

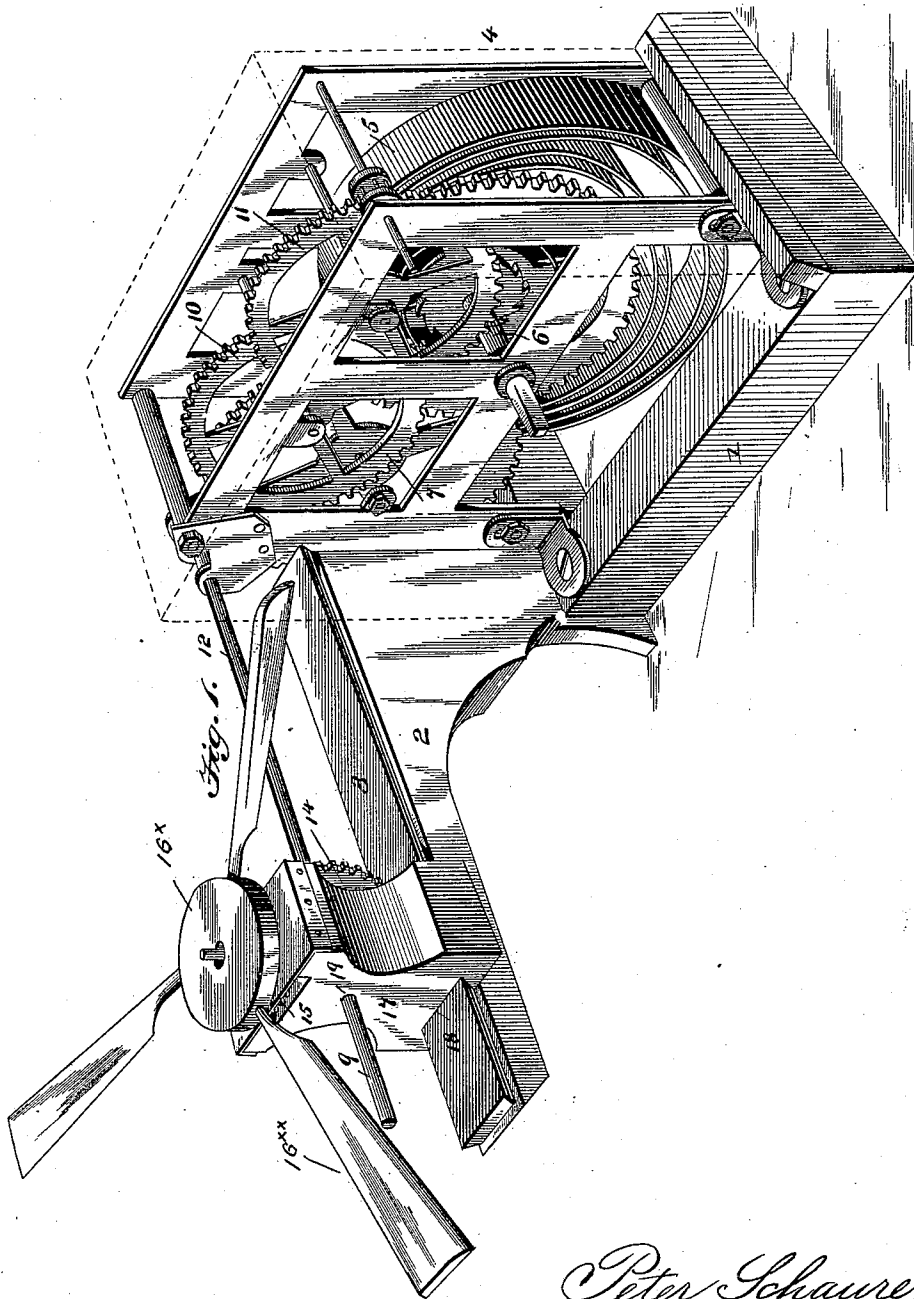
(No Model.)

2 Sheets—Sheet 1.

P. SCHAURER.
SPRING POWER FAN.

No. 471,196.

Patented Mar. 22, 1892.



Peter Schaurer,
Inventor

Witnesses
Wm. H. Fashier
Wm. H. Fashier

By his

Attorney

Wm. H. Fashier

(No Model.)

2 Sheets—Sheet 2.

P. SCHAURER.
SPRING POWER FAN.

No. 471,196.

Patented Mar. 22, 1892.

