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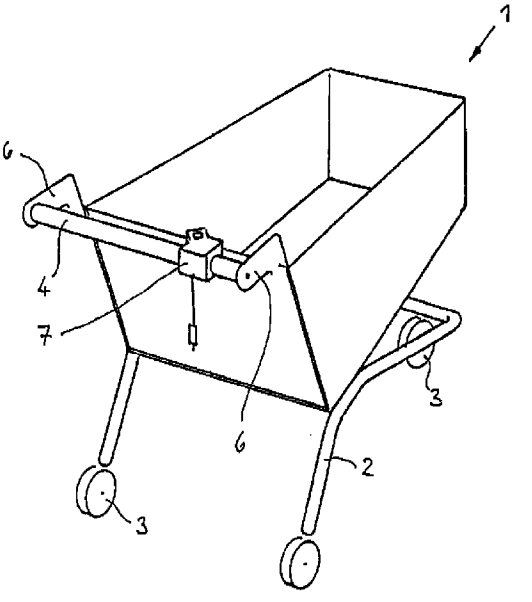
(54) **CHARIOT TRANSPORTEUR MUNI D'UN SUPPORT POUR LECTEUR DE CODE A BARRES MANUEL**

(54) **TRANSPORT CART**



(57) L'invention concerne un chariot transporteur (1) déplaçable manuellement, pouvant être encastré dans des chariots du même type, et destiné à transporter des marchandises ou des bagages, équipé éventuellement d'un élément d'accouplement (7) et dont la barre de poussée (4) ou bien est supportée par des supports de poignée (6), ou bien fait partie intégrante d'une structure dirigée vers le haut, un dispositif de support déterminé étant prévu pour un dispositif lecteur de code à barres manuel. Conformément à l'invention, le dispositif de support (9) est monté non amovible soit sur un support de poignée (6), soit sur un élément d'accouplement (7), soit encore sur une barre de poussée (4).

(57) The invention relates to a push-trolley (1) which can be stacked with its kind and loaded with goods or luggage. The trolley can optionally be equipped with a coupling part (7). The pushing device (4) of the trolley is either supported by handle support brackets (6) or is an integral part of a frame structure with an upward directed member providing a certain carrying facility (9) for placing a hand scanner. It is suggested to unreleasably attach the carrying facility either to a handle support bracket (6), a coupling part (7) or a pushing device (4).

Summary

The invention concerns a transport cart (1) to accept goods or baggage which can be pushed by hand and closely packed with similar carts and which, if desired, can be outfitted with a coupling device (7) and whose pushing device (4) can be supported by the handle mounts (6) or can be built into a frame construction aligned upward, whereby a carrying device (9) is envisioned for placing or depositing a hand scanner.
It is recommended, that the carrying device (9) be placed in a non-detachable manner either on one handle mount (6) or on the coupling piece (7) or on the pushing device (4).

Transport Cart

The invention concerns a transport cart to accept goods or baggage which can be pushed by hand and closely packed with similar carts and which, if desired, can be outfitted with a coupling device and whose pushing device can be supported by the handle mounts or can be built into a frame construction aligned upward, whereby a carrying device is envisioned for placing or depositing a hand scanner.

It is customary in self-service stores to loan customers hand scanners, so that the customers can calculate the cost of the goods purchased. In order that the hand scanner does not always have to be carried during shopping, the transport carts which are made available to the customers as shopping carts have a carrying device which can be used to hold the hand scanner when no calculations are being made. The carrying device which is shaped like a container open on the top is attached as an independent part to the pushing device which is shaped as a handlebar. When not in use during shopping, the hand scanner is placed or inserted loosely into the carrying device.

It is customary to equip such transport carts with coupling devices in order to ensure orderly loaning and returning of the transport carts which are made available. Such coupling devices are normally located on, or in the area of, the pushing device. Finally, it is customary to attach advertisements in the form of text, symbols and similar items on the pushing device, in order to influence the buying habits of the customers or merely to characterize the transport cart as being the property of a certain store.

It has proven disadvantageous to attach the carrying device for the hand scanner to the pushing device because, first of all, the already mentioned advertising is made unreadable and, secondly, the carrying device gets in the way, when one wants to place goods in the portion of the transport cart which is shaped like a basket. The carrying device is then in the movement area of the hands of the person pushing the transport cart. That is even more of a hinderance when a coupling device is instead attached on or near the pushing device.

