



(12) **EUROPEAN PATENT APPLICATION**
published in accordance with Art. 153(4) EPC

(43) Date of publication:
04.06.2014 Bulletin 2014/23

(51) Int Cl.:
A45D 29/02 (2006.01)

(21) Application number: **12820090.4**

(86) International application number:
PCT/MX2012/000072

(22) Date of filing: **27.07.2012**

(87) International publication number:
WO 2013/019096 (07.02.2013 Gazette 2013/06)

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

(72) Inventor: **Fernandez Quintero, Fernando**
06100 México D.F. (MX)

(30) Priority: **29.07.2011 MX 2011008032**

(74) Representative: **Manresa Val, Manuel et al**
Manresa Industrial Property SL
Roger de Llúria, 113, 4a planta
08037 Barcelona (ES)

(71) Applicant: **Fernandez Quintero, Fernando**
06100 México D.F. (MX)

(54) **NAIL CLIPPER HAVING AN INTEGRATED CLIPPINGS HOLDER**

(57) This invention relates to a nail clipper with a mechanism and functionally different to those well-known, it allows accumulating temporary pieces of nails trimmed, preventing to spread everywhere to be discarded later in the proper place and simultaneously.

Nail clipper with integrated waste-holding container forms a deposit through two leaves creating a space between their bodies, it also has the special feature of having a three channels lever that work in a radial way, and provides different results depending on the location of the pin in the channels: Bolt located on the first channel allows thick material cutting; bolt located on the second

channel, allows thin matter cutting and when pin is located on the third channel, allows to store three channels lever to take up less space when not in use.

The cutter has a special lid with different finishes that in addition to controlling the output nails trimmed, functioning as a grind to give a finish to the freshly cut nails.

The object of this invention is to facilitate to get rid of the trimming of nails debris.

Manufacture is simple and innovative, because it consists of few components, is light, with small dimensions and with more functions than those well-known.

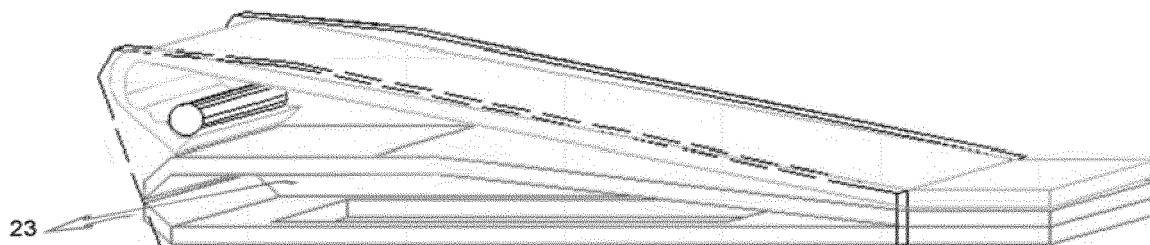


Fig. 4

Description

BACKGROUND

[0001] Nowadays there are many types of nails clippers, some of them with separate disposal deposits, which causes a greater number of pieces easy to get lost or broken, some others have the inconvenience of the parts size which makes complex its use, production, portability and storage.

[0002] Another problem of the actual nail clippers with waste container is the vertical pivot located near the cutter blades, causing the nails remain to jamb on its way to the deposit.

[0003] The mechanism of most nails clipper consists of a combination of two levers that allow pressure to cut, without applying much effort. The pressure applied to the lever causes the inconvenience that surplus nail cuts are expelled without direction and in disturbance, ending on the floor in the best of cases.

[0004] To suppress the mentioned troubles, this nail-cutter with waste container integrated was developed, and the purpose of this request is to protect the invention rights.

DESCRIPTION

[0005] The nail clipper with integrated waste container presents a new structure in mechanism and functionality of those known in the market. It consists of materials introducing the properties of tension, compression, plastic deformation, ergonomics, resistance to fatigue and mainly hardness.

[0006] The nail clipper with integrated waste container refers to the mechanism whose integration and function reduces the size of the fingernails, through cuts, accumulating temporary in a separate chamber the remaining pieces, to subsequently dispose of them in the proper place.

