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(54) A device for handling big and thin objects such as sheets for offset printing and the like.

(57) A handle (1) for being attached to offset printing sheets (10) and similar objects such that these objects can be handled in a simple, safe and careful way. The handle comprises one arm (2) to be held by the hand and one arm (3) to be locked to the object (10).

Fig.1

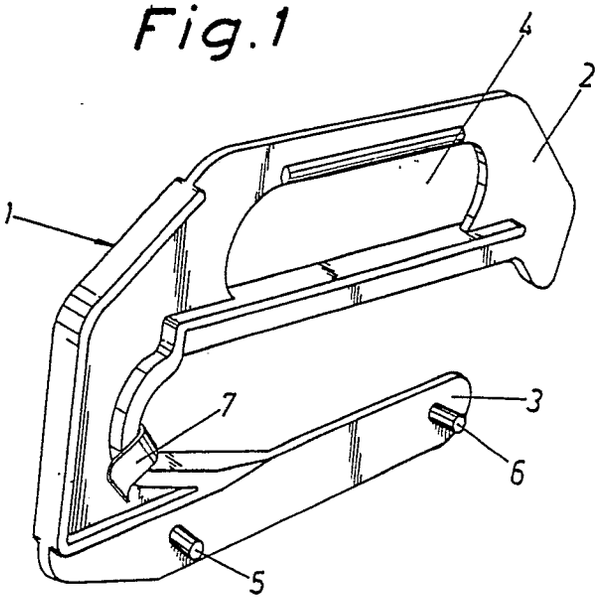
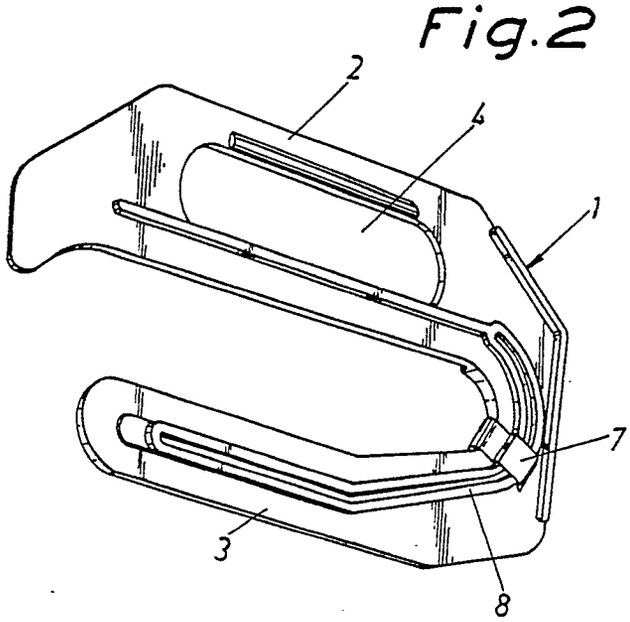


Fig.2



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A Device for Handling big and thin Objects such as Sheets for Offset Printing and the Like.

This invention relates to a device for handling of big, thin objects, e.g. offset printing sheets and the like. Such objects are difficult to handle due to their size and further they easily damage the hands of the person carrying them because the sheets have a thickness of e.g. 0.3 mm such that the edge is sharp and could cut wounds. Further, the sheets must be handled with care as their surface finishing must not be damaged what would cause a deterioriated quality of the printing.

The device according to the invention makes it possible to handle objects of the mentioned kind with safety and care and then in particular offset printing sheets. This has been achieved by means of the measures indicated in the characterizing clause of claim 1. 0ther features of the invention are obvious from the sub-claims.

The invention will now be described with reference had to the accompanying drawings. In the drawings:-

Figs. 1 and 2 show the device according to the invention in two different perspectives,

Fig. 3 shows the device when used for storing offset printing sheets,

Figs. 4 and 5 illustrate the use of the device according to the invention for transferring sheets from the storing place to the place of use,

Fig. 6 shows a device giving information of the sheets when the sheets are stoored with the aid of the device according to the invention.

Referring now to Figs. 1 and 2 the handle 1 shown therein comprises an upper arm 2 and a lower arm 3. The upper arm 2 is provided with an aperture 4 such that it can be grasped by the hand.

