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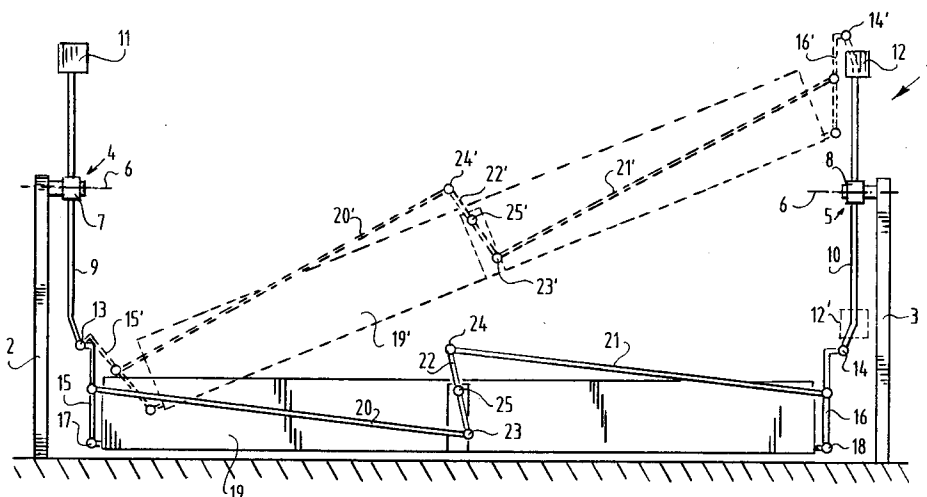
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NL-2517 GK The Hague(NL)(54) **Amusement device.**

(57) An amusement device comprises:
two posts (2,3) placed at a mutual distance;
two bearings (4,5), one of which is present on each post (2,3), with horizontal common rotational axis (6), which bearing supports a carrying shaft (7,8) to which is connected a rigid arm (9) which bears a mass (11,12) on one side and a three-dimensional coupling (13,14) on the other, which coupling supports a carrying arm (15,16);
a gondola (19) which is supported between the free ends of both carrying arms (15,16) by means of a three-dimensional coupling (17,18) and in which users of the device can take up position;

drive means for rotatably driving the carrying arms (9,10) at selected speeds; and
a rod mechanism co-acting with both carrying arms (15,16) and the gondola (19) and comprising:
- two control rods (20,21) each connected pivotally to a carrying arm (15,16); and
- a coupling rod (22) pivotally connected to these control rods (20,21) and pivotally coupled to the gondola (19) between both its pivot axes (23,24);
- this such that the position of the gondola (19) is dependent exclusively on the angular positions of both carrying arms (15,16).

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The invention relates to an amusement device, in particular a fairground attraction.

Such an amusement device is known for instance from EP-A-0 231 051. The fairground attraction described therein has the technical drawback of requiring a complicated construction. Use is made of two posts placed at a mutual distance to which rotors are coupled. One of both rotors comprises a foldable arm which carries on one side a counterweight rotatable in a vertical plane and on the other side, via a folding coupling, an auxiliary arm to which is connected a gondola. Such a construction is necessary to compensate the differences in distance which occur when the arms have dissimilar rotation speeds. Also proposed in this older application is to embody the gondola such that it has a variable length, in particular that it consists of two parts in mutually slidable arrangement.

EP-A-0 140 238 relates to a similar device. This also proposes the possibility of giving the gondola a variable length or of giving the carrying arms a variable position superimposed on the rotation in a horizontal plane. From a technical viewpoint such a solution is unsuitable in practice.

DE-A-33 21 599 likewise relates to such a device which operates with two carrying arms. Use is made here however of a coupled rotation movement of the carrying arms.

The invention has for its object to provide a construction which combines great technical reliability with a very simple construction. To this end the invention provides an amusement device comprising:

two posts placed at a mutual distance;

two bearings, one of which is present on each post, with horizontal common rotational axis, which bearing supports a carrying shaft to which is connected a rigid arm which bears a mass on one side and a three-dimensional coupling on the other, which coupling supports a carrying arm;

a gondola which is supported between the free ends of both carrying arms by means of a three-dimensional coupling and in which users of the device can take up position;

drive means for rotatably driving the carrying arms at selected speeds; and

a rod mechanism co-acting with both carrying arms and the gondola and comprising:

- two control rods each connected pivotally to a carrying arm; and
- a coupling rod pivotally connected to these control rods and pivotally coupled to the gondola between both its pivot axes;
- this such that the position of the gondola is dependent exclusively on the angular positions of both carrying arms.

The appended drawing shows an amusement device 1 comprising two posts 2, 3 placed at a mutual distance;

two bearings 4, 5, one of which is present on each respective post 2, 3, with horizontal common rotational axis 6, which bearing supports a carrying shaft 7, 8 to which is connected a rigid arm 9, 10 which carries a mass 11, 12 on one side and a three-dimensional coupling 13, 14 on the other, which coupling supports a carrying arm 15, 16, a gondola 19 which is supported between the free ends of both carrying arms 15, 16 via a three-dimensional coupling 17, 18 and in which users can take up position;

drive means (not drawn) for rotatably driving the carrying arms 9, 10 at selected speeds;

a rod mechanism co-acting with both carrying arms 15, 16 and the gondola 19 and comprising:

two control rods 20, 21 each connected pivotally to a carrying arm 15, 16;

a coupling rod 22 pivotally connected to the control rods 20, 21 and coupled to the gondola 19 between both its pivot axes 23, 24 by means of a pivot joint 25.

