

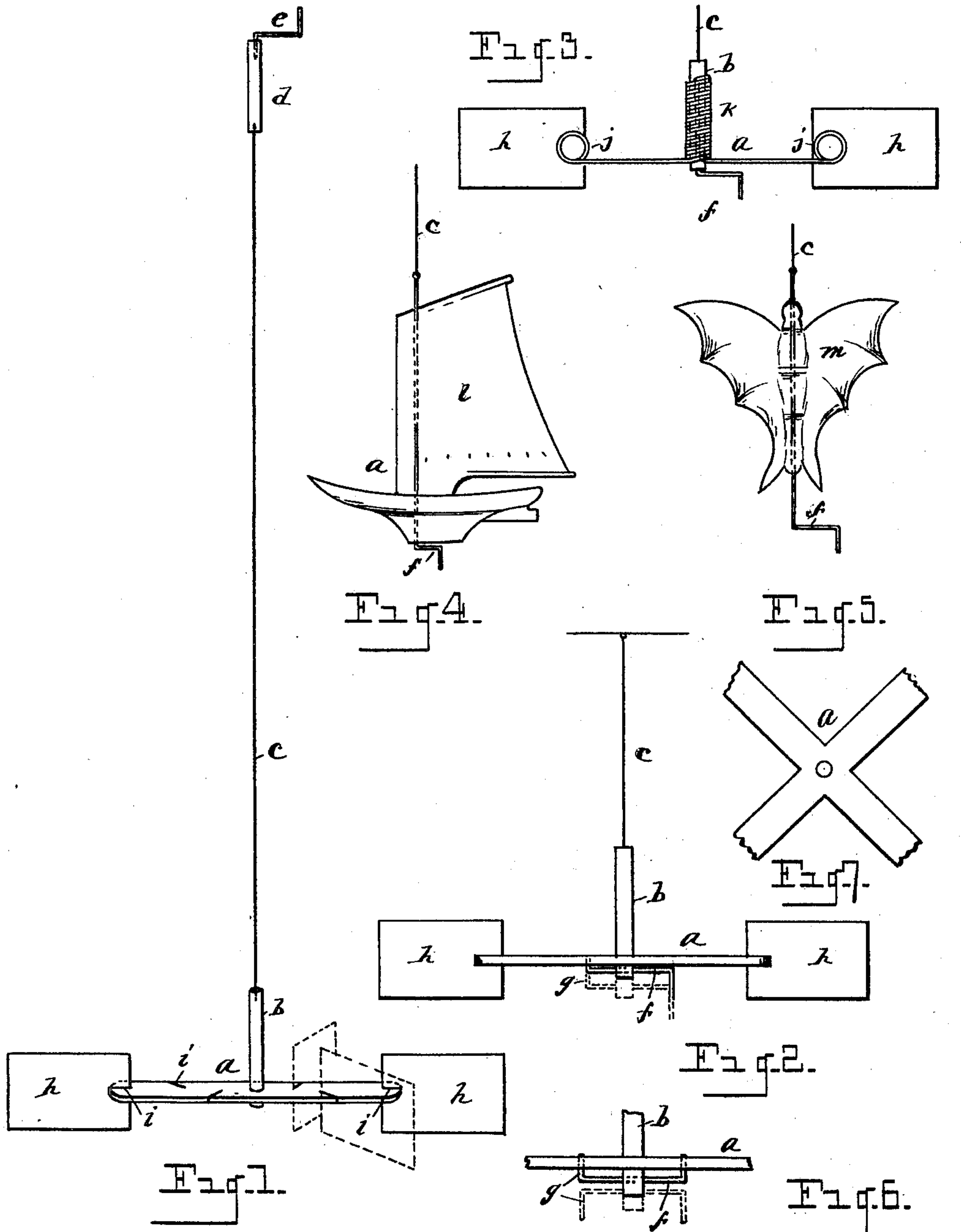
No. 697,107.

Patented Apr. 8, 1902.

C. J. SLAFTER.  
AUTOMATIC MOTOR.

(Application filed Apr. 13, 1901.)

(No Model.)



WITNESSES.

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# UNITED STATES PATENT OFFICE.

CORODEN J. SLAFTER, OF DETROIT, MICHIGAN.

## AUTOMATIC MOTOR.

SPECIFICATION forming part of Letters Patent No. 697,107, dated April 8, 1902.

Application filed April 13, 1901. Serial No. 55,625. (No model.)

*To all whom it may concern:*

Be it known that I, CORODEN J. SLAFTER, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Automatic Motors; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object a motor adapted for various uses, and the same consists of the construction, combination, and arrangement of devices hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a view in side elevation and perspective. Fig. 2 illustrates a modification wherein the apparatus may be wound from the lower end of the post or stem. Fig. 3 illustrates a modification wherein the swinging base is made of wire. Fig. 4 illustrates a different arrangement of the retarding-fan. Fig. 5 illustrates another method of applying the retarding-fan. Fig. 6 illustrates a modification in the winding mechanism. Fig. 7 illustrates another form of the swinging base.

My invention is applicable for use as a toy and also for advertising purposes.