In US Patent 4, 691, 816 it is briefly noted that a clamping device is envisioned on the coupling part in which a flat electronic pocket calculator or a shopping list can be clamped.

The listed patent provides neither information whether the clamping device is capable of handling a hand scanner which is significantly bigger than a pocket calculator, nor does it provide data about the type of placement and means of attaching the clamping device to the coupling part. It would, in addition, be extremely cumbersome when shopping to have to secure the hand scanner to the transport cart by means of the clamping device every time it was not in use, since two hands would always be needed for that task.

The German registered patent DE 295 07 772 UI describes a transport cart in whose pushing element, which is configured like a handlebar, a saucer-like, small parts container is molded. Another version of the registered patent proposes constructing the small parts container as a cap piece held by the handlebar, whereby a coupling part can be integrated into a cap piece which is so formed. The registered patent leaves open the matter of whether a hand scanner can be inserted into the described small parts container.

The task of the invention consists of further developing a transport cart of this type, so that the described disadvantages

can be avoided.

It is proposed as the first solution of the task to place the carrying device either on the handle mount, the coupling part or the pushing device in a non-detachable manner.

A second solution of the task consists of connecting the carrying device to either the handle mount or the coupling part in a detachable manner, for example as a snap-lock.

Since the carrying device is a space-saving component part of either the handle mount, coupling part or pushing device, the impression is avoided that it is another additional part in the area of the pushing device. The carrying device can thus be so accommodated, that the advertising is not covered up. It proves especially useful to place the carrying device within the outline of the transport cart. By doing that damage to the carrying device and hand scanner caused by bumping or ramming can be avoided. If the carrying device is constructed as a smooth, shaped opening or as a projection or a hook, then no dirt can settle on the carrying device. That is a decisive advantage, when the transport cart is outfitted as a shopping cart for the

transport of food items.

The invention will be explained more closely by means of execution examples. They show:

Figure 1 - A transport cart outfitted as a shopping cart;

Figure 2 - A carrying device envisioned on a coupling part;

Figure 3 - A carrying device placed on a handle mount;

Figure 4 - A carrying device incorporated into the pushing device; and

Figure 5 - The outline of a transport cart.

Since the main area of use for the invention is expected to be self-service stores, transport cart 1 in Figure 1 is configured as a shopping cart. Transport cart 1 is moved by hand. It can be packed closely together with other transport carts 1 in order to save space and is so configured, that it can transport goods, like shopping purchases, but with appropriate construction, baggage can also be partially transported. Transport cart 1 is equipped with a customary pipe or bar-like pushing device 4 which is either supported by a separate handle mount 6 attached to transport cart 1 or is a component part of at least one frame

construction which is oriented upward. Such configurations are well known. The pushing device 4 mounts a coupling part 7, constructed for example as a coin lock which makes possible coupling and de-coupling of transport cart 1 with or from similar transport carts 1. A coupling device 7 of this type is described in more detail, for example, in DE 2000582 A1. Transport cart 1

incorporates a chassis 2 with wheels 3, whereby other useful devices, for example a child seat or a storage area, can naturally be added. It is also possible to outfit the transport cart 1 with removable baskets or containers.

Figure 2 shows an overhead view of a pipe-type pushing device 4 which mounts a customary coupling piece 7. The housing 8 of the coupling piece 7 includes an extension 10 which manifests a receptacle 10', for example in the shape of recess, an opening or at least a protrusion. The extension 10 together with the receptacle 10' comprise the carrying device 9 for the device to calculate prices 9 in the form of a hand scanner which is not depicted. If the carrying device 9 is a recess, the hand scanner would be placed or inserted in the recess. If an opening is chosen as the carrying device 9, the hand scanner can be hung in

the opening whereby the contour of the hand scanner would be so shaped, i.e. by an offset edge, that the hand scanner could not fall through the opening. If a protrusion is selected as the form of the carrying device 9, the hand scanner could be affixed or hung on a hook. In the example, the carrying device 9 is configured as a recess or an opening incorporated into the housing 8 of the coupling piece 7. The carrying device 9 thus depicted can not be removed from the coupling piece 7. Instead of this solution, it would also be possible to construct the carrying device 9 as an independent part which could be detached from the coupling piece 7 especially by snap-locks. Contours are included for that purpose on the carrying device 9 and the coupling piece 7 which mutually engage and lock each other. Such contours can be formed in the customary ways by recesses, projections, grooves, undercuts, etc. The carrying device 9 is some distance from the key insert of the coupling piece 7 which is shown by the arrow.