[0007] When triggering the cutting mechanism, the surplus fingernails are retained temporarily in a small internal container of the cutter, which prevents the expulsion and dispersion in different directions. This container functions as a temporary warehouse, avoiding the annoying need to locate and collect the surpluses of nails trimmed to dispose of them in the proper place.

[0008] The body of the nail clipper forms an internal container where the debris will be stored; this container has an opening to control the exit of the scraps when the user wants to dispose of them with a simple movement. The same container has a cap that besides controlling the exit of fingernails, functions as nail filer.

Fig.1 is a parts isometric comprising trimmer with integrated container and is built by the following parts:

1) Three-channel lever,

2) Upper leaf,
3) Bolt,
4) Bottom leaf,
5) Lid.

Fig. 2 Perspective showing the cutting blades pressing each other; this position is to trim thick nails.

Fig. 3 it is shown the cutting blades between them; this position is for thin nails (baby nail).

Fig.4. It is a perspective of the nail clipper with integrated waste container resting and ready to keep.

[0009] Three channels lever (fig.1 No.1) works through a horizontal pivot which allows you to have a radial movement on its own axis through a pin (Fig. 1 No. 3) which is located above the heads of the upper cutter blade (Fig. 1 No. 13), and is supported in the holes of the lower blade walls (Fig.1 No. 18), which also prevent the exit of nails through the sides (Fig.1 No. 17).

[0010] The three channels lever works according to the position of the pin in every channel (Fig. 1 No. 6, 7 and 8). In channel one (Fig. 1 No. 6), upon applying pressure to the lever, causes the shock of the cutting blades for thin material (Fig. No. 3); in the third channel (Fig. 1 No. 8) allows the three channels lever to take less space when is not in use (Fig. No. 4).

[0011] Three channels lever (Fig. 1 No. 1) has slots (Fig. 1 No. 9) to improve the grip of the fingers on it. The three channels lever (Fig.1 No. 1) has a small lateral deviation so that when not in use and stored position (Fig. 4) to bind it with a bump of one of the walls of the lower blade (Fig.1 No. 15).

[0012] When pressure is applied on the three channels lever (Fig.1 No.1) a radial movement of the head of it (Fig. 1 No. 10) causes the tail of the head to push the three channels lever over the upper cutting blade (Fig. 1 No. 11), (Fig. 1 No. 13) that projects downward in an axial movement to crash the upper cutting blade (Fig. 1 No. 12) with the lower cutting blade (Fig.1 No. 16) and with the fingernail in the middle of the two cutter blades pressed causes the cut.

[0013] The top sheet is made in a zigzag pattern to improve the springing and increase the internal space and assemble the lower blade (Fig. 1 No.2 and No.4), seen by its side to create a space between their bodies (Fig. 2, 3, 4, no. 23) the side walls of the lower blade allows the storage of debris and also prevent the nail exit through the sides (Fig. 1 No.17). The blades are joint by spot welds or rivets located in the opposite end (fig. 1 No.2 and No.4) & (Fig. 1 and 2 No. 14 No. 22).

[0014] The lower leaf has a cavity (Fig. 1 No. 19) on the bottom that allows the exit of the trimmed pieces of nails for disposal when finish, this cavity is covered with a lid of light material (Fig. 1 No. 5) that prevents the exit of nails, this leaf also connect the lower blade by pressure and by means of a tab (fig. 1 No. 20) or a fasten. The

external lid is covered by a sheet of nail file (Fig. 1 No. 21) or by a lid of crafted metal with a texture of a grind whose finishes avoid that fingers could slip when in use.

5

Claims

1. Nail clipper with integrated waste deposit built by two sheets. One with zig zag form, and the other with side walls to form the container of waste between these two sheets. It also has as one a lever of three channels that provides by different opening leaves and trimming force level. This lever operates by means of an external horizontal pivot above the head, which allows a radial movement on its own axis. 10 15
2. Nail clipper with integrated waste container, featured as claimed in the preceding number, has a lever of three channels allowing different opening to the leaves and trimming strength. Likewise, allows on the first channel cut thick material; in the second channel cut thin material; and in the third channel to store the three channels lever to use less space when not in use. 20 25
3. Nail clipper with integrated waste container. As claimed in Clause 1, works by means of a pin that functions also a horizontal pivot and is located above the cutter head, allowing the radial movement of the lever. 30
4. Nail clipper with integrated waste container, as claimed in Clause 1, is characterized because one of leaf has a folding allowing to create an space to store and improve the spring. 35
5. Nail clipper with integrated waste container, which is featured by one leaf has side walls that avoid the projection of the nails out of the container. 40
6. Nail clipper with integrated waste container, which is **characterized by** a waste-holding container. 45

