

# FABRICATION OF MULTI HEADED NUTS AND FRUIT WEASEL GATHERER

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## ABSTRACT

*A nut gatherer includes a hollow drum formed by a plurality of wires. Each of the wires has a bowed middle segment and two end portions. The end portions are preferably hooked. A pair of hubs secures the hooked ends of the wires to form the drum there between. A handle is rotatably mounted to the hubs and a handle extension is removably coupled with the handle. In use, the handle or handle extension is used to rotate the drum into contact with an object, such as a nut, where the object then forces the wires to separate and permit the object to move from outside the drum to inside said drum. Once contact between the object and the wires is terminated, the wires return to their original position thereby trapping the object within the drum.*

**Key words:** fruit weasel, multi headed nut

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## 1.INTRODUCTION

While at first sight, it may seem like an easy task, choosing the right rolling nut gatherer tool is not exactly a walk in the park. There are many products available on the market, but simply going into a shop and buying the first tool you come across (or the one that has the lowest price) may prove to be a big mistake. Just because the vast majority of nut gatherers are advertised as being capable of collecting any kind of nuts from virtually any surface doesn't mean that they'll all get the job done. Customers who purchase random nut gatherers often end up complaining about the product and spending more money than needed to finally get in possession of a reliable device. Some tools fail to gather small nuts from the ground, and others are too hard to use or break up way too quickly. So, as you can see, picking a good nut gatherer tool can be harder than expected and you don't want to be hitting the stores before getting yourself well-informed about which products are good.

## 2.LITERATURE SURVEY

Gardening and yard maintenance require a variety of tools. Many of these tools are designed to efficiently remove debris or yard waste. Rakes and brooms are typically used to maneuver yard waste such as leaves, grass clippings and branches into piles for removal. Some items, such as nuts and pine cones, are not easily corralled using rakes or brooms because they pass through the tines of the tool, are too bulky to be swept or roll away. Yet these items are precisely the sort of yard debris that most gardeners prefer to clear away as they do not decompose quickly, can cause damage to lawn mowers and create a slipping hazard for people desiring to use the space for recreation or leisure.

### **3.EQUIPMENT**

Choosing the right nut gatherer to use in your patio or garden may not be a life or death decision, but you shouldn't take this issue lightly either. We're talking about a tool that has a great potential of making your daily chores easier. But if you simply buy the first product you set eyes upon without studying its manufacturing process and features, your life may actually get harder, as you won't achieve anything other than wasting some hard-earned money. So, before you start shopping for a rolling nut gatherer, here are some significant aspects you need to take into consideration.

#### **3.1 Dumping accessories**

Ideally, you should look for rolling nut harvesters that come with a dumping accessory. The design of the majority of these tools is simple and includes two major elements: a long handgrip and a wire cage. When picking up nuts, you need to place the wire cage on the ground, hold the prototype by its handgrip and roll it back and forth.

#### **3.2 WELDING**

Welding is a fabrication process that joins materials, usually metals or thermoplastics, by causing coalescence. This is often done by melting the work pieces and adding a filler material to form a pool of molten material (the weld pool) that cools to become a strong joint, with pressure sometimes used in conjunction with heat, or by itself, to produce the weld.

#### **3.3 Arc welding**

These processes use a welding power supply to create and maintain an electric arc between an electrode and the base material to melt metals at the welding point. They can use either direct (DC) or alternating (AC) current, and consumable or non-consumable electrodes. The welding region is sometimes protected by some type of inert or semi-inert gas, known as a shielding gas, and filler material is sometimes used as well.

#### **3.4 Hydroforming**

Hydroforming is a process that is analogous to deep drawing, in that the part is formed by stretching the blank over a stationary die. The force required is generated by the direct application of extremely high hydrostatic pressure to the workpiece or to a bladder that is in contact with the workpiece, rather than by the movable part of a die in a mechanical or hydraulic press.

