

No. 725,107.

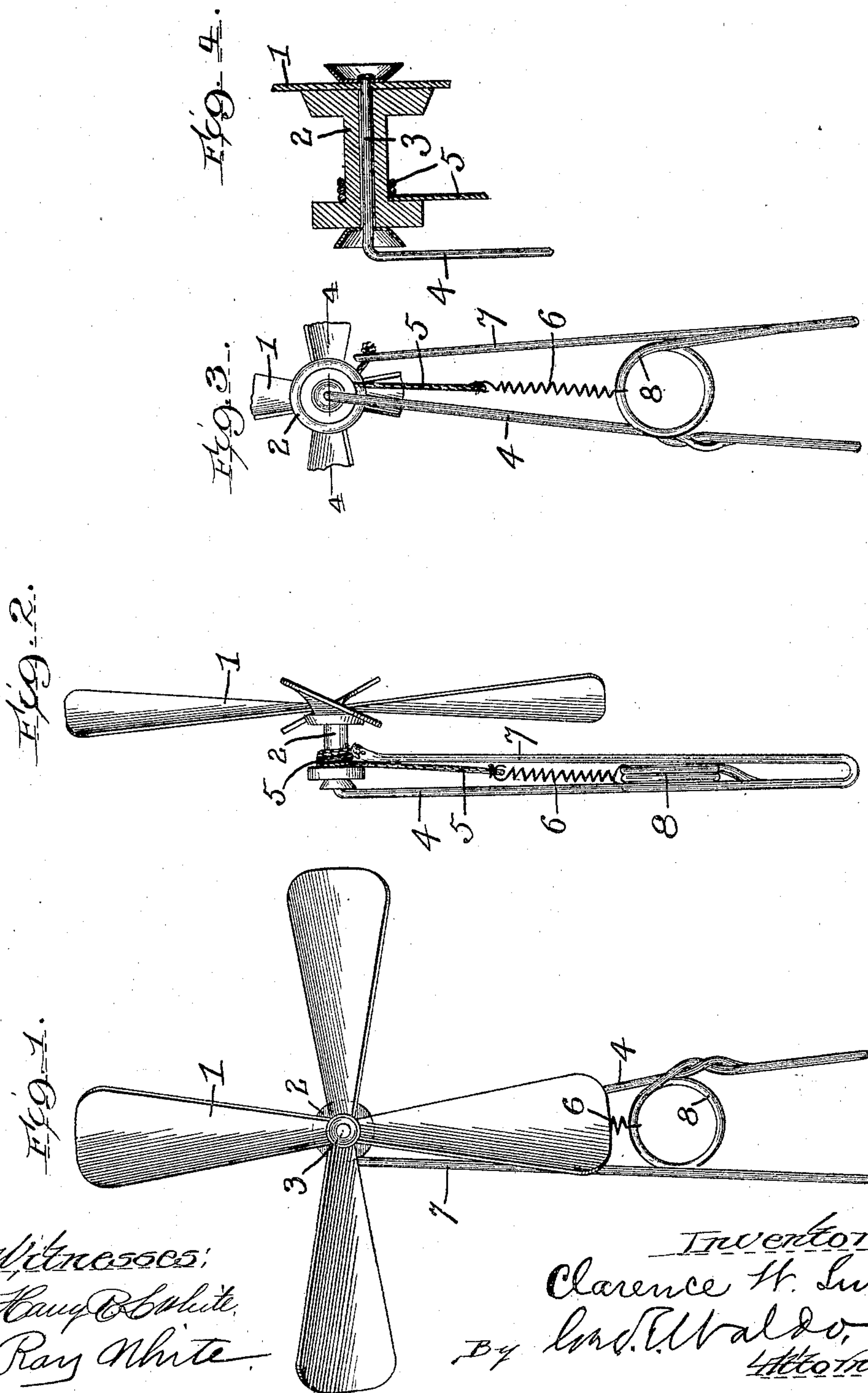
PATENTED APR. 14, 1903.

C. W. LUND.

FAN.

APPLICATION FILED OCT. 9, 1901.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

CLARENCE W. LUND, OF CHICAGO, ILLINOIS.

FAN.

SPECIFICATION forming part of Letters Patent No. 725,107, dated April 14, 1903.

Application filed October 9, 1901. Serial No. 78,054. (No model.)

To all whom it may concern:

Be it known that I, CLARENCE W. LUND, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented an Improved Fan, of which the following is a specification.

This invention relates to fans.

A primary object of the invention is to provide a fan of the rotary type which is adapted to be operated by hand and which will be of simple and cheap construction.

A fan of my invention consists of the various features, combinations of features, and details of construction hereinafter described and claimed.

In the accompanying drawings a fan of my invention is fully illustrated.

Figure 1 is a front view of a fan of my invention. Fig. 2 is a side view thereof. Fig. 3 is a rear view thereof, and Fig. 4 is a sectional view on the line 4 4 of Fig. 3.

The fan 1 is of the rotary type and is secured to a drum 2, revolubly mounted upon a stud or pin 3, which projects laterally from the upper end of an arm 4.

