



Tender nut punch and cutter

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The main factors deterring the large scale adoption of tender coconut parlours is the absence of simple tools for the easy extraction of tender coconut water.



Fig. 1. Tender nut cutter in operation

Tender coconut water is a delicious and nutritious refreshing drink provided by nature. Though the artificial soft drinks had once tended to reduce the importance of tender coconut water, the propaganda in favour of tender coconut water by the Government, the Coconut Development Board and the proponents of naturopathy has now paved the way for its increased consumption. The lead taken by the Coconut Development Board in establishing tender coconut parlours at different locations is accelerating and enhancing the consumption of tender coconut water in a big way.

But the main factors deterring the large scale adoption of tender coconut parlours is the absence of simple tools for the easy extraction of tender coconut water. It is an art to use a machete to remove the husk from one end of a tender coconut to

expose a part of its shell and to cut open a small hole in the exposed portion of the shell to extract its water or liquid endosperm. While doing so, the coconut is held in one hand and the machete in the other. The husk is sliced off in bits by repeated heavy strokes of the machete. This is difficult and requires considerable practice before the skill is acquired. This is very risky also and tiresome. Tender coconut parlours are mainly run by men due to the skill involved in chopping the nut. After drinking the tender coconut water some people like to eat the soft meat. For extracting the meat the tender coconut is placed on a wooden block or held in the left hand and a heavy machete is used to break it into two halves. The meat is then scooped out with a spoon. Considerable practice is necessary before acquiring the skill for cutting, it open with least

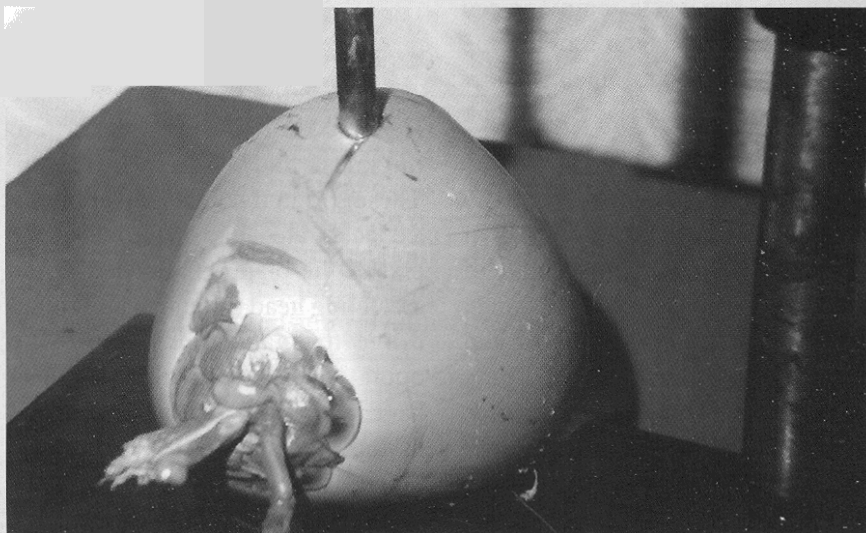


Fig. 2. Hole made in the tender nut using tender nut punch

number of cuts and also for avoiding injury. People having this skill are only a few in number. Because of the risk involved, only a few people learn this craft. This is a major factor that deters people from establishing tender coconut parlours in most of the places. Simpler methods for cutting the tender coconut in an easier way also do not exist at present. In view of this, a simple device has been developed for making a small hole in the coconut and a cutter to cut open into two halves.

Tender Coconut Punch

A simple tender nut punch has been developed. It mainly consists of a square base made of MS angle of 40 cm length. The tender nut is placed on the nut holder which is a circular and hollow in shape with a diameter of 10 cm. The tender nut can be placed on the nut holder and by operating the lever mechanism a hole of 12mm diameter is made in just 4-5 seconds. As the lever is spring loaded it automatically tries to move upwards. At this point one has to hold the nut so that the lever moves up. The waste removing rod is pushed down thus removing the waste from inside the punch. A straw is put in the hole and one can drink the nut water.

This device is operated manually by one person. The punching of coconut can be done irrespective of size and the withdrawal of punch after punching is made easier and quicker by this invention as there are no complicated parts. This device can be operated by any person including women thereby reducing the drudgery involved. Chances of injury are almost eliminated. This

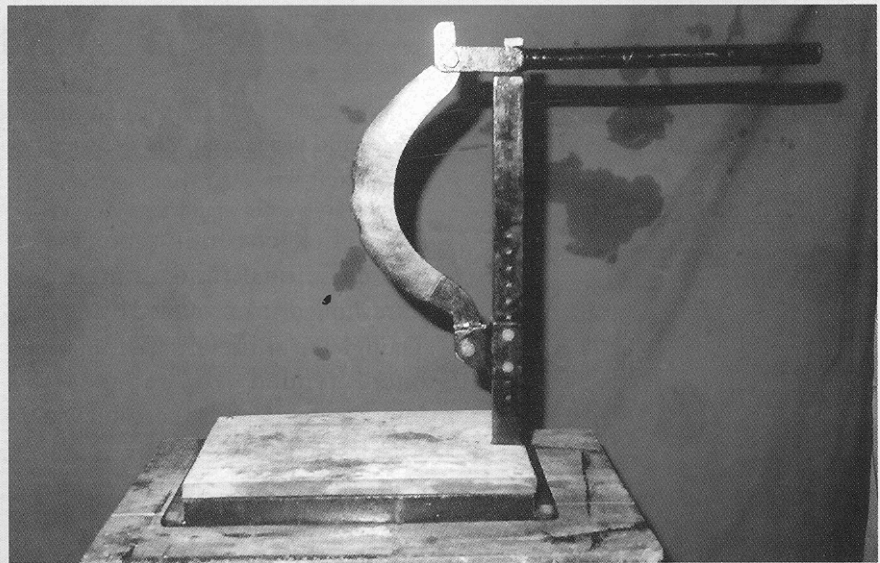


Fig. 3. Tender nut cutter

specific advantage is likely to encourage women also to establish tender nut parlours or *elaneer* pandals.

Tender Coconut Cutter

A simple tender coconut cutter was developed. It mainly consists of a wooden base of 50 cm length, a stand, a knife and a hand lever. The stand is mounted on the base. The cutting blade is mounted concentric to the stand and retained at a height of 15-20 cm. Provision also exists for changing the position of the knife to other convenient heights depending upon the size of coconut. The serrated curved blade or knife is made of leaf spring of 6 mm thickness and is 45cm in length. These serrated points help applying a concentrated load on the husk. One end of the blade is attached to the swiveling head through a horizontal hinge to enable the blade to be operated in a vertical plane. The hand lever is pivoted to the other end of the blade through a horizontal hinge. One stopper is provided on the lower side to apply concentrated load for easy cutting. Once the

cutting operation is complete the knife is taken upwards and hooked to a lock. This will not allow the knife to come down unless it is necessary.

To cut open, the tender coconut is placed on the base such that its longitudinal axis is radial to the stand. The knife is lifted and placed on the coconut. It is then pressed down with a downward thrust splitting the coconut into two halves. If the shell is hard, the hand lever is lifted to its upper limit on the blade and suddenly swung downward imparting an impact force which normally cuts open the coconut. It is observed that the time needed for cutting and opening a tender coconut is 2-3 seconds. This method is much safer than the traditional method because the blade movement is through a controlled path and at a controlled speed. In normal operation no part of the body comes in the way of the blade. No special skill is required for operating it and hence is an ideal tool for tender coconut parlours. Even women can operate without fear of injury.