The other arm 3 is provided with two pins 5 and 6 situated at such a distance from each other that when two holes have been punched in the sheet by means of a normal punching machine the sheet can be hooked on the pins 5 and 6. The sheet is fixed on the pins 5 and 6 by means of a clamp 7 which is slidable along the boarder of the arm 3 towards the aperture 4 when guided by a ridge 8 on the arm 3. It is understood without saying that the sheet is held in the safest way if the clamp 7 is passed to a position essentially midway between the pins 5 and 6. It is also obvious from Figs. 1 and 2 that the handle preferably is provided with reinforcing ribs so as to increase its resistance to bending. The location to be chosen for such ridges is understood by anyone skilled in the art without special instructions.

Fig. 3 shows a rack 9 on which e.g. offset printing sheets are suspended by means of handles 1 according to the invention. The rack 9 comprises uprights 11 standing on the floor on feet 12. The uprights 11 carry beams 13 on which handles 1 with sheets 10 can be suspended in a way understood from Fig. 3 without further. However, it should be mentioned that - as shown in the lower row of sheets 10 - labels 14 may be inserted between the handles 1 these labels 14 carrying information concerning the sheets 10 stoored.

Figs. 4 and 5 show how the handle according to the invention can be used for suspending the sheets 10 from a rack trolley 15 for being transported from their stooring place to their place for use. This trolley 15 is of course constructed principally in the same way as is the rack 9 but has at the feet been provided with castors 16. At the place of use it is of course possible and preferable to place a rack offering the same possibilities for suspending the offset printing sheets in a way making them easily accessable.

Fig. 6 shows an indicating device 14 which has arms shaped in such a way that they can be arranged above a beam 13 carrying sheets 10. The indicating device 14 has a surface 19 for a label with indications concerning the sheets in the close neighbourhood of the label.

0f course the invention is in now way restricted to the embodiments as shown and described but many modifications are possible within the scope of the appended claims for achieving the purposes of the invention, i.e. to create a handle which can be safely attached in a simple way to an object of the kind described, i.e preferably offset printing sheets, such that these objects can be handled in a simple, safe and careful way. Thus, it is obvious that the essential part of the invention is to be seen the handle 1 proper which may be modified with regard to the measures for stiffening purposes. The clamp 7 can take many shapes and this is true also with regard to the measures for coupling of the handle to the offset printing sheets.

Claims

1. A device for handling of big, thin objects of sheet-like shape, in particular offset printing sheets, **characterized** therein that it is in the form of a handle (1) which comprises two arms (2, 3) one of which (2) forms a part to be gripped by the hand of the user and the other arm (3) is capable of being locked to the object and to this end is provided with two pins (5, 6) and a clamp (7) for locking the object on the pins (5, 6), when these pins (5, 6) are inserted in corresponding openings in the object, the arm (2) to be held by the hand capable of being suspended from the beams of a track (9).

2. A device as claimed in claim 1, **characterized** therein that the arms (2, 3) are provided with ridges increasing their resistance to bending.

3. The use of the device as claimed in claim 1 or 2 for the transportation of offset printing sheets by means of a stand in the shape of a trolley (15).

