W. F. JAENECKE.

HANGER FOR CAROUSELS OR MERRY-GO-ROUNDS AND THE LIKE.

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1,259,992.

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Fig. 1.

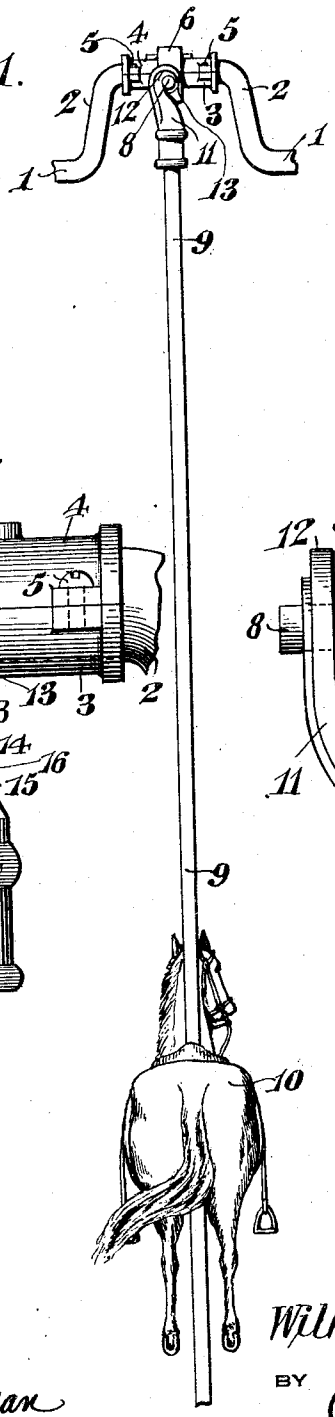


Fig. 2.

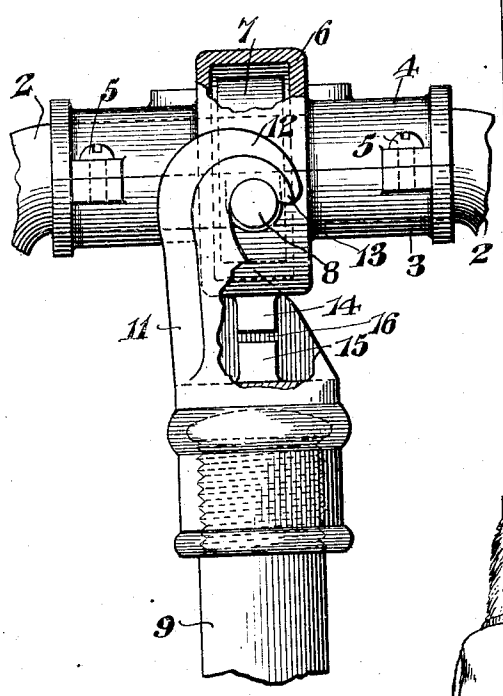
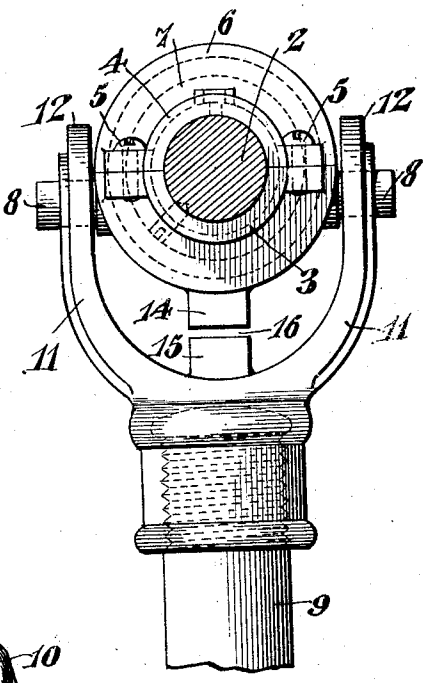


Fig. 3.



WITNESSES

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HANGER FOR CAROUSELS OR MERRY-GO-ROUNDS AND THE LIKE.