The full lines indicate the lowest position; the broken lines and the reference numerals provided with an accent indicate another extreme position, from which it is apparent that the rod mechanism determines the position of the gondola so that horizontal rocking of the gondola such as can occur particularly in the device according to EP-A-0 140 238 is positively prevented.

In the embodiment drawn the rod mechanism has an exactly symmetrical form.

It will be apparent from the above that the device according to the invention ensures great reliability with mechanically very simple means, which is of fundamental importance for this kind of device.

Claims

1. An amusement device comprising:

two posts placed at a mutual distance;

two bearings, one of which is present on each post, with horizontal common rotational axis, which bearing supports a carrying shaft to which is connected a rigid arm which carries a mass on one side and a three-dimensional coupling on the other, which coupling supports a carrying arm;

a gondola which is supported between the free ends of both carrying arms by means of a three-dimensional coupling and in which users of the device can take up position;

drive means for rotatably driving the carry-

ing arms at selected speeds; and

a rod mechanism co-acting with both carrying arms and the gondola and comprising:

- two control rods each connected pivotally to a carrying arm; and 5
- a coupling rod pivotally connected to these control rods and coupled pivotally to the gondola between both its pivot axes;
- this such that the position of the gondola is dependent exclusively on the angular positions of both carrying arms. 10

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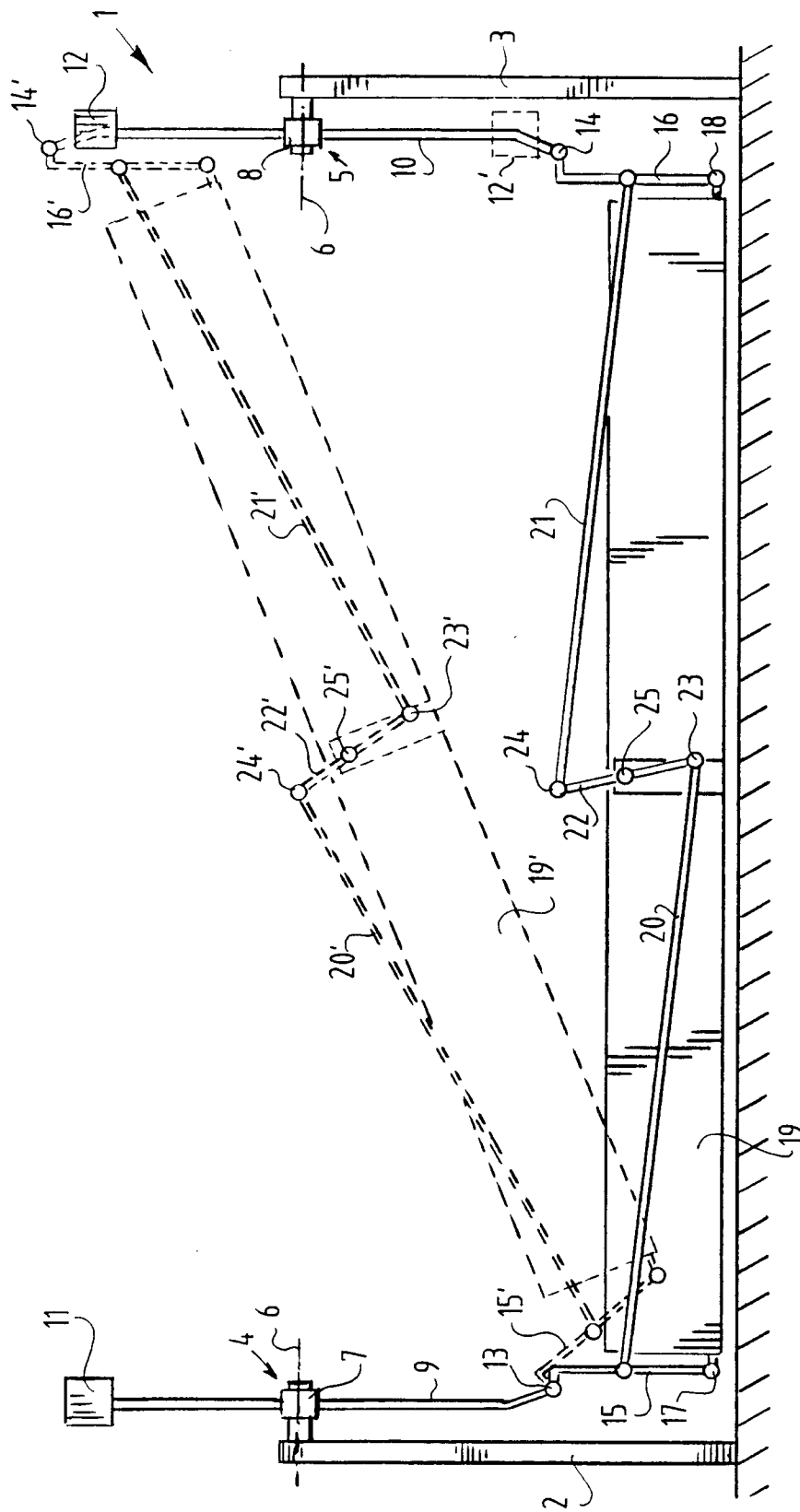
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EUROPEAN SEARCH REPORT

Application Number

EP 91 20 2963

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A, D	EP-A-0 231 051 (KNIJPSTRA) * the whole document * ---	1	A63G27/02 A63G9/08
A, D	EP-A-0 140 238 (VAN DER VEEN) * the whole document * ---	1	
A, D	DE-A-3 321 599 (WINTER) * the whole document * -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			A63G
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 17 FEBRUARY 1992	Examiner BAERT F.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			