#### **3.5 Ironing**

Ironing is a sheet metal working or sheet metal forming process. It uniformly thins the workpiece in a specific area. This is a very useful process. It is used to produce a uniform wall thickness part with a high height-to-diameter ratio. It is used in making aluminium beverage cans.

#### **3.6 Laser cutting**

Sheet metal can be cut in various ways, from hand tools called tin snips up to very large powered shears. With the advances in technology, sheet metal cutting has turned to computers for precise cutting. Many sheet metal cutting operations are based on computer numerically controlled (CNC) laser cutting or multi-tool CNC punch press.

#### **3.7 Photochemical machining**

Photochemical machining, also known as photo etching, is a tightly controlled corrosion process which is used to produce complex metal parts from sheet metal with very fine detail. The photo etching process involves photo sensitive polymer being applied to a raw metal sheet.

### 3.8Punching

Punching is performed by placing the sheet of metal stock between a punch and a die mounted in a press. The punch and die are made of hardened steel and are the same shape. The punch is sized to be a very close fit in the die. The press pushes the punch against and into the die with enough force to cut a hole in the stock.

### 3.10Roll forming

A continuous bending operation for producing open profiles or welded tubes with long lengths or in large quantities.

### 3.11SHAFT

Drive shaft, a shaft for transferring torque is used to transfer the torque from the motor to the primary gears which is in mesh with the secondary gears which remove the nuts using the removing tools. A hollow shaft is used to transfer the motion from the secondary gears to the removing tool.

## 4.WORKING PRINCIPLE

A garden tool that will pick up fallen nuts and fruits rapidly, easily and, even better, without you having to bend over! I've seen it sold under several names (nut and fruit gatherer, nut gatherer, nut broom, Nut Wizard, etc.) and it is certainly easy enough to use. Simply use the handle to roll the oval gathering basket back and forth over the ground, pressing lightly as you go. The basket's flexible wires pull open when it hits any fruits or nuts in the sector and in they pop. As it rolls, it picks up more and more objects, even in fairly tall grass. In fact, I found it even able to pry loose and pick up fruits and nuts half sunk into the ground. When it's full, simply hold it over a pail or other recipient and spread the wires apart to release the basket's contents. We use it to pick up the thousands of crabapples that fall from our very prolific crabapple tree each fall. When they fall in flower beds, I just leave them be and let them decompose on the spot. On the other hand, when crabapples litter the path or lawn, it becomes very slippery and possibly dangerous. We used to spend a lot of time raking crabapples into piles and getting down on our knees to pick them up. Now, we just run the nut gatherer and it's all done in an instant.



## 5.MERITS

- It requires simple maintenance cares
- Automatic method
- System is helpful for the drive
- Avoid fear while driving the vehicle
- Quick respond is achieve
- Simple in construction
- Easy to maintain and repair
- Continuous operation is possible without stopping
- The safety system for automobile.
- Checking and cleaning are easy, because of the main parts are screwed.
- Easy to Handle.
- Cost of the unit is less
- Replacement of parts is easy.

## 6.DEMERITS

- If the needle rod is fail, it can't be repaired. We have to replace it.

## 7.APPLICATIONS

- It is applicable in all types of two wheeler vehicles

## 8.CONCLUSION

As you've probably noticed while reading our detailed shopping guide, most rolling nut gatherers today work more or less in the same way. This is exactly why purchasing a reliable product is tricky, because you need to look beyond appearances and examine the smaller details and characteristics. As we've pointed out, some of the most important features you need to take into account are sturdy design, basket capacity, ergonomics, flexibility as well as a dumping tool. Moreover, you should consider doing a little research on the exact types of nuts that your prospective rolling nut harvester can gather. Before you actually buy the device, it is vital to consider all of the criteria mentioned above. After all, the usability of the tool and your personal satisfaction with the product will depend on a variety of small details, making up a larger product. We hope you've found our tips and tricks useful; now, it should be a lot easier for you to make a good acquisition. Buy now with no fear.

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