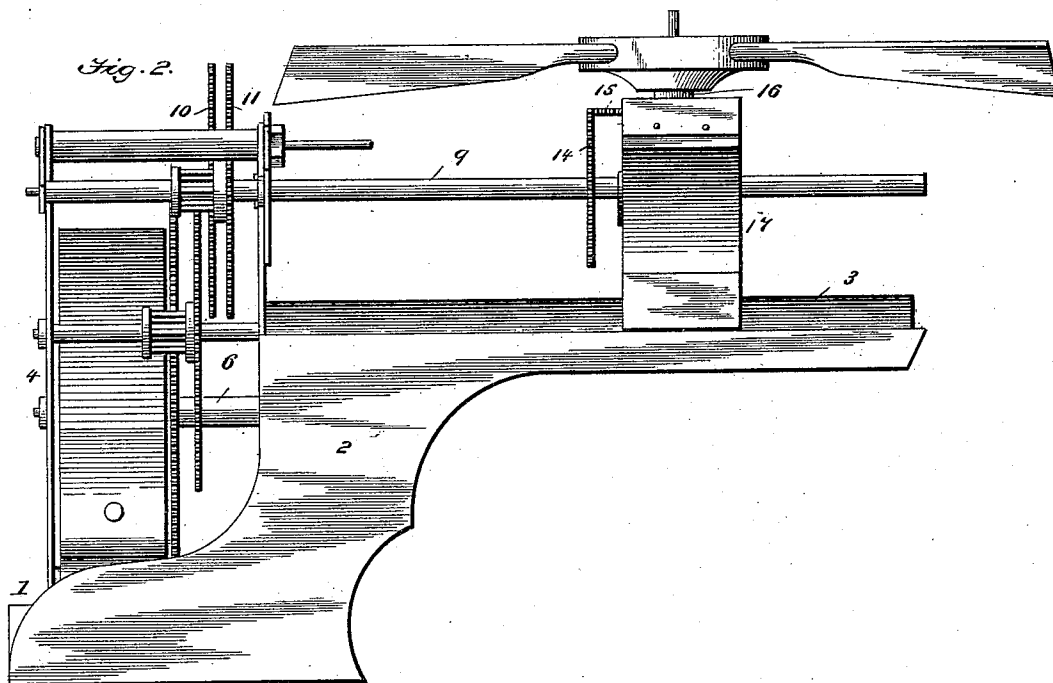
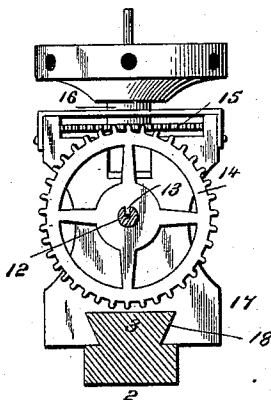


Fig. 3.



Witnesses

Wm. H. Schieffelin
Walter M. Mather

Peter Schaurer,
Inventor

By *Thos*

Attorney

J. M. Moore

UNITED STATES PATENT OFFICE.

PETER SCHAURER, OF WELLINGTON, KANSAS.

SPRING-POWER FAN.

SPECIFICATION forming part of Letters Patent No. 471,196, dated March 22, 1892.

Application filed June 6, 1891. Serial No. 395,331. (No model.)

To all whom it may concern:

Be it known that I, PETER SCHAURER, a citizen of the United States, residing at Wellington, in the county of Sumner and State of Kansas, have invented certain new and useful Improvements in Spring-Power Fans; and I do 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, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in fans, and is what I term a "spring-power extension-fan;" and one of the objects of my invention is the provision of a fan which will consist of few parts arranged within a small space in order that the fan when in position for use will be out of the way, be capable of use in any place, and not be unsightly in appearance.

Another object of my invention is the provision of a fan which will run for a long period and require but little attention and run even and steady, and which can have the fan adjusted to any desired place for the convenience of the user.

Another object of my invention is the provision of a fan which will not get out of order easily, which can be readily moved from place to place, and which can be produced at a low price.

To attain the desired objects my invention consists of a fan embodying certain novel features of construction and combinations of parts substantially as herein illustrated, described, and specifically claimed.

Figure 1 represents a perspective view of my improved fan. Fig. 2 represents a side view thereof. Fig. 3 represents a detail sectional view to clearly show details.

In the drawings, the numeral 1 designates the frame of my fan, to which is connected or formed with the arm a bracket 2. The frame may be secured to the ceiling, so that the bracket is downward disposed, or the frame may be secured to form a base, as circumstances require, and the arm is provided on the upper side with an inwardly-beveled strip 3, forming a guide, as will appear. Se-

cured to the main frame is the supplemental frame 4, which serves as a housing for the operating mechanism, consisting of the power-spring 5, mounted on the winding-shaft 6, and the gear 7, operating the gear 8, which rotates the long fan-operating shaft 9.

To prevent the spring from running down or giving out too soon, I employ the gears 10 and 11, which act as a partial brake, as is evident.

From this construction it will be seen that the mechanism is operated by the spring to impart a rotary motion to the long fan-shaft, and the fan-shaft is provided with a groove 12, in which fits the feather or nib 13 of the gear 14, which meshes with the horizontally-disposed gear 15, mounted on a stud 16, having its bearings in the adjustable carrier 17. The carrier 17 is formed with a dovetailed channel 18, fitting on the dovetailed guide of the bracket, and is thus capable of adjustment to any point along the bracket, and the carrier has bearings 19 for the shaft 9. On the stud 16 is mounted a disk 16^x, which carries the fan-blades 16^{xx} of any desired shape.

The operation of my fan will be easily understood from the drawings and description, and is as follows: The gear on the long shaft is brought into engagement with the gear on the fan-stud at the desired point of adjustment, and the unwinding of the spring through the mechanism shown and described rotates the fan. The operating mechanism can be covered over to present a more attractive appearance, and a number of fans may be used, if desired, as the mechanism will effectually operate a number.

The fan may be made of any preferred size, as occasion requires, and, owing to its simplicity, durability, efficiency, and cheapness, it is rendered practical and useful.

I claim—

1. In a fan, the combination of a frame, an arm or bracket secured to the frame, a carrier adjustable on said arm, a shaft carrying a fan mounted in the carrier, a shaft passing through the carrier and having a gear-wheel for operating the fan, and mechanism for operating the shaft.

2. In a fan, the combination of the arm having the guide-plate, the carrier adjustable

on said guide-plate, the fan-shaft carrying the fan, the long shaft having a groove, mechanism for rotating said shaft, and the gear-wheel having the feather fitting the groove
5 of said shaft and operating the fan-shaft, as described.

3. In a spring-power fan, the rectangular frame, the casing thereon, the driving mechanism in the casing, the arm or bracket having the beveled channel or way, the fan-carrier having the beveled groove fitting on the
10

arm, the long shaft carrying the gear-wheel, the gear-wheel in the carrier meshing therewith, and the disk carrying the fan-blades mounted on the shaft in the carrier, all as
15 shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

PETER SCHAURER.

Witnesses:

L. S. CAMPBELL,
W. D. MOORE.