W. I. BUNKER.

ROTARY CARPET BEATER.

APPLICATION FILED JULY 31, 1916.

1,204,741. Patented Nov. 14, 1916.

Fig. 1

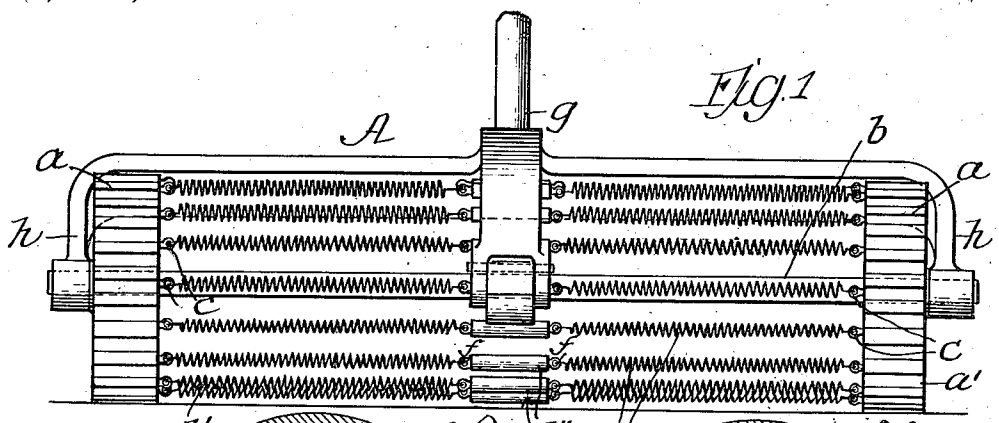


Fig. 2

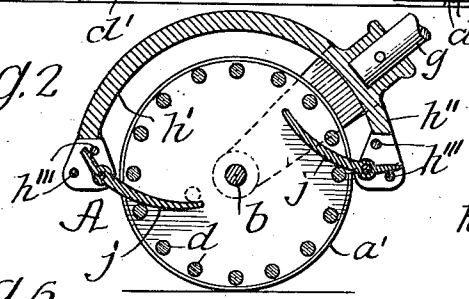


Fig. 3

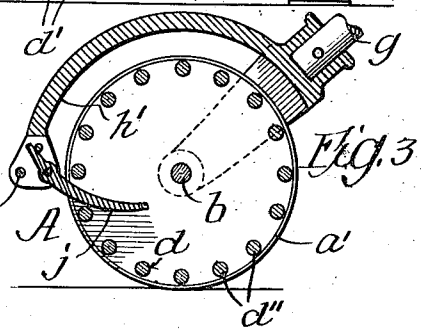


Fig. 6

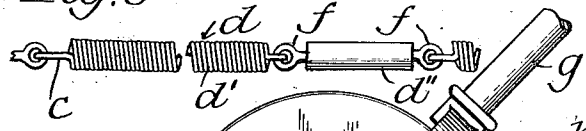


Fig. 4

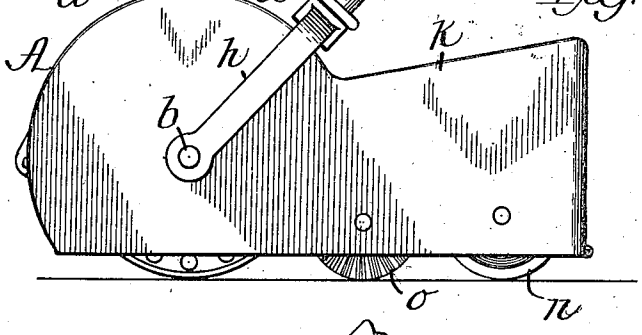
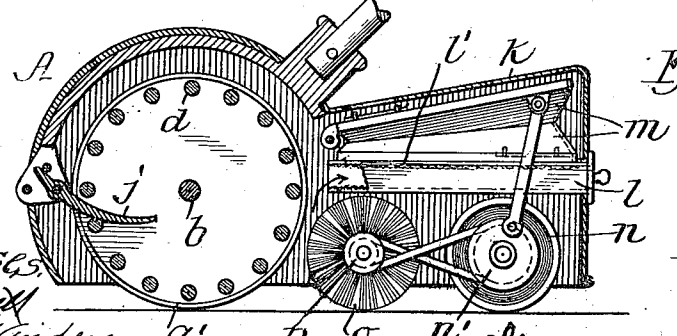


Fig. 5



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ROTARY CARPET-BEATER.

1,204,741. Specification of Letters Patent. Patented Nov. 14, 1916.

Application filed July 31, 1916. Serial No. 112,322.

To all whom it may concern:

Be it known that I, WILLIAM I. BUNKER, of La Grange, Cook county, Illinois, have invented a new and useful Improvement in Rotary Carpet-Beaters, of which the following is a specification.

The object of my invention is to make a simple practical and efficient beater for carpets or similar articles; and the invention consists in the features and combinations hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a front elevation of my improved device, showing beaters; Fig. 2, a cross section showing means of operating the beaters in both the forward and back movements of machine; Fig. 3, is a similar view showing modified construction; Fig. 4, is a view of hood covering the beating members in connection with means for brushing and screening the dust; Fig. 5, a longitudinal section of Fig. 4, and Fig. 6, is a detail view of one of the spring beaters.