1,259,992. Specification of Letters Patent. Patented Mar. 19, 1918.

Application filed February 16, 1917. Serial No. 149,066.

To all whom it may concern:

Be it known that I, WILHELM F. JAENECKE, a citizen of the United States, residing at North Tonawanda, in the county of Niagara and State of New York, have invented new and useful Hangers for Carousels or Merry-Go-Rounds and the like, of which the following is a specification.

This invention relates to hangers for carousels, or merry-go-rounds, and the like.

An object of the invention is to provide a construction which can be easily and quickly dismantled, when desired, without much effort but which cannot be accidentally detached when in operation.

Another object of the invention is to provide a construction which will prevent the separation of the hanger from the bearing by a direct vertical movement but which will allow the hanger to be lifted and separated from the bearing after it is swung laterally.

In the accompanying drawing, I have illustrated one embodiment of my invention, in which:

Figure 1 is a rear elevation, showing the hanger applied to the crank shaft of a carousel, a portion only of the crank shaft being shown.

Fig. 2 is an enlarged detail view of the upper portion of the structure illustrated in Fig. 1.

Fig. 3 is an enlarged detail view at right angles to that shown in Fig. 2, the crank shaft being shown in section.

In this drawing I have illustrated only so much of the carousel as is necessary to disclose the invention, the main features of the carousel being well known. It is also to be understood that my invention is applicable to constructions other than carousels.

As here illustrated, the radial crank shaft 1 of the carousel is provided with a crank 2, whereby the seat, which, as here shown, comprises a horse, may be reciprocated vertically.

Each crank is provided with a bearing or journal box, which, in the present instance, comprises the separable lower and upper parts 3 and 4, connected together by means of suitable fastening devices such as the screws 5. The central portion of the bearing box comprises a casing 6 in which is located a set collar 7 fixed to the crank and engaging the casing to prevent movement of the box lengthwise of the crank.

The bearing is provided with suitable devices for supporting the hanger. These devices are of such a nature as to allow the hanger to swing thereon and are unobstructed at the top to allow the hanger to be bodily lifted therefrom to separate the same from the bearing. For this purpose, the opposite sides of the lower part 3 of the bearing box are provided with oppositely directed trunnions 8 projecting from the casing 6. To the trunnions is attached a hanger 9 having, at its lower end, a suitable support or seat 10, which, in the present instance, simulates a horse, although a representation of any other animal may be used, or none at all. The upper end of the hanger 9 is bifurcated providing a pair of arms 11 terminating in devices or hooks 12 engaging the supporting devices or trunnions 8, the arms embracing the lower portion of the casing 6 of the bearing box. Each hook is provided with a bill 13 which extends around its trunnion. The invention, however, is not to be limited to hooks as herein illustrated as the form of hook or similar device will vary with the form of supporting device or trunnion used.

In order to prevent the separation of the hanger from the bearing by a direct vertical movement but to allow this separation after the hanger has been swung laterally, there has been provided suitable means which in this instance comprises the lugs 14 and 15. The lug 14 projects downwardly from the bottom of the casing 6, while the lug 15 projects upwardly from the hanger at a point between the arms 11 and in alinement with the lug 14.

When the hanger is supported by its trunnions, a small space 16 is provided between the lugs to allow a certain amount of play. This space, however, is not of sufficient width to cause the disengagement of the hooks, should the hanger move vertically, and the lugs engage. Each bill 13 extends around its trunnion a sufficient distance to securely lock the hook against disengagement by a lateral movement should the lugs engage each other by a vertical movement of the hanger. When the hanger is in the position shown, it will be seen that it is impossible to cause the disengagement

of the hooks from the trunnions by a direct vertical movement of the hanger, for the reason that the lugs will engage each other to prevent such movement and the bills extend around the trunnions enough to prevent the disengagement.

It is usual in carousel constructions to retain the lower end of the hanger against lateral movement when in operation by suitable means connecting the same to the floor of the carousel. This means, however, has not been shown as it is of a well known construction and does not constitute a feature of the invention.

