

STAND FOR AN ELECTRIC HANDMIXER

The invention relates to a stand for an electric handmixer which has at least one removable beater shank and a device for driving the beater shank, to which device the beater shank can be detachably connected, the stand comprising a base for rotatably supporting a bowl, a column connected to the base and an overhanging arm connected to the column for supporting the handmixer, the arm being formed as a closed casing in which is journaled a coupling wheel of a transmission mechanism for a driving wheel for the bowl, which coupling wheel has a central aperture to receive the beater shank and comprises connection means whereby the beater shank can be detachably connected to the coupling wheel.

German Auslegeschrift 1654868 discloses a stand of the above construction which is used in combination with a handmixer having a beater shank which is provided with a toothed wheel. In the operating condition the beater shank extends into the mixer and the toothed wheel cooperates with the transmission mechanism in the overhanging arm of the stand. This construction makes it necessary for the arm on the side facing the base to comprise a comparatively large aperture for the passage of the toothed wheel. A disadvantage of the fact that the arm is not completely closed is that the transmission mechanism soon becomes contaminated. A further disadvantage of the known construction is that when the mixer is used without a stand the toothed wheel has to be removed from the beater shank so as to avoid contamination of the toothed wheel.

It is an object of the invention to provide a stand which does not suffer from these disadvantages.

According to the invention there is provided a stand for an electric handmixer which has at least one removable beater shank and a device for driving the beater shank, to which device the beater shank can be detachably connected, the stand comprising a base for rotatably supporting a bowl, a column connected to the base and an overhanging arm connected to the column for supporting

the handmixer, the arm being formed as a closed casing in which is journaled a coupling wheel of a transmission mechanism for a driving wheel for the bowl, which coupling wheel has a central aperture to receive the beater shank and comprises connection means whereby the beater shank can be detachably connected to the coupling wheel, characterised in that the beater shank can be inserted through the central aperture for connection to both the coupling wheel and the driving device of the handmixer in order to receive drive from the driving device and transmit this drive to the coupling wheel, the casing of said arm also having apertures through which the beater shank can be inserted for said connection.

Netherlands Patent Application 7500397 discloses a stand having an overhanging arm which is formed as a closed housing. A disadvantage of this known stand is that the housing is provided with two coupling elements, namely one for the mixer and one for the beater. The stand according to the invention has only one coupling element, namely the said coupling wheel, as a result of which the construction of this stand and notably of the arm is surprisingly simple.

A preferred embodiment of the stand according to the invention is characterised in that the connection means comprises at least one axial slot which opens into the central aperture to receive a radial projection on the beater shank.

An embodiment of the invention is shown in the drawing and will be described in detail hereinafter. In the drawing:

Figure 1 shows diagrammatically in side elevation an embodiment of the stand according to the invention with a handmixer mounted thereon, and

Figure 2 is a sectional view through a part of Figure 1.

The stand 1 shown in Figure 1 has a base 2 to which a column 3 is rigidly connected. A bowl 4 is journaled on the base 2 so as to be rotatable and comprises on its outside a driving rim 5.

An overhanging arm 6 is connected to the top of the column 3 by means of a hinged joint 7. A transmission mechanism 8 is provided in the arm 6 and in this embodiment is in the form of a

toothed wheel drive. Instead of a toothed wheel drive, for example, a belt drive may alternatively be used. The transmission mechanism 8 cooperates with a pinion 9 and has a coupling wheel 10. The pinion 9 is mounted on a shaft 11 of a driving wheel 12. The driving wheel 12 presses against the driving rim 5 of the bowl 4. The coupling wheel 10 is in the form of a toothed wheel having a central aperture 13 (see also Figure 2).

In the operating condition a handmixer 14 is mounted on the arm 6. A shank 15 of a beater 16 is inserted through the aperture 13 of the coupling wheel 10 and connected in known manner in the driving device 17 of the mixer 14 so as to be detachable. The beater shank 15 for that purpose comprises two radial projections 18 for cooperating with slots 19 in the driving device 17. The beater shank 15 furthermore comprises radial projections 20 forced out of the shank 15. The coupling wheel 10 has axial slots 21 corresponding to the projections 20. Connecting the beater shank 15 occurs as follows. First the beater shank 15 is inserted into the central aperture 13, the distance between the projections 18 and the projections 20 in this embodiment being such that in a given position of the beater shank 15 both the projections 18 and the projections 20 are simultaneously situated in the slots 21. The beater shank 15 is then inserted into the mixer 14, the projections 18 sliding into the slots 19 in the driving device 17 and the projections 20 remaining in the slots 21. As a result of this the beater shank 15 is coupled to the driving device 17 and to the coupling wheel 10. When the beater shank 15 is now driven by the electric motor, not shown, in the mixer 14, the coupling wheel 10 is made to revolve. This movement is transmitted via the drive 8 to the driving wheel 12 which in turn drives the bowl 4. The beater shank 15 is removed in the usual manner, namely by pulling it axially out of the mixer or by pressing it out of the mixer by means of an ejection mechanism.

The arm 6 is constructed as a closed casing in which only one aperture for the shaft 11 and two apertures for the beater shank 15 are present.

(13)



CLAIMS

1. A stand for an electric handmixer which has at least one removable beater shank and a device for driving the beater shank, to which device the beater shank can be detachably connected, the stand comprising a base for rotatably supporting a bowl, a column connected to the base and an overhanging arm connected to the column for supporting the handmixer, the arm being formed as a closed casing in which is journaled a coupling wheel of a transmission mechanism for a driving wheel for the bowl, which coupling wheel has a central aperture to receive the beater shank and comprises connection means whereby the beater shank can be detachably connected to the coupling wheel, characterised in that the beater shank can be inserted through the central aperture for connection to both the coupling wheel and the driving device of the handmixer in order to receive drive from the driving device and transmit this drive to the coupling wheel, the casing of said arm also having apertures through which the beater shank can be inserted for said connection.

2. A stand as claimed in Claim 1, characterised in that the connection means comprises at least one axial slot which opens into the central aperture to receive a radial projection on the beater shank.

3. A stand for an electric handmixer substantially as herein described with reference to the accompanying drawings.

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