M. A. FLACH.

POWER GENERATING AND TRANSMITTING MEANS.

APPLICATION FILED MAR. 1, 1921.

1,438,702. Patented Dec. 12, 1922.

Fig. 1.

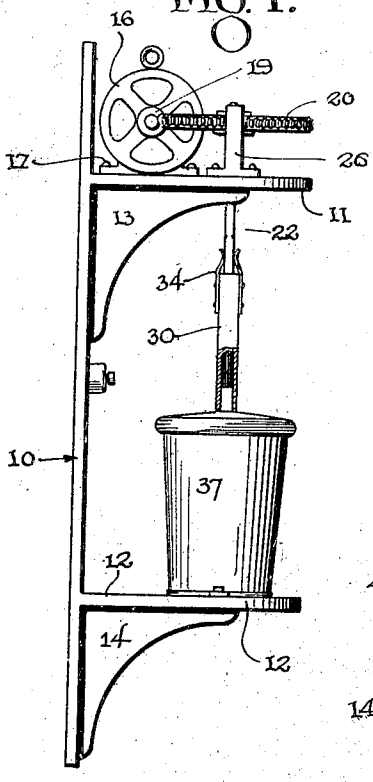


Fig. 2.

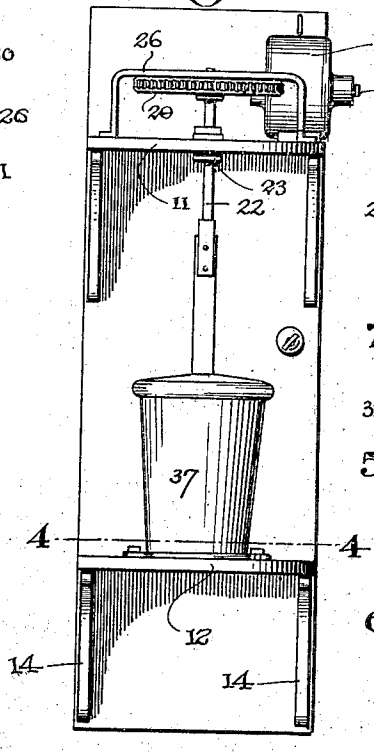
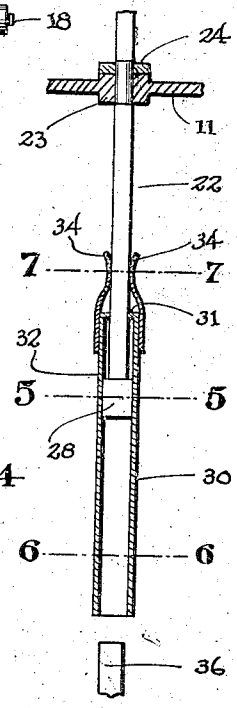


Fig. 3.



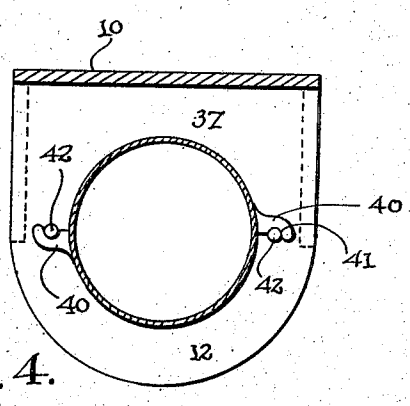


Fig. 4.

Fig. 5.

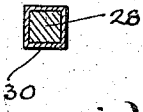


Fig. 6.

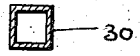
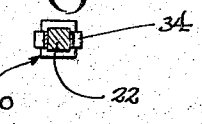


Fig. 7.



WITNESSES

INVENTOR

Max A. Flach.

BY

ATTORNEYS

Patented Dec. 12, 1922. 1,438,702

UNITED STATES PATENT OFFICE.

MAX AUGUST FLACH, OF COMFORT, TEXAS.

POWER GENERATING AND TRANSMITTING MEANS.

Application filed March 1, 1921. Serial No. 448,749.

To all whom it may concern:

Be it known that I, MAX AUGUST FLACH, a citizen of the United States, and a resident of Comfort, in the county of Kendall and State of Texas, have invented certain new and useful Improvements in Power Generating and Transmitting Means, of which the following is a specification.

This invention relates to power generating and transmitting means and more particularly to an apparatus having novel means for driving a plurality of household articles such as a churn, a meat chopper, various kinds of household mills, ice cream freezers and the like.

Briefly stated, an important object is to provide novel means whereby a single motor and power transmitting means may be employed for operating the above mentioned article so that one motor and one power transmitting means may be employed for all the aforesaid articles, thereby dispensing with the necessity of employing separate power generating and transmitting means for each article.

A further object of the invention is to provide a power generating and transmitting means which may be readily connected to a variety of articles for operating the same.

Other objects and advantages of the invention will be apparent during the course of the following description.