Fig.1

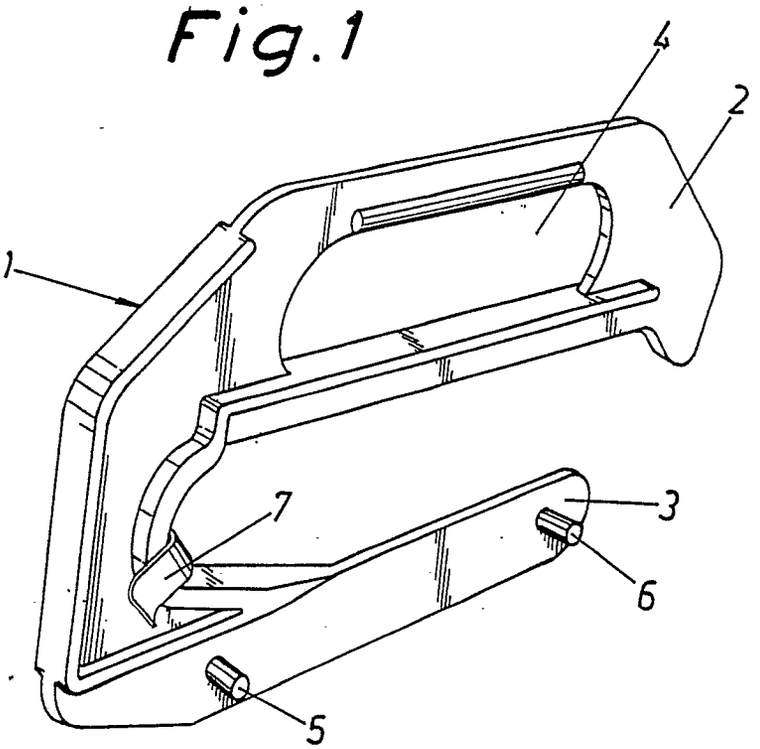

Fig.2

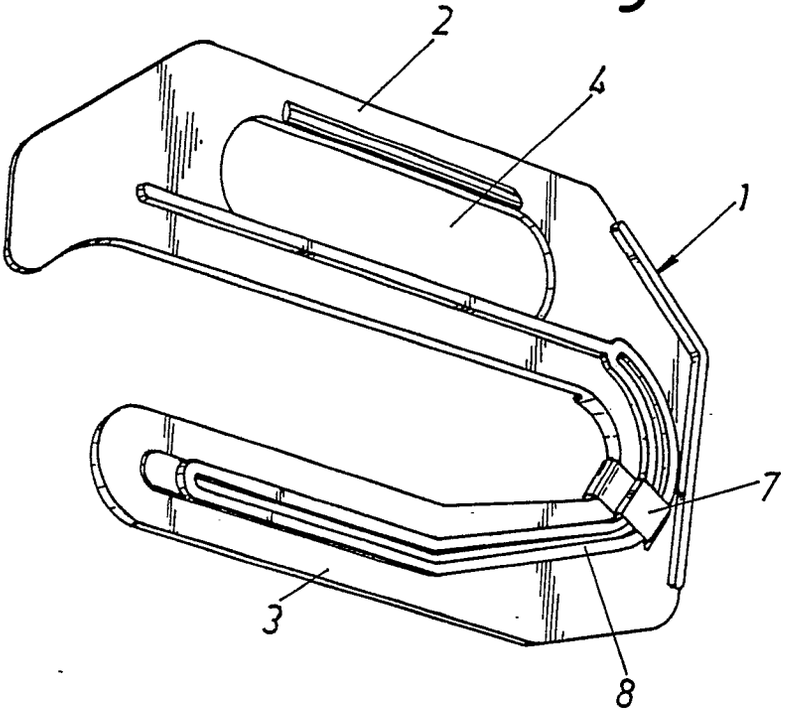