Figure 3 shows, that the carrying device 9 for the hand scanner described in Figure 2 can be located on one of the two handle mounts 6. The handle mounts 6 are usually composed of plastic and serve on the transport cart 1 to hold and support the pipe or

bar-type pushing device 4. It is also possible to place a carrying device 9 in the form of a recess, opening or protrusion on one of the two handle mounts, so that the carrying device 9 is inseparable from the handle mount 6. But it is also conceivable as proposed in Figure 2 to construct the carrying device 9 as an independent part which is snap-locked on a handle mount 6 with the assistance of the means listed in Figure 2. The listed means are then themselves attached in an appropriate way to the handle mount 6.

Another possibility of attaching a carrying device 9 for a hand scanner to the transport cart 1 is shown in Figure 4. In this execution model the pushing device 4 is a bar-shaped, plastic, injection molding part on which a non-detachable carrying device 9 shaped like an opening (as depicted), a protrusion or a hook is molded. Since a carrying device 9 in the shape of an opening can represent a weakening of the cross-section of the bar-shaped pushing device, the opening is preferred to be positioned outside of this cross-section, as shown. A pushing device 4 of this configuration can also house a coupling device, such as the type proposed in DE 37 14 115 C2. The pushing device 4 can also consist of two separate pushing handles, whereby the carrying

device would be located on one of the two pushing handles.

It is extremely useful, as can be seen in Figure 5, to place the carrying device 9 described in Figures 2 to 4 inside the outline of transport cart 1. The figure shows the solution described in Figure 2, whereby the lines marked as 11 represent the outline of transport cart 1. In the example the carrying device is positioned between the pushing device 4 and any device, for example a basket 5, used as a receptacle for goods. Since transport carts 1 of this type frequently bump into obstacles, the proposed solution prevents damage to the carrying device 9.

The invention also includes transport carts 1 configured as baggage transport carts, since shopping with such carts is also done in shops which are found for example in airports. Transport carts 1 of this type usually possess a small basket-like container in which purchased goods are placed.

PATENT CLAIMS

1. A transport cart (1) to accept goods or baggage which can be pushed by hand and closely packed with similar carts and which, if desired, can be outfitted with a coupling device (7) and whose pushing device (4) can be supported either by the handle mounts (6) or can be built into a frame construction aligned upward, whereby a carrying device (9) is envisioned for placing or depositing a hand scanner thereby characterized by the carrying device (9) being placed in a non-detachable manner either on a handle mount (6) or a coupling piece (7) or a pushing device (4).

2. A transport cart (1) to accept goods or baggage which can be pushed by hand and closely packed with similar carts and which, if desired, can be outfitted with a coupling device (7) and whose pushing device (4) can be supported either by the handle mounts (6) or can be built into a frame construction aligned upward, whereby a carrying device (9) is envisioned for placing or depositing a hand scanner thereby characterized by the carrying device (9) being connected in a separable fashion with either a

handle mount (6) or a coupling piece (7).

3. Transport cart (1) as per Claim 1 or 2 thereby characterized by the carrying device (9) manifesting a receptacle (10') in the form of a recess, an opening or at least a protrusion for a hand scanner.

4.Transport cart (1) as per Claim 1 to 3 thereby characterized by the carrying device (9) being located some distance from the key insert of the coupling piece (7).

5.Transport cart (1) as per Claim 1 to 4 thereby characterized by the carrying device (9) being located within the outline of the transport cart 1.

6. Transport cart (1) as per Claim 1 to 5 thereby characterized by the carrying device (9) being located between the pushing device (4) and any device, i. e. a basket (5), which is a receptacle for goods.