A, is the rotary beater; *a*, *a*, are the two traction wheels thereof; *b*, is the central connecting rod secured in the axes of the wheels; *c*, *c*, are the attaching points or loops on the inner rims of the wheels; *d*, *d*, are the beating members, stretched under tension and having their ends secured to the attaching points or loops on the rims of the wheels; *d'*, is the extension wire spring, having end loops; *d''*, is the central friction roller; *f*, *f*, are the end loops of the wire on which the friction roller is mounted; *g*, is the propelling handlebar, *h*, *h*, are the side extensions thereof pivoted to the external axis of the wheels; *h'*, is the front extension and *h''*, the rear extension thereof, the ends of the front and rear extensions being arranged in pivotal connection with the reversible tripping bars; *h'''*, pins or stops placed to properly limit the movement of the tripping bar; *j*, *j*, are the reversible tripping bars, hinged or pivoted to the front and rear extensions so as to face each other and one to be in tripping contact with the beating members as the other reverses out of such tripping contact; *k*, is the hood; *l*, is the dust screening receptacle, and *l'*, the dust screening cover thereof; *m*, is one of the two bellows, the other one at the side thereof not shown; *n*, is one of the two traction wheels, the other one not shown, adapted to operate the bellows by direct shaft pivoted thereto; *n'*, is a pulley on the traction wheel adapted by a belt to rotate the brush; *o*, is the brush, arranged to be rotated by a belt from the pulley on the traction wheel; *p*, is the one way pulley, adapted to operate the brush only during the forward action of the machine; *a'*, is the rubber tire, having a width of about two inches.

In making my improved rotary carpet beater I provide two traction wheels one at each end of a central connecting rod or tube secured in the axis of the wheels the inner rims of the wheels having about sixteen suitable attaching points or loops on each rim adapted to receive the ends of a series of beating members, and a series of beating members stretched under tension between the wheels having their ends secured to said attaching points or loops on the rims.

As shown in the drawings the wheels *a*, *a*, are 7 inches in diameter and 2 inches face provided with rubber tires *a'*; the rod *b*, is one half inch diameter and 26 inches long; this rod is rigidly secured in the axis of the wheels with its ends projecting sufficiently to form pivotal connections with the side extensions of the handle bar; the beating members are made up of two close coil or extension wire springs of small diameter and about six inches in length having end loops and a central friction roller mounted on a wire provided with end loops connecting the two springs; these beating members are stretched and secured to the loops on the rims of the wheels.

Of course difference in size of wheels, length of rod, the construction of the beating members, the method of attaching the parts and the material used, may be varied to meet the demands of the trade or the cost of manufacture.

The beating members are preferably provided with friction rollers designed to contact with the tripping bars and roll thereon to an elevated position to be tripped off the end thereof; however, in case the friction rollers are dispensed with, the beating members will be in one piece or one spring.

A propelling handle bar is used with the ordinary side extensions pivoted to the external axis of the wheels and having an extension in front thereof adapted to have a tripping contact with the beating members. However, for front and back action I provide both front and rear extensions with reversible tripping bars hinged or pivoted thereon arranged to face each other

and one adapted to be in tripping contact with the beating members as the other reverses out of such tripping contact.

In some constructions I arrange a hood to cover the beating members having, in connection therewith, a dust receptacle or drawer having a dust screening cover thereon and means such as two small bellows actuated by traction wheels for collecting the dust from the beating action into the receptacle; also a rotary brush, suitably arranged at the rear of the beating members, may be used to brush against the surface of the carpet over which it operates; this brush may be rotated by a belt to the traction wheels over a one way pulley adapted to rotate the brush during the forward action only.

The advantages of my improvements are, that the operator may easily and quickly beat all the dust out of a carpet by simply rolling the beater back and forth over its surface; as the beating members are placed about an inch apart on the rims of the wheels the beating action strikes every inch of the surface of the carpet, no portion possibly escaping the beating action; also as the beating members are stretched to a tension only a light tripping action is required to produce the highly active beating stroke desired; and this rotary carpet beater being arranged in portable form is simple in construction, durable in use and not expensive to manufacture.

I claim—

1. A rotary carpet beater comprising traction wheels one at each end of a central connecting rod secured in the axis of the wheels the inner rims of the wheels having suitable attaching points to receive the ends of a series of beating members, a series of beating members stretched under tension having their ends secured at said attaching points on the rims, means for propelling the wheels and means for tripping the beating members.

2. A rotary carpet beater comprising two traction wheels one at each end of a central connecting rod secured in the axis of the wheels the inner rims of the wheels having suitable attaching points to receive the ends of a series of beating members, a series of coiled wire spring beating members, each provided with a central friction roller, stretched under tension between said wheels having their ends secured at said attaching points on the rims, means for propelling the wheels and means for tripping the beating members.

3. A rotary carpet beater comprising two traction wheels one at each end of a central connecting rod secured in the axis of the wheels the inner rims of the wheels having suitable attaching points to receive the ends of a series of beating members, a series of beating members stretched under tension between said wheels having their ends secured at said attaching points on the rims, a handle bar suitably pivoted to the wheels and having a tripping bar at the front thereof arranged to have a tripping contact with said beating members.

4. A rotary carpet beater comprising two traction wheels one at each end of a central connecting rod secured in the axis of the wheels, the inner rims of the wheels having suitable attaching points to receive the ends of a series of beating members, a series of beating members stretched under tension having their ends secured at said attaching points on the rims, a handle bar suitably pivoted to the wheels and having a reversible tripping bar at the front and rear thereof each arranged to have a tripping contact with said beating members and reverse out of such tripping contact by the rotation of the wheels forward and back.

5. In a rotary carpet beater the combination of two wheels suitably mounted on a connecting rod, beating members secured to the rims thereof, and means for tripping the beating members when the wheels are rotated.

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