Sisal Leaf Fibre Extractor

Background:

There have been continued efforts to develop an efficient machine for extraction of fibre from green sisal leaves. The available extractors are associated with lesser output as because the entire length of the leaf cannot be processed in the machine. Moreover, the operator has to drag the leaf backward resulting human drudgery and fatigue. Accordingly, design and development of an extractor with the provision of an easy mechanism wherein the green leaves can be processed with the elimination of back-ward dragging and also higher yield of fibre from the whole length of green leaf is the need of the hour:

Technology Details:

The present invention relates to a sisal leaf fibre extractor. More particularly, the present invention is directed to provide a machine for extraction of fibre from the entire length of the green sisal leaf after collection of the green leaves from the field. The extractor device according to the present invention consists of a feeding platform and a beating roller. Importantly also, as there is the provision of clamping of green leaves on feeding platform &cam arrangement to detach the beaten leaves backwards, back-ward dragging of the processed leaves by manual force is completely avoided. The beating roller is made of horizontal bars with blunt edges and is driven by a 2 HP single-phase electric motor. Green sisal leaves are clamped manually on the feed platform and the leaves are driven forward towards the beating roller. Once the beating operation is over for the entire length of green sisal leaves, the cam arrangement helps in detaching the beaten leaves from the roller and it automatically dragged backwards over the feed platform. The operating person de-clamps the beaten leaf and then washes it in plain water in room temperature and then dries it under sun to get sisal fibre. The highlighting feature of the extractor is that the entire length of the green leaf can be processed for getting the fibre and manual dragging is not required for the removal of debris adhered to the surface of beaten leaves.