to study.

Place to work.

Place to eat.

Place to sleep.

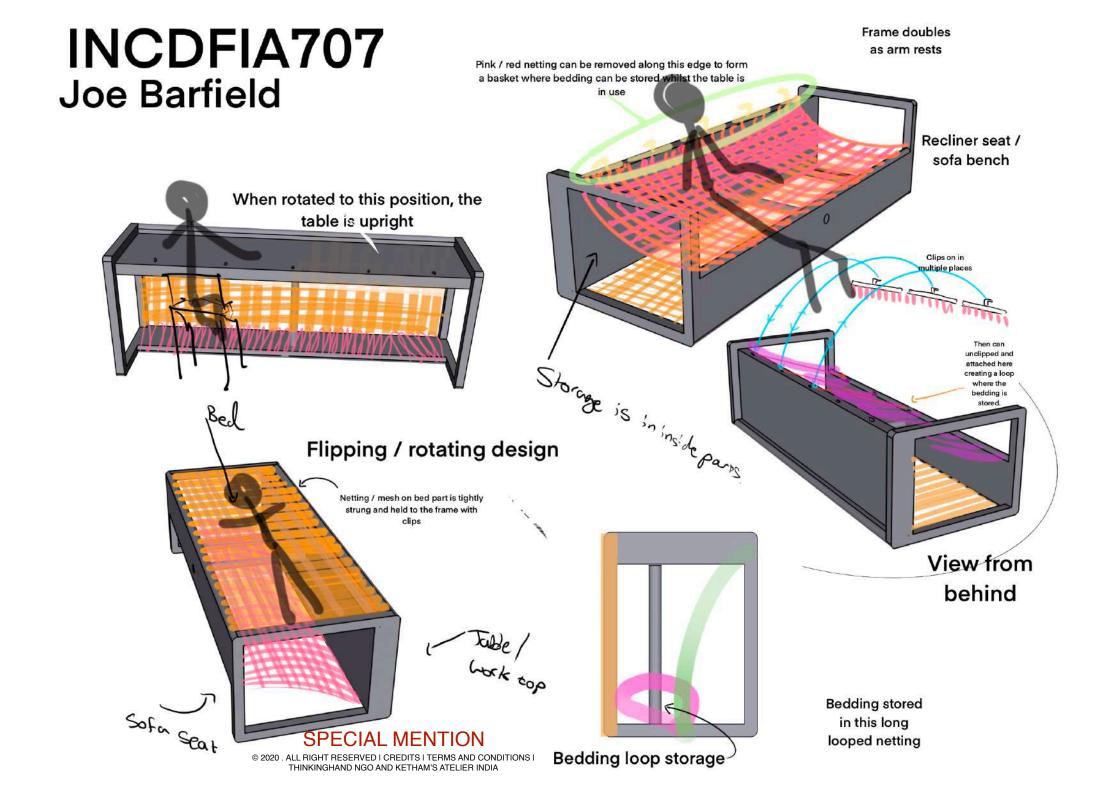
Sofa seat. Bed.



easily be turned on side

Simple design. No moving parts. Only 1 detaching part. No hazards.

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Object: Furniture

Title: 'Arca'

Date: 09. July 2020

Materials and Techniques:

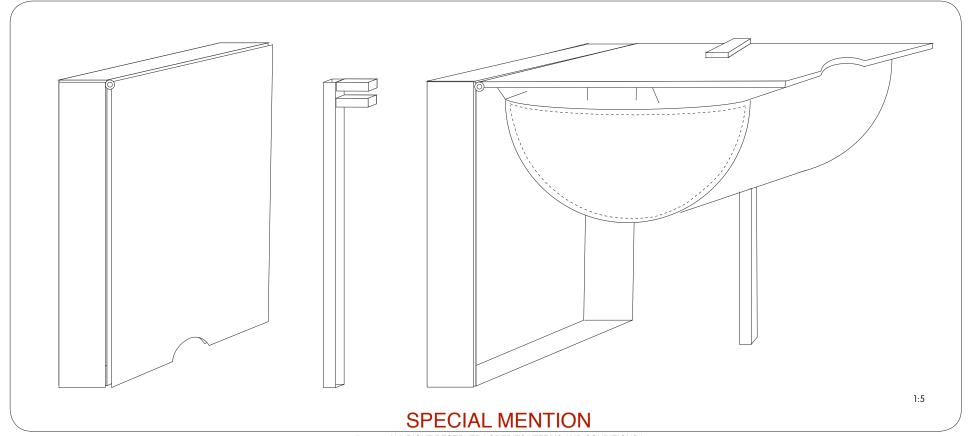
Reclaimed Wood, painted, folding or piano hinge,

Sewn Textile Bag [hemp, cotton]

Measurements Box: 21 x 4 x 25 inch

Measurements Textile Bag: Ø 20 inch, depth 24 inch





I designed 'Arca' to make a flexible desk and storage furniture that suits different needs. In a passive state it is a fairly flat box which can be mounted to a surface such as a wall. Unfolded it becomes a writing desk, drawing board and storage, manifested as textile bag, which can be (un) loaded from both sides. The bag is on both ends attached to the bottom of the desktop and folds into the container when not in use.

I wanted the object itself to be as basic as possible in order to be more adaptable for augmented functions. For example a hole in the desk top which can host a container to store pencils, painted as blackboard, equipped with elastic band, slots etc. In use 'Arca' becomes a personal hub of the home, with space for toys and clothing, pencils and nick nack, put in action for school work, creative projects and play.

#### **Identification No: INCDFIA603**

Object: Furniture

Title: 'Arca'

Date: 09. July 2020

Materials and Techniques:

Reclaimed Wood, painted, folding or piano hinge,

Sewn Textile Bag [hemp, cotton]

Measurements Box: 21 x 4 x 25 inch

Measurements Textile Bag: Ø 20 inch, depth 24 inch