I carry out my invention as follows:

The gist of the invention consists of a swinging base *a*, which may be of any desired construction or form, the same being provided with an upright stem or post, (indicated at *b*.) The base may consist simply of a single piece of wood, as indicated in Figs. 1, 2, 4, and 6, or it may consist of two pieces extending crosswise one of another, as indicated in Fig. 7, or it may be shaped into the form of a boat, as indicated in Fig. 4, or it may be wholly made of a single piece of wire, as indicated in Fig. 3. The post or stem *b* may be engaged with the base in any suitable manner. With the upper end of the post or stem *b* is engaged a cord, (indicated at *c*,) the same being preferably an elastic or rubber cord.

Any suitable device may be employed to facilitate the twisting of the cord *c*. Thus, as shown in Fig. 1, a spindle *d* may be employed through which a crank, as of wire,

(shown at *e*,) may pass, with the lower end of which the cord may engage, or the cord might be engaged directly to the spindle *d*. It will be readily seen that by holding the spindle *d* in one hand and turning the crank-handle with the other the cord will be twisted, or when the device is used for advertising purposes the stem *b* may be provided at its lower end with a suitable crank-handle *f* for twisting the cord, in which case the post *b* is movable longitudinally through the base *a*, as well as horizontally, in the process of twisting the cord.

The crank-handle *f* may be provided at one end with a pin or flange *g* to engage the base *a* to hold the post or stem *b* from rotating. In Fig. 2 the pin or flange *g* extends in the opposite direction from the other extremity of the handle, while in Fig. 6 both extremities of the handle are turned in the same direction.

To twist the cord *c*, the stem or post *b* is first slipped downward a suitable distance through the base *a*, so as to disengage the pin or flange *g* from the base. The cord is then twisted, after which the stem is moved upward to engage the pin of the crank-arm with the base. One or both ends of the crank-arm may engage the base. Where both ends are made to engage the base, the crank-arm is turned to present its extremities downward for the purpose of twisting the cord, after which said crank-handle is turned back into normal position to engage the base.

Where it is desired to retard the rotation of the base, I provide the same with one or more retarding fans or wings *h*, two being shown in Figs. 1, 2, and 3, engaged with the extremities of the base. Where the base is made of wood, the extremities thereof may simply be slitted, as indicated at *i*, to engage the fans and hold them in place. When the base is made of wire, as indicated in Fig. 3, the extremities of the wire may be provided with coils, as indicated at *j*, to engage the fans. Where the base is made of wire, it may also be coiled intermediate its ends, as indicated at *k*, to receive the stem or post *b*. Instead of employing two retarding-fans at the extremities of the base a single retarding-fan may be employed. Thus, for example, as shown in Fig. 4, the base *a* may be shaped in



the outline of a boat, provided with a sail or imitation thereof, as indicated at *l*, to act as a retarding-fan, the wire crank-arm *f* extending upward through one edge of the sail, as shown in Fig. 4. As shown in Fig. 5, a retarding-fan may be provided in the form of a butterfly or other object, the crank-arm *f* extending upward therethrough to engage the cord *c*. The post or stem *b* is designed to keep the base always in a level position when in operation. Instead of engaging the fans *h* at the extremities of the base they might be engaged with the lateral edges thereof, additional slots or recesses *i* being shown in the base in Fig. 1 for that purpose.

It will be observed that the base when swinging about by the torsional action of the twisted cord forms a sort of "merry-go-round" or "whirligig," forming an interesting toy. For advertising or analogous purposes, however, it is evidently desirable that the swinging about of the base should be retarded, so that the torsional action of the twisted cord will actuate the device for a long period, and for this purpose the retarding-fans, one or more, may be employed. These fans may consist of advertising-cards, for example. By the use of the fan or fans the rotation of the base may be so retarded as to permit a slow rotation of the same for even several hours. For such purposes the device may be arranged in a show-window, for example, the cord being twisted by a device attached to the lower end of the cord. I do not limit myself to any particular shape of the base. When used simply as a toy, I prefer to employ the spindle *d*, attached to the upper end of the cord.

Obviously such a motor for advertising purposes is economical and attractive, and when twisted and provided with retarding-fans the device will automatically rotate for a long period.

What I claim as my invention is—

1. A motor embodying a rotatable base, a stem projecting upwardly therethrough, a cord engaged with the upper end of said stem,

means to rotate said stem, and means to hold the stem from rotation.

2. A motor, embodying a rotatable base, a stem or post projecting upwardly from the base and movable longitudinally therein, a cord engaged with the upper end of the stem or post, and a crank-arm engaged with the lower end of said post, said crank-arm also engageable with the base to hold the stem from rotating.

3. A motor embodying a rotatable base, a cord connected with said base intermediate the extremities of the base, means to twist the cord, and a retarding-fan engaged with said base, said base extending laterally from said cord.

4. A motor embodying a rotatable base, a cord connected with said base intermediate the extremities of the base, means to twist the cord, and retarding-fans engaged with opposite extremities of said base, said base extending laterally from said cord.

5. A motor embodying a rotatable base, an elastic cord connected with said base intermediate of the extremities of the base, and a crank-handle arranged to twist said cord, said base extended laterally from said cord.

6. A motor embodying a rotatable base, provided intermediate its extremities with an upwardly-projecting stem or cord, a cord engaged with the upper end of said post, and means for twisting said cord, said post movable longitudinally through the base, said base extended laterally from said cord.

7. A motor embodying a rotatable base, a stem projecting upwardly therethrough, a cord engaged with the upper end of said stem, means to rotate said stem, and means to hold the stem from rotation, said base provided with means to retard its rotation.

In testimony whereof I sign this specification in the presence of two witnesses.

CORODEN J. SLAFTER.

Witnesses:

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