Fig. 1

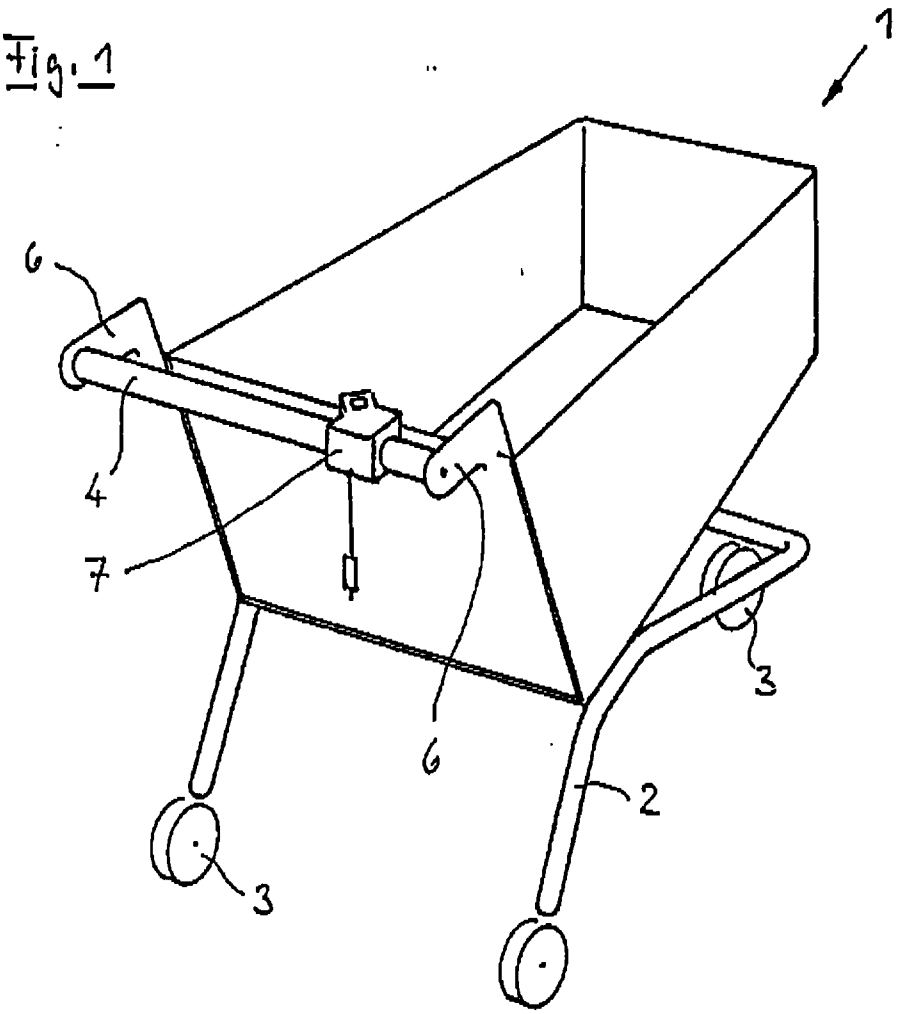


Fig. 2

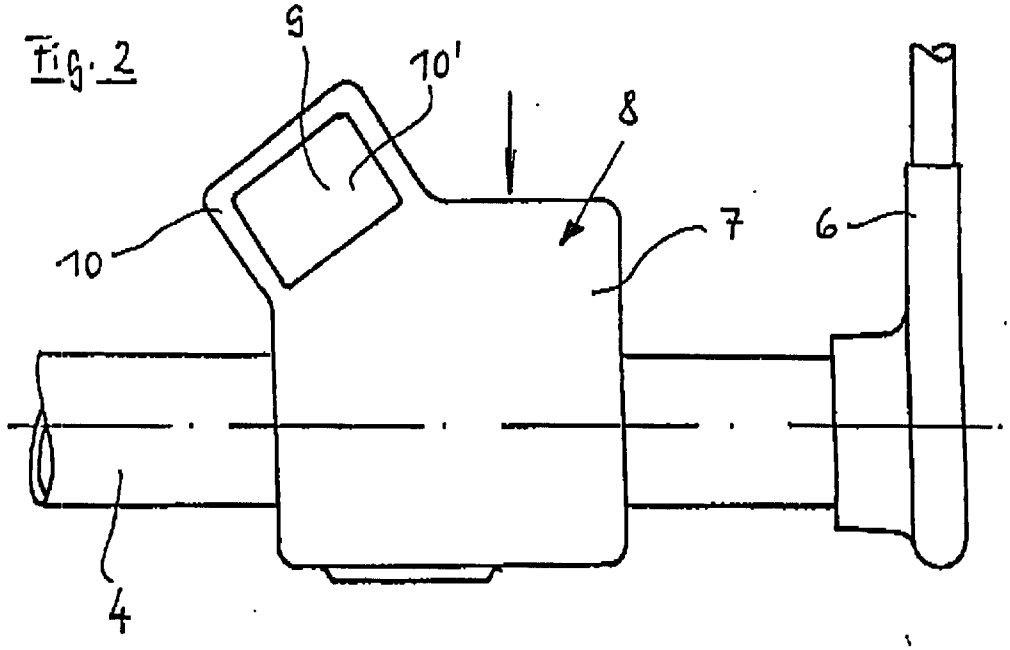


Fig. 3

