Weaving technique of a traditional door screen *Dhalapathar Parda* woven by *Rangani* at Dhalapathar

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The weaving technique of a traditional door screen locally known as *Dhalapathar parda* woven by a community called *Rangani* has been discussed. It describes the weaving of cloth with colored weft ribbed designs without the use of *Dobby*, *Jacquard* or *Jala*. The novel feature of this technique is the extra weft shedding and picking. The technique is very rare and not seen in any traditional weaving of India.

**Keywords:** Traditional weaving, *Dhalapathar parda*, *Rangani* community, *Parda*, Chiari, *Kasumikasta*

**IPC Int. Cl.**: D01, D06P

The village population of Dhalapathar is mainly dominated by a community, called *Rangani* (*Rang* = colour; *Ani* = to bring) and their sole livelihood is weaving on handloom. So, who knows the art to bring the colour on cloth are recognized as *Rangani*. The community have adopted the weaving profession more than a century and almost every elder member of each family are well known about the technique of dyeing and weaving. Besides the weaving of saree, lungi and napkin by the community, about a century, another interesting and unique craft had been developed by them in the form of a saree named as *Kasumikasta*. Gradually by the turn of time, the technique of the craft changed its course and found in another item door screen and became popular as *Dhalapathar parda*. The specialty of the technique is weft ribbed cloth, woven without the use of *Dobby*, *Jacquard* or *Jala*. The very large design which may require at least 600 hooks. *Jacquard* or *Jala* can be woven easily by this technique. The colour prominence of the design is due to the weft rib effect and multicolour effect can also be produced. This type of weaving technique is not seen anywhere in India in any of the traditional weaving.

**Methodology**

The *Parda* is generally having the following specifications and raw materials (Table 1):

**Dyes and colours**

Azoic dyes are extensively used to colour the warp and weft. Mostly, contrast colours are used in figures with respect to body. The common colours like violet, yellow, red, green, white, off white, natural, sky blue, beige are used.

**Sizing**

Sizing is carried out by putting the hands inside a pot which contains 2-3 days old water rice. Pressure is applied on the rice as well as the hank by the two hands of the worker in such a way that the water rice is converted to a paste and stick to the individual thread of hank. Then the hank is squeezed and taken out and dried in the shadow over a bamboo. During drying, the hanks are subjected to individualization and parallelization of threads of hank by worker’s hand applying tension on hank around the bamboo which facilitates easy winding of bobbins for warping.

**Winding**

The ordinary *Charkha* is used to prepare bobbins for warping as well as pins for weft and extra weft.
Warping and beaming

Hand operated wooden sectional warping machines are used to carry out the warping. Required number of warp threads are warped and wound on to the beam.

Loom arrangements

It is woven on a fly shuttle pit loom having the dimension of width =203.2 cm, length =106.7 cm and height =182.9 cm. The depth of the pit is 45.7 cm (Figs. 1 & 2). There is no backrest in this loom. The warp beam is placed parallel to the cloth beam and just 5-8 cm below cloth beam level. Hand operated take-up and let off motions are used in these looms. After weaving a small length of cloth the cloth beam is rotated and the warp beam is unwound simultaneously manually and then both are kept under tension with certain arrangement. Handmade crossed cotton healds are used for the ground shedding (Fig. 3). The flat rectangular wooden pieces, locally known as Chiari (Fig. 4) of size 152.4 cm × 7.6 cm × 0.6 cm are used for the formation of shed for design. The number of Chiari depends upon the design. For ground pick, ordinary handloom shuttle is used. For extra weft, the weft thread in the form of ply yarn is converted into the hank of small diameter by rotating the weft thread over the weaver’s palm and then makes it out. The number of extra weft palm hank depends upon the number of colours and intricacy of the design.