Fig. 3

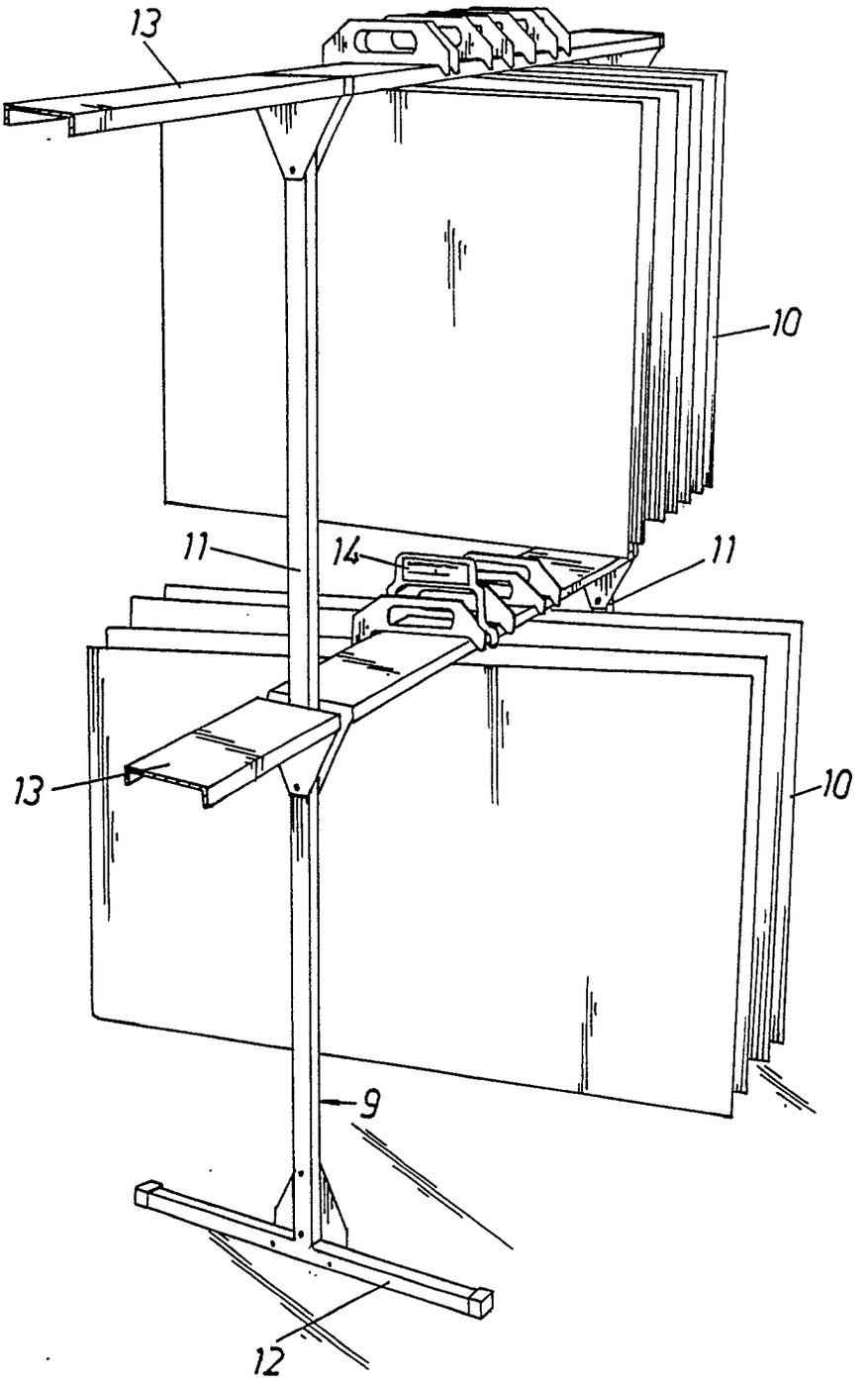

Fig.5

