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# Origin of Indian Bread Making Tools – A Review

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Abstract: The most common activity in all homes is cooking. The diet consciousness of people in the present days has lead to an increase in Indian bread consumption irrespective of region. Indian breads made of wheat flour and served hot at breakfast, lunch or dinner, and are eaten with dry and semi liquid vegetable preparations, as well as with gravies and other adjuncts. Women spend most of their time in this activity. Indian bread making tools aid to perform this job safely, efficiently and comfortably even in adverse working conditions reinforcing strength and effectiveness of hands. Different varieties of Indian bread include: Chapathi, puri, phulka, roti, parotta, bathura and naan are the main traditional products which form the staple items in the diet of the majority of the population. The common tools used in Indian bread making are the Rolling board and Rolling pin, which are available in a variety of materials and sizes. In India these are must-haves in the kitchen. So the present study was carried out to study the origin of Indian Bread Making Tools. The review was collected and it was found that the rolling pins have been used over the centuries, among Etruscans were the first users. The rolling pins and boards were made with different materials and of different shapes among which the wooden rolling pins are the oldest and most commonly used.

Keywords: Origin, Rolling Pin, Rolling Board, Bread making tools, Materials.

### 1. Introduction

One of the most significant developments in the home during recent years has been its mechanization. Today an average Indian family boasts of possessing a wide variety of small and large tools, which has greatly reduced the work involved in the kitchen. Kitchen is the most commonly used area by the women. The tools used in the kitchen may be small in themselves, but most important is their efficiency (Eric Luchman, 1992). Well-designed kitchen tools with ergonomic considerations help women to work comfortably, efficiently with less effort, drudgery and reduce time needed for the job. The well-designed kitchen tools with ergonomic considerations help the women to work comfortably while working. Indian bread making tools come under the Kitchen tools must-haves in the kitchen. Indian breads / Roti's are a wide variety of flatbreads and crepes which are an integral part of Indian cuisine. Their variation reflects the diversity of Indian culture and food habits. It is a flat unleavened baked product, which forms the staple food of the majority of the population in the Indian subcontinent and parts of the Middle East. The consumption of this traditional product is increasing and has become popular even in areas where traditionally rice has been staple diet. By replacing rice in the meal with Indian bread is the best diet to reduce weight (Indu, 2011). The common tools used in Indian bread making are the Rolling board and Rolling pin, which are available in a variety of materials and sizes. Indian breads are rolled out on a rolling board with the help of a rolling pin. As these tools were considered as the most important tools, the review was made on the origin of Indian bread making tools from centuries to present scenario.

### 2. Review on Origin of Bread Making Tools

### 2.1. Rolling pins

The rolling pins used for flattening dough, cookies, biscuits, and crackers have been around for decades. The first civilization known to have used the rolling pin was the

Etruscans. These people may have migrated from Asia Minor to Northern Italy or may have originated in Italy. The Etruscans' advanced farming ability, along with a tendency to cultivate many plants and animals never before used as food and turn them into sophisticated recipes, made them to develop a wide range of cooking tools, including the rolling pin (Some and Lucio, 2001).

Wooden rolling pins (Figure 1a) were the oldest and most common, some being nothing more than cylinders of wood. However, knob-ended rolling pins preceded those with the handles carved in one piece with the roller. These rolling pins were usually homemade until they began to be factory produced in the mid-19th century (Plante and Ellen, 1991).

Many rolling pins featured inlays of darker woods, such as cherry, mahogany, applewood, beech, pine, sycamore, or walnut. The rolling pins that are most familiar with have two handles with a heavy wooden cylinder that turns unaided between them on ball bearings. This pin has a smooth action which makes it easy to produce dough of an even thickness.