When it is desired to detach the hanger from the crank shaft, the lower end of the former must first be swung laterally or to the left, looking at Fig. 2. In this connection, it should be noticed, that, in swinging the hanger, it always remains supported by the trunnions, so that it will not be necessary for the person swinging the hanger to sustain the weight thereof during the initial part of the detaching operation. By swinging the hanger laterally it will be obvious that the lugs 14 and 15 will thereby be moved out of alinement with each other and into such position that the hooks can then be easily lifted from the trunnions by a slight vertical movement.

The operation of detaching the hanger is a very simple one, comprises a minimum number of movements and reduces to a minimum the necessity of supporting the weight of the hanger during the operation. This construction is, therefore, a great advantage over constructions which have heretofore been made or which are in use.

While I have shown and described one embodiment of my invention, it is to be understood that I do not desire to be limited to the details of construction herein shown and described for obvious modifications will be apparent to anyone skilled in the art.

What is claimed is:—

1. The combination with a bearing, of a hanger, said hanger and said bearing having co-acting means for detachably and swingingly connecting said hanger to said bearing and said hanger being adapted to be disconnected from said bearing when swung, and means to prevent the separation of the hanger from the bearing by a direct vertical movement but to allow such separation only after the hanger is swung laterally.

2. The combination with a bearing having a supporting device, of a hanger provided with means for swingingly engaging the supporting device and adapted when swung laterally to be lifted therefrom, and means fixed to said bearing and to said hanger to prevent their disengagement when the hanger is moved directly vertically, but to allow their disengagement when it is swung laterally.

3. The combination with a bearing, of a hanger detachably connected therewith and adapted to swing thereon, and lugs fixed to said bearing and to said hanger adjacent to each other to prevent the disengagement of the hanger freely by a direct vertical movement thereof but to allow such disengagement when the hanger is swung laterally.

4. The combination with a bearing having a supporting device unobstructed at the top, of a hanger having an engaging device adapted to engage said supporting device and to be lifted bodily therefrom after the hanger is swung laterally, and lugs to prevent the disengagement of said hanger freely from said bearing except when the hanger is swung laterally.

5. The combination with a bearing having a supporting device unobstructed at the top, of a hanger having an engaging device adapted to engage said supporting device, said engagement being such that the hanger can swing thereon and be bodily lifted therefrom when swung laterally, and lugs fixed to the lower portion of said bearing and to a portion of the hanger adjacent thereto to prevent disengagement of the hanger from the bearing except when the former is swung laterally.

6. The combination with a bearing having supporting devices unobstructed at the top and projecting therefrom at its opposite sides, a hanger having arms provided with engaging devices at their upper ends adapted to removably engage the supporting devices and to swing laterally thereon, and fixed means to prevent a disengagement of said hanger from said bearing by a direct vertical movement but to allow the disengagement thereof when the hanger is swung laterally.

7. The combination with a bearing provided with oppositely directed trunnions, of a hanger having at its upper end spaced arms provided with hooks engaging the trunnions, and lugs upon the bottom of the bearing and upon said hanger between said arms and in alinement with each other to prevent excessive vertical movement of the hanger.

8. The combination with a bearing and a portion projecting therefrom constituting a trunnion support, of a hanger having a hook at its upper end engaging said trunnion support, said bearing and hanger being provided with lugs interposed between the same and below said trunnion support to prevent vertical movement of the hanger, said hanger being adapted to be swung laterally to move said lugs out of alinement whereby the hook may then be lifted from the trunnion support.

9. The combination with a bearing and oppositely directed trunnions projecting from said bearing, of a hanger provided at

its upper end with a pair of spaced arms embracing said bearing, provided with hooks, engaging the trunnions and supported thereby, a lug projecting downwardly from the bottom of said bearing and a lug in alinement with said first mentioned lug and below the same, and fixed to said hanger between the arms, said lugs being slightly separated when the hanger is in normal position upon the trunnions, and the hooks being provided with bills extending around the trunnions sufficiently to prevent the disengagement thereof as the lugs move toward each other and engage.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

WILHELM F. JAENECKE.

Witnesses:
JOHN WENDLER,
ALLAN HERSCHELL.