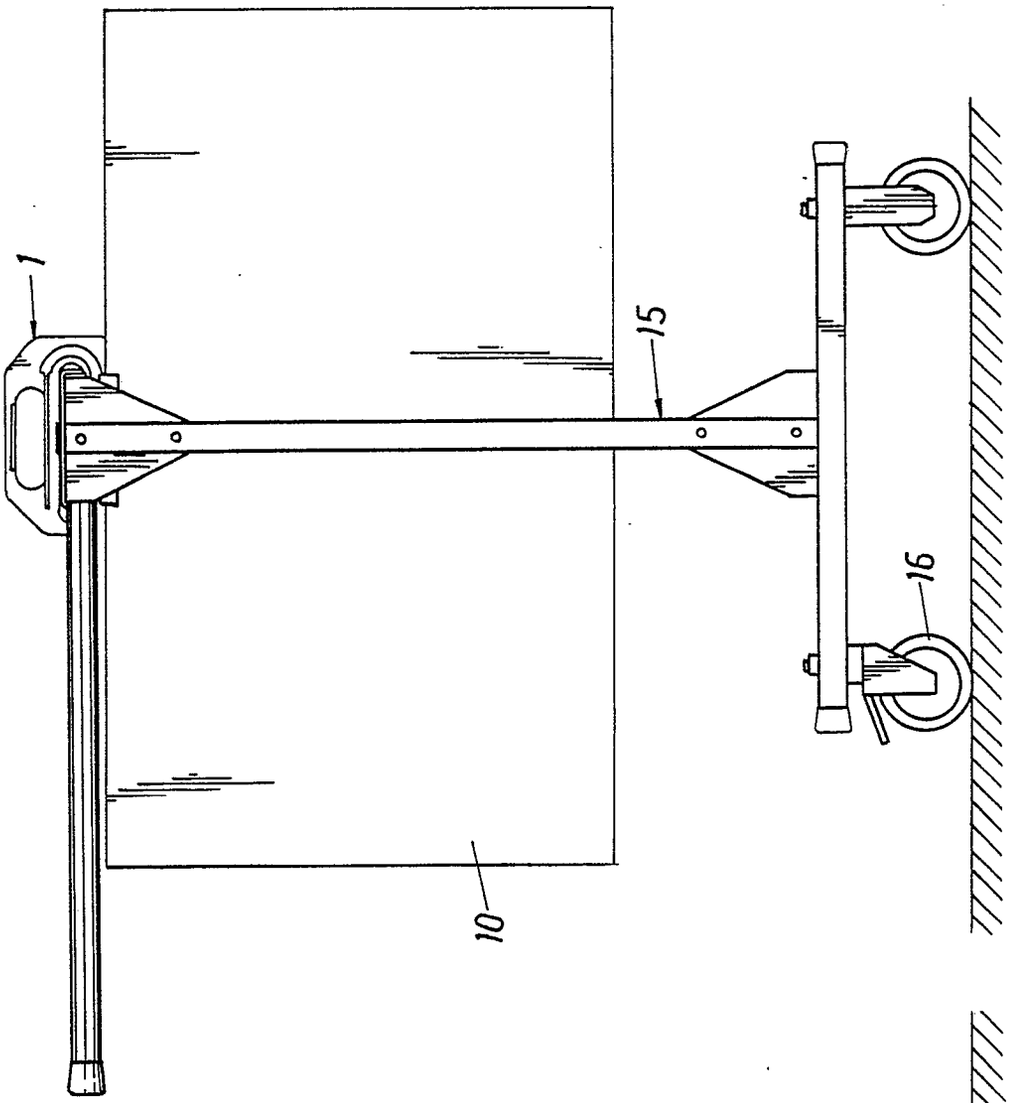

Fig.4

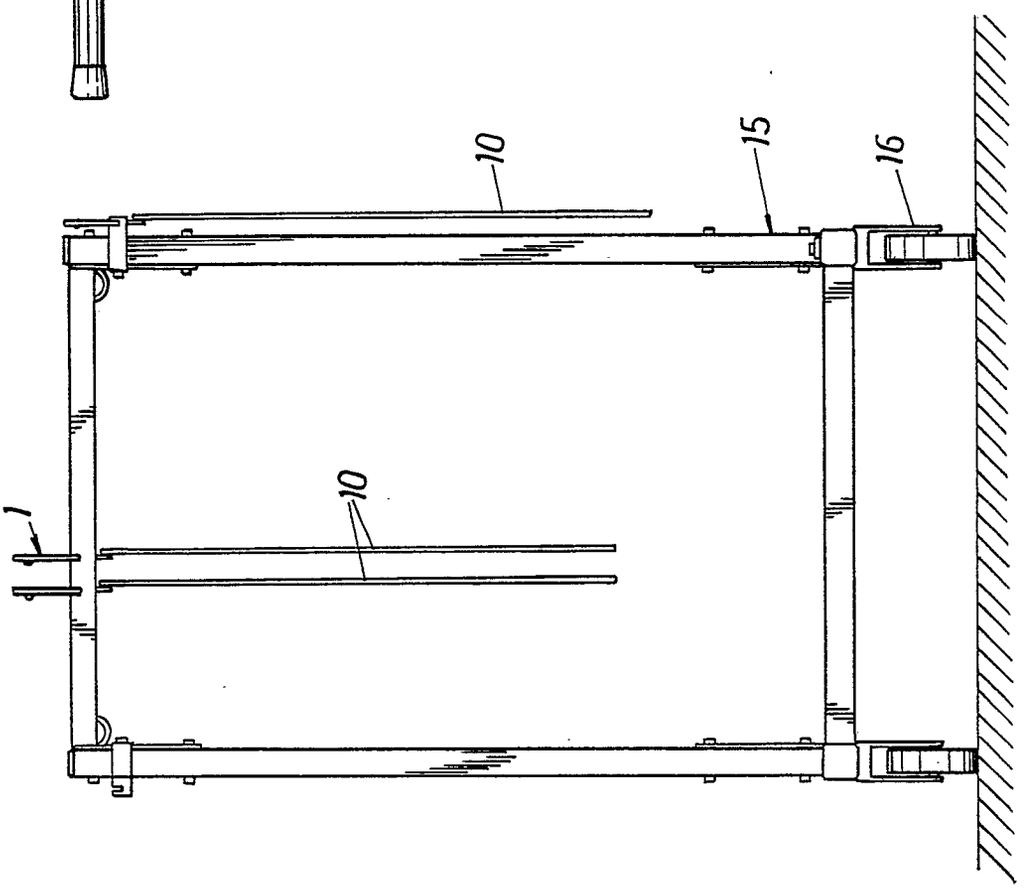

Fig.6