45

50

55

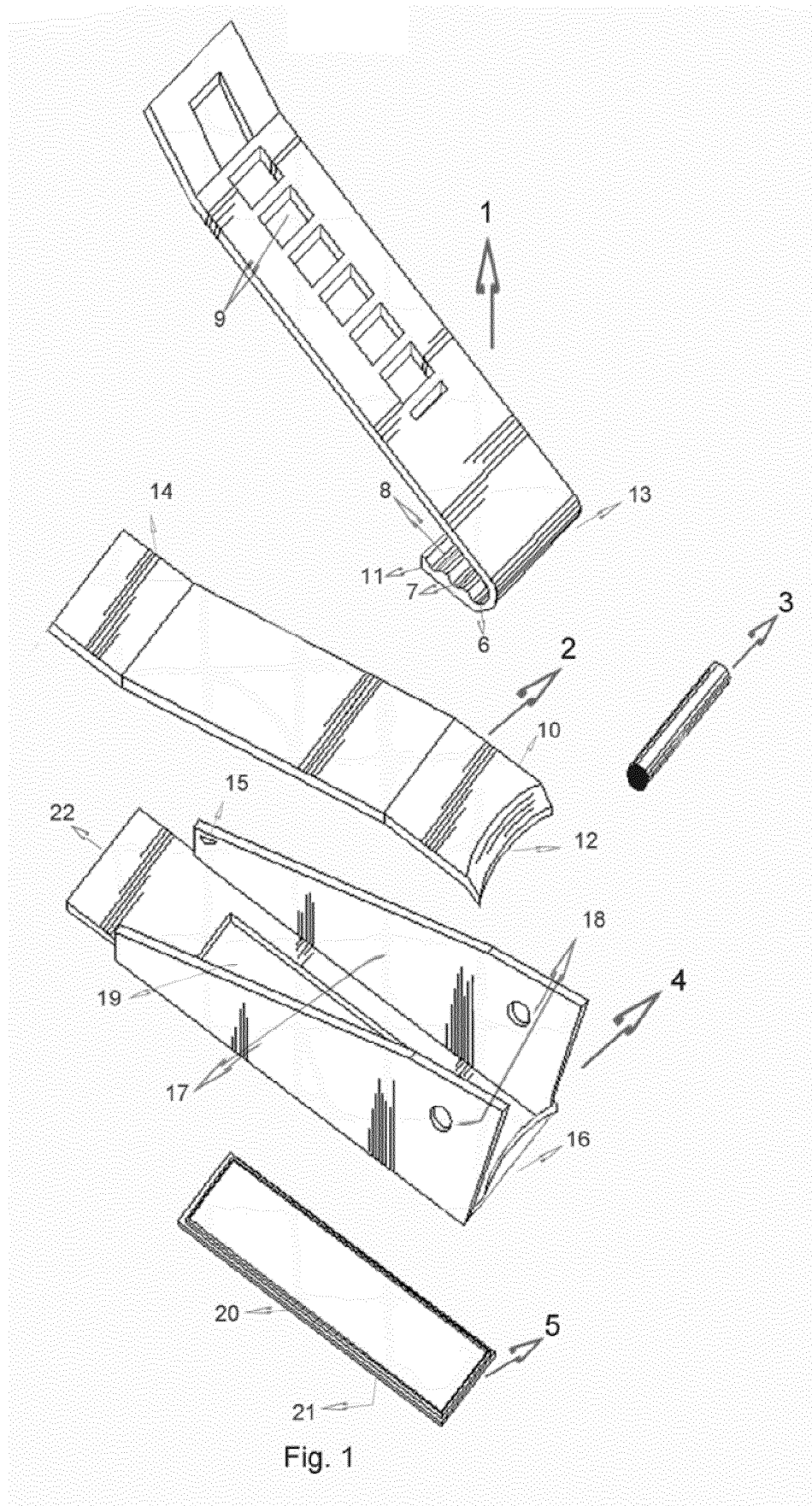


Fig. 1

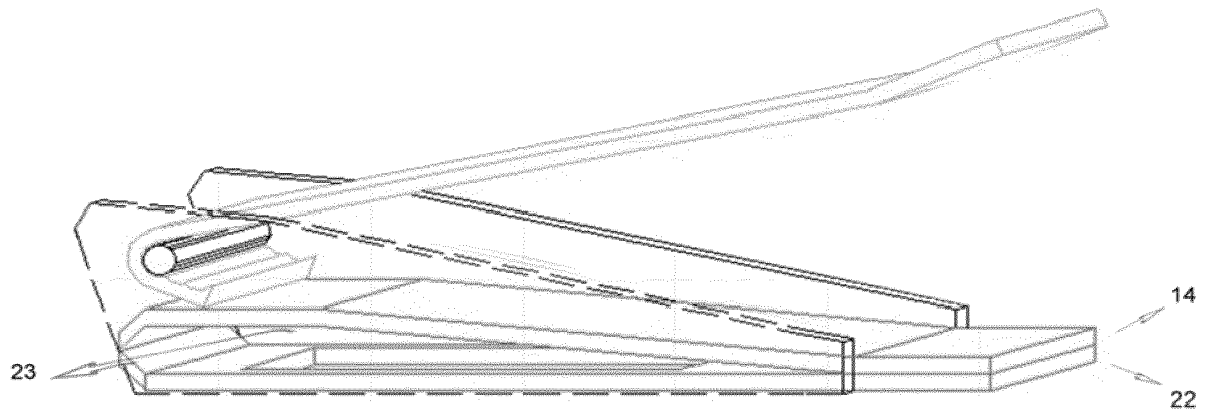