Over the centuries, rolling pins have been made of many different materials, including long cylinders of baked clay, smooth branches with the bark removed, and glass bottles. As the development of breads and pastries spread from Southern to Western and Northern Europe, wood from local forests was cut and finished for use as rolling pins. The French perfected the solid hardwood pin with tapered ends to roll pastry that is thick in the middle; its weight makes rolling easier. The French also used marble rolling pins for buttery dough worked on a marble slab. French rolling pins are longer than the American ones and do not have handles. They are straight or tapered hardwood cylinders with a thick center. French chefs claim that it is more important to learn to get the feel of the dough into your palms through the use of such simple rolling pins (Franklin and Linda, 1964).

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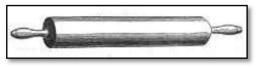


Figure 1(a): Rolling pin of maple wood body and revolving wood handles



**Figure 1(b):** Rolling pin of glass body and revolving wood handles

Figure 1: Types of Rolling Pins

Old hand-carved wooden rolling pins with grooves cut into their barrels were used for making cookies, a typical anise-flavored Christmas cookie from Austria and Baveria. The designs on these pins were the quaint figures of animals, fruits, and flowers, each carved in a square outline (Figure 2.2c). These rolling pins, still being made in Germany today, give the cookies a ridged surface (Franklin and Linda, 1997).





**Figure 2.2 (a):** Stained handle, black enameled handle, maple wood, revolving handles



**Figure 2.2 (b):** Polished cherry handle, maple wood, revolving handles



**Figure 2.2 (c):** Fancy cake roller and print, cherry wood with polished handles

Figure 2.2: Types of Rolling Pins of different materials

Glass is still popular; in Italy, full wine bottles that have been chilled are ideal rolling pins (Figure 1b) because they are heavy and cool the dough. Countries known for their ceramics make porcelain rolling pins with beautiful decorations painted on the rolling surface; their hollow centers can be filled with cold water (the same principle as the wine bottle), and cork or plastic stoppers cap the ends (Gillian, 2002).

Wood has always been the material preferred by cooks and craftsmen in the United States. Pine was probably the wood of choice from colonization to the mid-1800s. Rolling pin manufacturers started using other hardwoods like maple (Figure 2.2a) and cherry (Figure 2.2b) for their wooden kitchenware, which also included ladles and butter molds (Gillian, 2002).

Pottery and china rolling pins (Figure 2.3) were popular in the 19th century. Delft-type windmill and sailboat designs were most prevalent. The blue-and-white Meissen onion pattern porcelain rolling pins may date from the 17th century. Created in 1739, it was Meissen's first success in duplicating the Asian technique of the coveted blue under glaze (painting on absorbent porcelain rather than on top of the glaze), (Lantz and Louise, 1975).



Figure 2.3: Pottery and china rolling pin of 19th century

Stoneware and yellow ware (Figure 2.4) rolling pins were made during the 19th century. In 1912, Seastrand Catalog advertised a glazed stoneware roller that was non-absorbent and revolved on polished wood handles (Barlow and Ronald, 1992).



**Figure 2.4:** Stone ware and yellow ware rolling pin of 19th century

Helen (1940) developed a rolling pin of the circumference of about 2". The same width as that of the roller was taken for the handles and patented that the thicker the handle the lesser is the load on the hand muscles, and the handles beyond the hand would help the user in ease of rolling (Figure 2.5). Duskey (1953) developed a rolling pin with the diameter of the body having 11/2 inches centrally and 11/4th inches in diameter of the handles, so that the convexity of the roller had a radius of about 60".

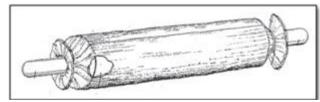


Figure 2.5: Rolling pin developed by Helen (1940)

He said that the smaller the roller easier it is to use and more maneuverable, as well as being advantageous with doughs of more elastic nature. Fetrow et al. (1978) patented a dough roller with the dimensions of the body having 11/2 inches in diameter at the small end, 2 inches in diameter at the larger end, and 2 1/2 inches in diameter at its largest point, which was 8" from the larger end. The radius of curvature at the smaller end was about 43", and that at the larger end was about 127".