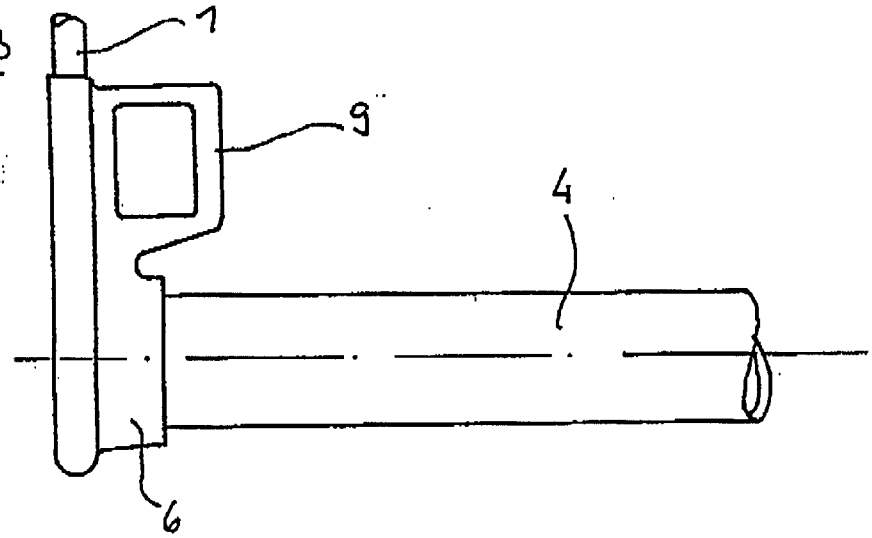


Fig. 4

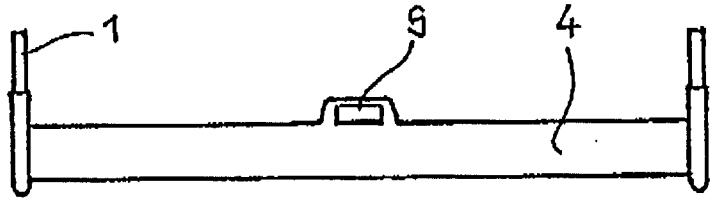
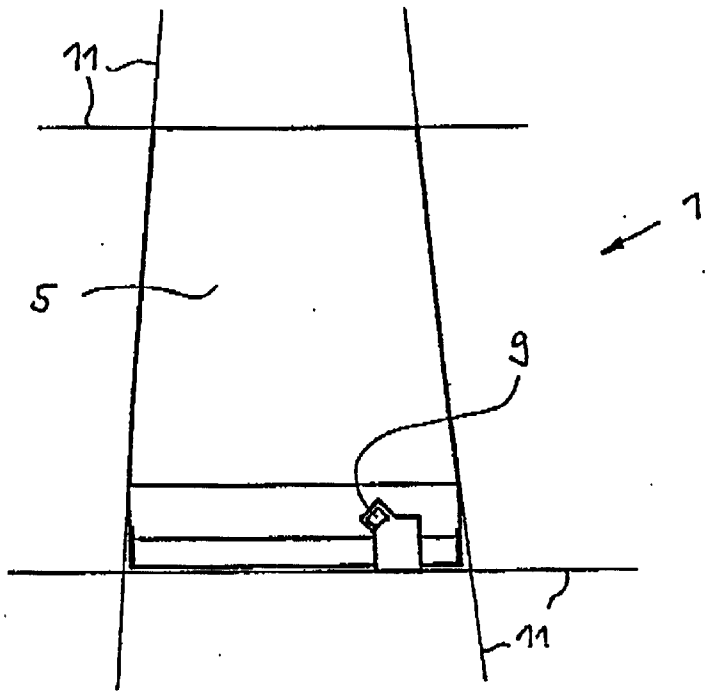
