UNITED STATES PATENT OFFICE.

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TRANSPORTING DEVICE FOR UNASSORTED CIGARS WHICH ARE NOT YET PACKED.


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To all whom it may concern:

Be it known that we, DAVID SÜSS, manufacturer, and HEINRICH JOCHER, workmaster, citizens of the German Empire, residing, respectively, at Mannheim, Germany, and Lampertheim, near Mannheim, have invented certain new and useful Improvements in Transporting Devices for Unassorted Cigars Which Are Not Yet Packed, of which the following is a specification.

This invention relates to a device for transporting unassorted and unpacked cigars and cigarillos from the place where they have been manufactured to the place where they are to be assorted and packed. 

Hitherto for this transport and assorting of the finished goods arrangements of various type have been proposed which possess however all the grave inconvenience that the cigars had to be packed in boxes to be brought to the place of assortment and packing, that they had to be repacked several times wherefrom resulted on the one hand much loss of time and high expenses for wages and on the other hand the possibility that the goods could be damaged and were damaged frequently. With the devices of known construction it was further rather troublesome to ascertain the number of cigars which had been manufactured and the control whether the corresponding number of cigars were really delivered at the place of assortment and packing was difficult or even impossible.

It is finally important that the goods packed in one box are of the same shape and colour and further, that the workman can easily examine the cigars with regard to colour, shape and size and that a control is possible so that the workmen are educated for careful work.

All these advantages are realized and all the above mentioned inconveniences are avoided by this invention which will be hereinafter described by way of example with reference to the accompanying drawing, wherein:

Fig. 1 shows an improved packing and assorting frame.

Fig. 2 shows several such frames inserted in a box ready for transport.

Fig. 3 shows in perspective view a second form of construction of the transporting and assorting box.

Fig. 4 is a cross section of Fig. 3, constructional details having been omitted.

Fig. 5 is a plan view of Fig. 3 the lid having been removed.

Figs. 6 and 7 show constructional details.

The transporting and assorting frame shown in Figs. 1 and 2 comprises two longitudinal parts a, a and two end parts b, b which are all rigidly connected with one another. These parts a, b are not high. Each frame has a bottom c with shallow corrugations 2.

Inside the frame a, b movable bars d are guided by means of flat irons 3 with hook-shaped ends, or by other means, upon the parts a of the frame parallel to the sides parts b. A ruler 4 serves to measure the length of the cigars and to regulate the distance between the movable bars d of which any required number can be used.

The depth of a frame from the bottom of a corrugation 2 to the upper edge of the frame corresponds with the thickness of the cigar at its thickest point. If a second frame is placed upon the first frame all cigars placed upon the corrugated bottom c of the first frame are securely held between the bottom plate of the lower frame and the bottom plate of the upper frame, so that during the transport the cigars cannot get out of their positions if the frame is shaken. The corrugations 2 ensure that in each frame only so many cigars can be stored as there are corrugations. The movable cross bars d separate inside the frame the different parallel rows of cigars. If therefore the number of corrugations are known or marked upon one of the end parts b by figures and if said number is multiplied by the number of parallel rows the result will be the number of cigars stored in the frame.

One glance is sufficient to ascertain whether the frame is completely filled, the number of corrugations and parallel rows, whether the cigars are of the correct length and whether they are all of the same colour.

The frames are superposed in a box e as shown in Fig. 2. In multiplying the
number of frames with the number of cigars in each frame the total number of cigars stored in one box is found.

The cigar maker deposits the cigars which he has made in the frame and hands the filled frames to the foreman who can easily ascertain the number of cigars and the appearance of the goods. The frames are inserted in a box which is locked and sent to the place where the final assembling and the packing are done. At this place the foreman to whom the box is delivered can see at once how many cigars he has received and of which quality they are. The empty frames are returned to the factory to be used again. Figs. 3 to 6 show a very important improvement. The frames are not inserted in a box but they are formed by the frames themselves. With this object in view each frame has a groove at its upper edge and a tongue at its lower edge so that the superposed frames are securely connected the one with the other. Fig. 4 shows a top frame and a bottom frame between which any number of intermediate frames can be inserted. The top frame is closed by a strong lid and the bottom frame is closed by a strong bottom plate. In each frame a corrugated supporting plate is arranged, as described, the cigars being securely held between these corrugated plates. The intermediate frames together with the top and bottom frames are rigidly connected by means of hoop irons and secured against theft with the aid of a padlock or the like.

The groove and tongue are either arranged so that the groove is open towards the outside, as shown in Fig. 4, or a tongue is arranged so that it downwardly projects from the middle of the lower surface of the frame parts and as shown in Fig. 7.

In order to facilitate the displacement and the locking of the separating bars an adjusting rail having a large number of teeth is fixed upon the inner surfaces of the frame parts. The separating bars embrace with their hook-shaped ends the adjusting rails and a slide movably arranged upon each separating bar engages its projections into the teeth if the slide is displaced in the direction of the arrow (Fig. 6).

Claims:

1. Transporting device for un assorted cigars and cigarillos which are still to be packed consisting of a convenient number of transporting frames—which possess only little depth and which have each a corrugated bottom, separating rails movably guided in said transporting frames, a transporting box in which the frames are placed the one upon the other so that the cigars stored between the superposed frames are held in position by the corresponding corrugated bottoms.

2. Transporting device for un assorted cigars and cigarillos comprising in combination a required number of transporting frames consisting of end parts and side parts of little height connected by groove and tongue and placed the one upon the other to form a transportable box, corrugated bottom plates one in each frame the superposed frames securely holding the cigars between them, movable separating bars, toothed rails fixed to the frame parts and slides movably mounted upon the separating bars for mounting and fixing these bars in transporting frames, a lid in the top frame, a bottom plate in the bottom frame and hoop irons for securely uniting the transporting frames to one closed receptacle.

3. Transporting device for un assorted cigars and cigarillos consisting of a plurality of low transporting frames, a corrugated bottom in each frame, means for the reception and secure mounting of the individual frames, and means for the formation of parallel rows of cigars in each transporting frame.

4. Transporting device for un assorted cigars and cigarillos comprising in combination, low transporting frames, bottoms with shallow corrugations in each transporting frame so that the superposed frames securely hold between the bottom plates the cigars placed into the corrugations, means for securely holding together the individual transporting frames and for closing the same towards the outside, separating bars in the individual transporting frames, and means for guiding and locking the separating bars in the individual frames.

5. Transporting device for un assorted cigars and cigarillos consisting of individual frames of such thickness and having grooves and tongues so that the superposed frames form together a transportable box, corrugated bottom plates in said frame so that the cigars in the frames are essentially secured between the bottom plates of two superposed frames against accidental displacement, and means for securely uniting the frames and for locking the same against separation.

In testimony whereof we affix our signatures in presence of two witnesses.

DAVID SÜSS.
HEINRICH JOCHER.

Witnesses:
BASIL E. SAVARD,
T. H. ANDERSON.