Thomson (1978) patented a pastry roller which is terete rather than cylindrical in outline, being of greater diameter

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centrally than at its ends, so that its configuration from end to end comprises a smooth convex curved surface, the curvature of which need not be everywhere the same (Figure 2.6).

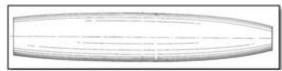


Figure 2.6: Rolling pin developed by Thomson (1978)

Davis (2006) designed a rolling pin having a cylindrical body with a handle at each end. The pin is often used to roll out the dough until the dough is approximately at a desired thickness. He said that the batch of dough is rolled into a generally circular mass having a diameter greater than the length of the cylindrical body of the rolling pin (Figure 2.7).

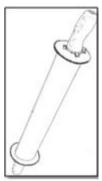


Figure 2.7: Rolling pin developed by Davis (2006)

Depression glass rolling pins (Figure 2.8) were made during the 1930s and 1940s in an assortment of colors. Nickel-plated metal rolling pins (1920s) had wood handles. Sometimes an intentional rattle could be heard from within, which may have been added to make them heavier. Over the years, the wooden rolling pin has remained popular and widely used.



Figure 2.8: Glass rolling pins of 19th century

Gibran and Frith (2001) disclosed a rolling pin which included a cylindrical working barrel with oppositely extending handles. The handles were contoured with strategically shaped surfaces and indentations configure to comfortably accommodate the shape of the user's hands, thereby alleviating stress and fatigue during protracted use. When the user using the rolling pin, the user curls his or her hands around the handles such that the outer edges of the handles fit approximately across the distal palmer creases and into the hypothenar eminences. The fingers were then curles around to the lower portions of the handles and were seated in the depressions. The thenar eminences were rotated

down onto the slightly curved portions of the upper portions of the handles while the thumbs were Seated in depressions. This position allows the user to more effectively apply the entire palm area of the hand to manuever the rolling pin as opposed to using an ordinary rolling pin wherein only the palm area at the roots of the finger grasp the handles.

#### 2.2. Rolling boards

Orosz (1955) invented a pastry board, having a flat top working surface provided with a pair of grooves extending downwardly into board along opposite sides thereof, and removable rolling pin guide strips having portions received in grooves and portions extending working surface, strips each having the thickness substantially equal to the width of grooves and a width equal to approximately four times its thickness, strips each having at one side thereof an abutment having a thickness substantially equal to the width of grooves, abutment being spaced from one edge of strip a distance substantially equal to the width of grooves, and from the other edge of strip a distance substantially equal to twice the width of said grooves.

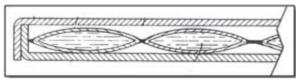


Figure 2.9: Rolling board developed by Sjoberg (1999)

Sjoberg (1999) developed a rolling board (Figure 2.9) that can be chilled to reduce the dough sticking on to the board by reducing the gluten strands in the dough formed due to the ambient heat and heat produced during the rolling activity. The diameter of the rolling board ranges from 9-11 inches suitable for making crusts. The board thickness was about 3/4th inch to 1 inch was considered.

## 3. Conclusion

It can be concluded from the above review that the rolling pins have been used over the centuries, among Etruscans were the first users. The rolling pins were made with different materials and of different shapes among which the wooden rolling pins are the oldest and most commonly used. From the 17th century, the blue-and-white Meissen onion pattern porcelain rolling pins were used from the 17th century and pine wood was probably of choice from colonization to the mid-1800s, rolling pin manufacturers started using other hardwoods like cherry and maple for their wooden and the use of rolling pins was started at the factory level from the home level. Nickel-plated metal rolling pins was used in 1920s which had wood handles. Depression glass rolling pins were made during the 1930s and 1940s in an assortment of colors. Stoneware and yellow ware rolling pins, pottery and china rolling pins were made during the 19th century. Glass and ceramic material was used in Italy, Southern countries used wood for the rolling pins, and French used marble for rolling pins as well as for rolling boards.

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