The fan 1 is adapted to be rotated by means of a cord 5, which passes around the drum 2, said cord being attached at one side of the drum 2 to a spring or elastic 6, attached to a fixed support, and at the opposite side of said drum being attached to an arm 7, supported in such manner that its upper end will be movable toward and from the upper end of the arm 4. The lower ends of the arms 4 and 7 form the handle of the fan, and the relation is such that pressing the lower ends of said arms toward each other will separate the upper ends of said arms. A spring 8, applied to said arms, operates to maintain the upper ends thereof normally in positions of nearest approach to each other.

In the preferable construction shown the arms 4 and 7, the spring 8, and the stud or pin 3, forming what may be called the "fan-frame," are made of steel wire and are all made integral with each other. In the preferable construction shown also the spring 8 is formed somewhat above the lower ends of the arms 4 and 7, the wire being doubled upon itself to form a handle, which will be of such size that it may be grasped with com-

fort, and the lower ends of said arms conveniently compressed to separate the upper ends thereof.

While I consider the construction above described as preferable, I do not desire to be limited thereto, as my invention admits of embodiment in different forms, as by pivoting the arms 4 and 7 directly to each other and applying a spring thereto, so as to maintain said arms in desired normal relation.

My improved fan is operated by merely pressing the lower ends of the arms 4 and 7 together, which can be conveniently done by the hand holding said fan and releasing them, allowing the spring 8 to return said arms to their normal positions. In separating the upper ends of said arms 4 and 7 the cord 5 bights upon the drum 2, which carries the fan 1, causing said drum and fan to revolve. As soon as the arms are released the momentum of the revolving fan breaks the bight of the cord 5 upon the drum 2 and the spring or elastic 6 operates to take up the slack of said cord due to the movement of the upper ends of the arms 4 and 7 toward each other. For this reason the fan 1 will preferably be made sufficiently heavy to acquire desired momentum. In addition to taking up the slack of the cord 5 the spring or elastic 6 also operates to produce necessary frictional engagement of said cord with the drum 2 to rotate said fan.

I claim—

1. The combination of a fan, a drum to which said fan is secured, an arm or support on which said drum is revolubly mounted, a cord adjusted to said drum, a spring or elastic to which said cord is attached at one side of said drum and a pivotally-movable arm to which said cord is attached at the opposite side of said drum, substantially as described.

2. The combination of a fan, a drum to which said fan is secured, an arm or support on which said drum is revolubly mounted, a cord adjusted to said drum, a spring or elastic to which said cord is attached at one side of said drum, a pivotally-movable arm to which said cord is attached at the opposite side of said drum and a spring applied to said arm whereby said arm is maintained normally in position of nearest approach to said drum, substantially as described.

3. The combination, in a fan, consisting of a drum provided with fan blades or vanes, of a frame comprising connected arms, the ends of which are movable toward and from each other, and on one of which the drum is revolvably mounted, a cord attached at one end to the other arm and coiled about the drum, a spring or elastic attached at one end to the other end of the cord, and at the other end to a part of the frame, substantially as described.

4. The combination of a fan, a drum to which said fan is secured, connected arms which are movable toward and from each other on one of which said drum is revolvably mounted, a cord adjusted to said drum, a spring or elastic to which said cord is attached at one side of said drum, said cord being attached at the opposite side of said drum to the arm other than that on which said drum is mounted and a spring applied to said arms and adapted to maintain said arms in such positions that the sections thereof on which said drum is mounted and to which said cord is attached will normally be at their points of nearest approach to each other, substantially as described.

5. The combination of a fan, a drum to which said fan is secured, arms, a coiled spring to which said arms are connected and which is adapted to maintain the upper ends thereof normally at their points of nearest approach to each other, said drum being revolvably mounted on one of said arms, a cord adjusted to said drum, a spring or elastic to which said cord is attached at one side of said drum, said cord being attached at the opposite side of said drum to the arm other than that on which

said drum is mounted, substantially as described.

6. The combination of a fan, a drum to which said fan is secured, arms, a coiled spring to which said arms are connected between their ends, said spring being adapted to maintain the upper ends of said arms normally in positions of nearest approach to each other, said drum being revolvably mounted on one of said arms, a cord adjusted to said drum, a spring or elastic to which said cord is attached at one side of said drum, said cord being attached at the opposite side of said drum to the arm other than that on which said drum is mounted, substantially as described.

7. The combination of a fan, a drum to which said fan is secured, arms, a coiled spring to which said arms are connected between their ends, said arms and spring being formed integral with each other and said spring being adapted to maintain the upper ends of said arms normally in positions of nearest approach to each other, said drum being revolvably mounted on one of said arms, a cord adjusted to said drum, a spring or elastic to which said cord is attached at one side of said drum, said cord being attached at the opposite side of said drum to the arm other than that on which said drum is mounted, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature, in presence of two subscribing witnesses, this 3d day of October, A. D. 1901.

CLARENCE W. LUND.

Witnesses:

FRED. M. LUND,
W. J. DE SALEY.