Weaving technique

The ground weave is always plain and the shed is formed with the help of hand made cotton heald shafts, roller and treadle. Design is always in the form of weft rib, either of 4 up 1 down or 6 up 1 down depending upon the intensity of colour and effects required. To form the rib the shedding is always done by means of Chiari. After warping, heald shafts are made by making individual heald eyes around every warp threads. After looming the warp, a small length of ground weave is woven with fly shuttle to condition the loom for running. The next step is the important one at where the weaver inserts the Chiari just behind the heald shafts in warp by making all the threads into two layers by his hand either 4 up 1 down or 6 up 1 down. This Chiari is responsible for design in body of Parda (Fig. 5). In almost every Parda a panel of different colored stripes is woven in the bottom to get a good look. In between these stripes some rib effects are also made in the form of small diamond or triangle. To facilitate quick and easy weaving of these diamond or triangle figures the weaver uses 3, 4 or 5 Chiari instead of one. For an example if a triangle figure of 3 Chiari (in which each pick repeats for three times consecutively) has to be woven, the three Chiari will be inserted in three following different sheds (Fig. 6). The three different shed repeats are:

- Shed of Chiari No 1 - 4 up, 1 down, 4 up, 1 down, 4 up, 1 down, 4 up, 1 down
- Shed of Chiari No 2 - 5 down, 4 up, 1 down, 4 up, 1 down, 4 up, 1 down
- Shed of Chiari No 3 - 10 down, 4 up, 6 down

No 1 Chiari (Fig. 17a) is brought near to the heald shaft behind and rotate 90° and kept stationary. As the width of Chiari is 7.6 cm the threads of the top layer goes up to 7.6 cm behind the heald shaft. The handmade cross eyed cotton heald shaft support the same by taking up the bottom shaft of the heald frame. The depth of the shed becomes 7 cm in the sley. The weaver weaves one figured weft by inserting the hand made palm hank in the shed up to design width. Then the Chiari is again brought to its original position by rotating 90°. Then two ground picks are inserted by operating treadle and fly shuttle. In next figured pick if same shed is required the process is repeated. When the shed of Chiari No 2 (Fig. 17b) is required, it is brought near to the heald shaft by dragging by weaver and same process is carried out as in case of Chiari No 1, same process is adopted also for Chiari No 3 (Fig. 17c). The body design is entirely woven with the help of Chiari No 1. After every two ground picks, the figured weft is inserted by the skilled weaver. Some skilled weavers are there who are having designs in their mind and they can weave without the help of any figure or graph. Otherwise, the white paper containing the designed figure is placed beneath

<table>
<thead>
<tr>
<th>Size</th>
<th>Warp</th>
<th>Weft</th>
<th>Extra weft</th>
<th>Ends/cm</th>
<th>Picks/cm</th>
<th>Extra pick/cm</th>
<th>Weight/piece</th>
</tr>
</thead>
<tbody>
<tr>
<td>102 cm × 183 cm</td>
<td>20s cotton</td>
<td>20s (2 ply cotton)</td>
<td>20s (8 ply) or 40s (16 ply)</td>
<td>91.4-101.6</td>
<td>91.4-101.6</td>
<td>45.7-50.8</td>
<td>230-250 gm</td>
</tr>
</tbody>
</table>

Table 1—Specifications and raw materials used by Dhalapathar parda community
Fig. 1—Loom arrangement; Fig. 2—Side view of loom; Fig. 3—Crossed eye cotton healds; Fig. 4—Chiari; Fig. 5—Chiaris in loom; Fig. 6—Triangle figure; Fig. 7—Sabor bagha; Fig. 8—Surya bandana; Fig. 9—Phuladani; Fig. 10—Suryabandana; Fig. 11—Mandira; Fig. 12—Russi; Fig. 13—Budhadeba; Fig. 14—Hansa; Fig. 15—Mandir; Fig. 16—Hansa
the fell of the cloth and by seeing the figure the figured weft with required colour is inserted at desired places. Sometimes more than three Chiari are also used for different types of rib effects and big designs. Some Parda designs are shown in Figs. 7-16.

Conclusion
At present the production of such Parda is declining day by day due to decreasing the number of skilled weavers and prevailing unattractive wage structure. On the other hand, such product has potential market as home utility item is increasing.

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References