In the accompanying drawing, forming a part of this application in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a side elevation of the improved power generating and transmitting apparatus embodied in the invention, the same shown in use.

Figure 2 is a front elevation of the same.

Figure 3 is a detail sectional view through the power transmitting mechanism.

Figure 4 is a vertical transverse sectional view taken on line 4—4 of Figure 2.

Figure 5 is a horizontal sectional view taken on line 5—5 of Figure 3.

Figure 6 is a horizontal sectional view taken on line 6—6 of Figure 3.

Figure 7 is a horizontal sectional view taken on line 7—7 of Figure 3.

In the accompanying drawing, wherein for the purpose of illustration is shown the preferred embodiment of the invention the numeral 10 generally designates a supporting member having upper and lower spaced parallel shelves 11 and 12 which are braced by brackets 13 and 14 respectively. As illustrated in Figures 1 and 2 an electric motor 16 is secured to the upper shelf 11 by means of bolts 17 which serve as a means for securely holding the motor against movement as a result of vibration of the same. The armature shaft 18 of the electric motor is provided with a small gear 19 with which a larger gear 20 meshes. The gear 20 is arranged horizontally and is operated by the motor 15 and is keyed or otherwise secured to the upper end of a squared shaft 22.

As illustrated in Figure 3 the intermediate portion of the squared shaft 22 is rounded and passed through a bearing 23 in the upper shelf 11. A washer 24 is secured on the shaft 22 above the shelf 11 and rotatably contacts with the upper side of the bearing 23 so as to limit downward movement of the square shaft 22. The upper end of the shaft 22 is as previously stated keyed or otherwise secured to the gear 20 and is rotatably connected to a U-shaped yoke 26 which acts as a guard for the gear.

The lower end of the squared shaft 22 is provided with a flared end 28 which is slidable within the squared bore of a tube 30. The tube 30 which is slidably and non-rotatably connected to the shaft 22 has its upper end formed with an inwardly directed flange 31 which is adapted to engage shoulders 32 formed at the upper end of the head 28 so as to limit the downward movement of the tube 30 with relation to the shaft 22.

In order that the tube 30 might be held in an adjusted position with relation to the shaft 22 I have provided the upper end of the tube 30 with a pair of oppositely arranged longitudinally curved springs 34 which engage opposite sides of the shaft 22 and thereby hold the tube 30 in a set position. The terminal portions of the springs 34 are curved outwardly so that the same may be gripped by the fingers should it be desired to disengage the springs with the shaft.

The lower end of the tube 30 is open and is adapted to receive the squared end 36 of an article such as a churn 37 or a chopper or grinder, a mill, a mangle or an ice cream freezer. The article 37 may be any one of the foregoing and is detachably secured on the lower shelf 12 by means of oppositely arranged radially arranged ears 40 which are

formed on opposite longitudinal edge portions with recesses 41 to detachably receive the upstanding lugs 42 formed on the lower shelf 12. By rotating the article 37 in a clockwise direction the ears 40 will be engaged with the lugs 42 and by rotating the article 37 in an anticlockwise direction or to the left the article will be disengaged with the pair of lugs 42 so that the article may be removed from the lower shelf.

The various articles above mentioned are provided with radial ears 40 so that when the several articles are mounted on the lower shelf 12 the same may be readily connected to the upstanding lugs 42. It will be observed that since the shaft 22 rotates in a clockwise direction, the article 37 will at all times be urged into engagement with the lugs 42 and thereby firmly held in position.

When it is desired to connect the agitator or other working part of the article 37 to the shaft 22, it is merely necessary to mount the article on the lower shelf 12 and consequently lower the tube 30 so that the shank 36 is received within the lower end of the tube. The motor may now be set into operation and as the shaft 22 is rotated, the tubular shaft 30 and consequently the agitator or other movable part of the article 37 will be operated.

The churn or other article may be removed to permit a mangle or the like to be mounted upon the lower shelf and connected to the tubular shaft 30.

Having thus described my invention what I claim is:—

1. In a power transmitter the combination with a supporting member having upper and lower shelves, of a motor mounted on one of the shelves, upper and lower interfitting slidably connected shafts associated with said motor, means establishing a driving connection between said motor and one of said shafts, one of said shafts being rotatably extended through one of said shelves, and springs carried by one of the shafts and engaging the other shaft whereby to hold the shafts in an adjusted position with relation to each other.

2. The combination with a supporting member having upper and lower shelves, of a motor mounted upon the upper shelf, a shaft rotatably extending through said upper shelf, gears mounted upon the upper end of said shaft and said motor and being adapted for rotating said shaft, a second shaft of tubular formation connected to said first named shaft, and a pair of oppositely arranged longitudinally curved leaf springs secured to said tubular shaft and engaging said first named shaft to secure said second named shaft in an adjusted position with relation to said first named shaft.

MAX AUGUST FLACH.