Fig. 2

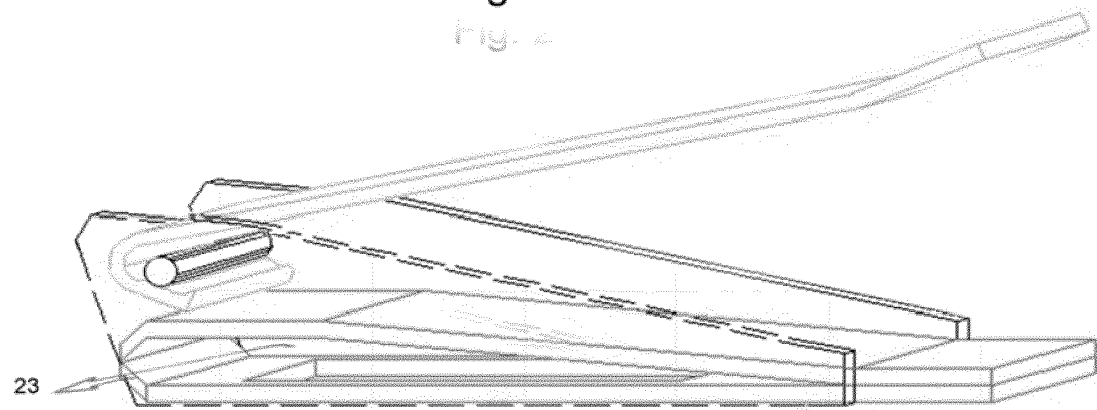


Fig. 3

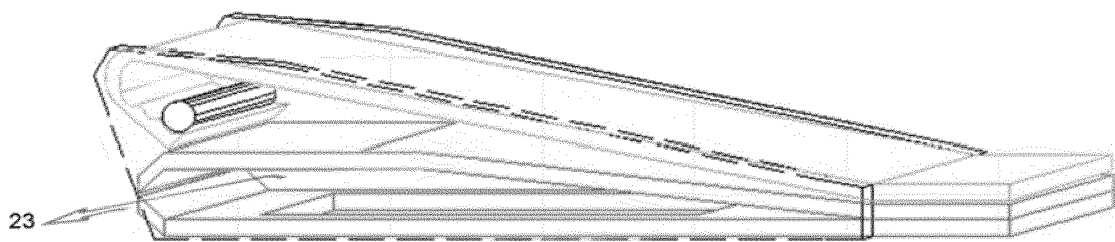


Fig. 4