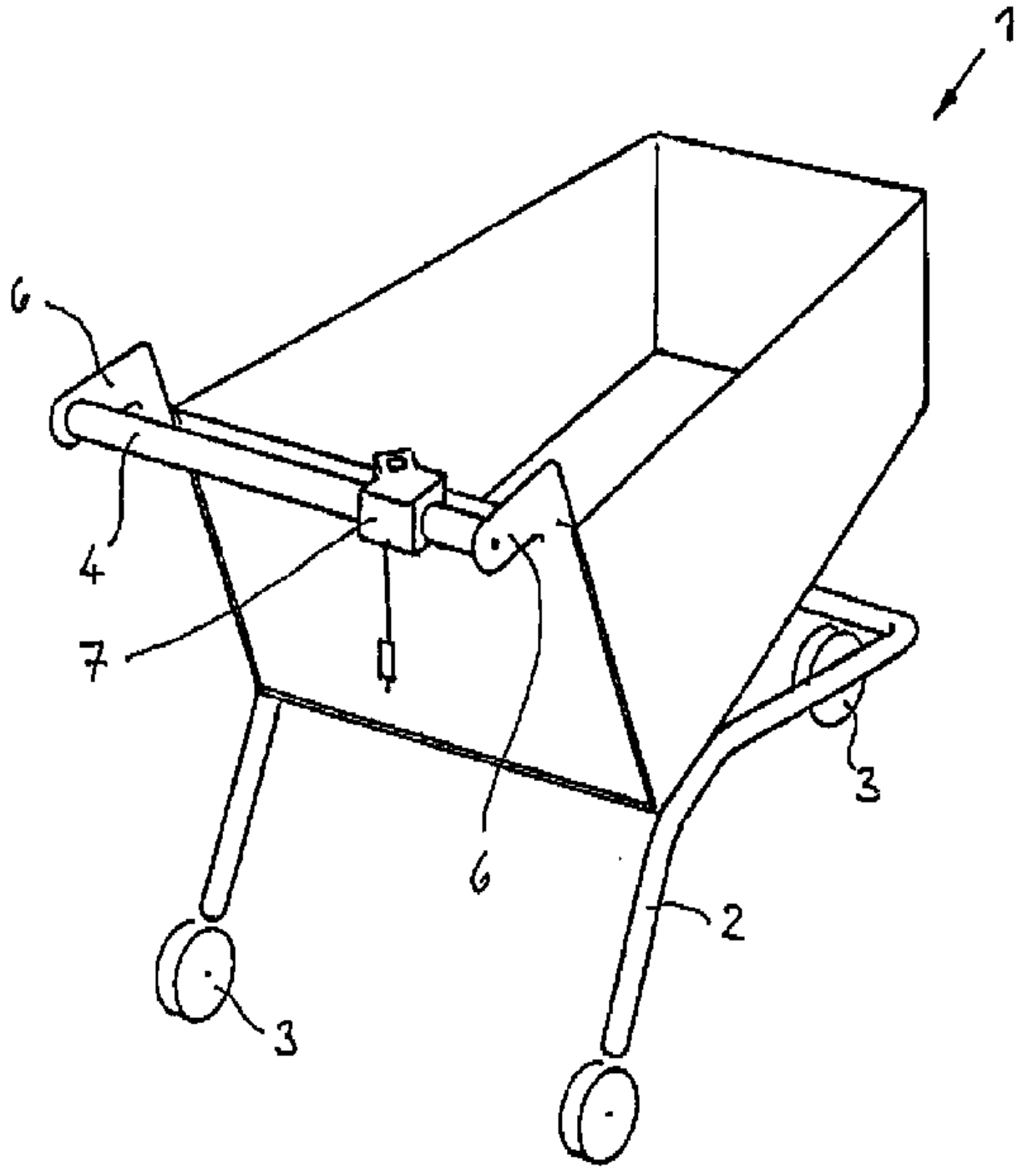


Fig. 5

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