

(No Model.)

C. PRAHL.
Fan.

No. 235,808.

Patented Dec. 21, 1880.

Fig. 1.

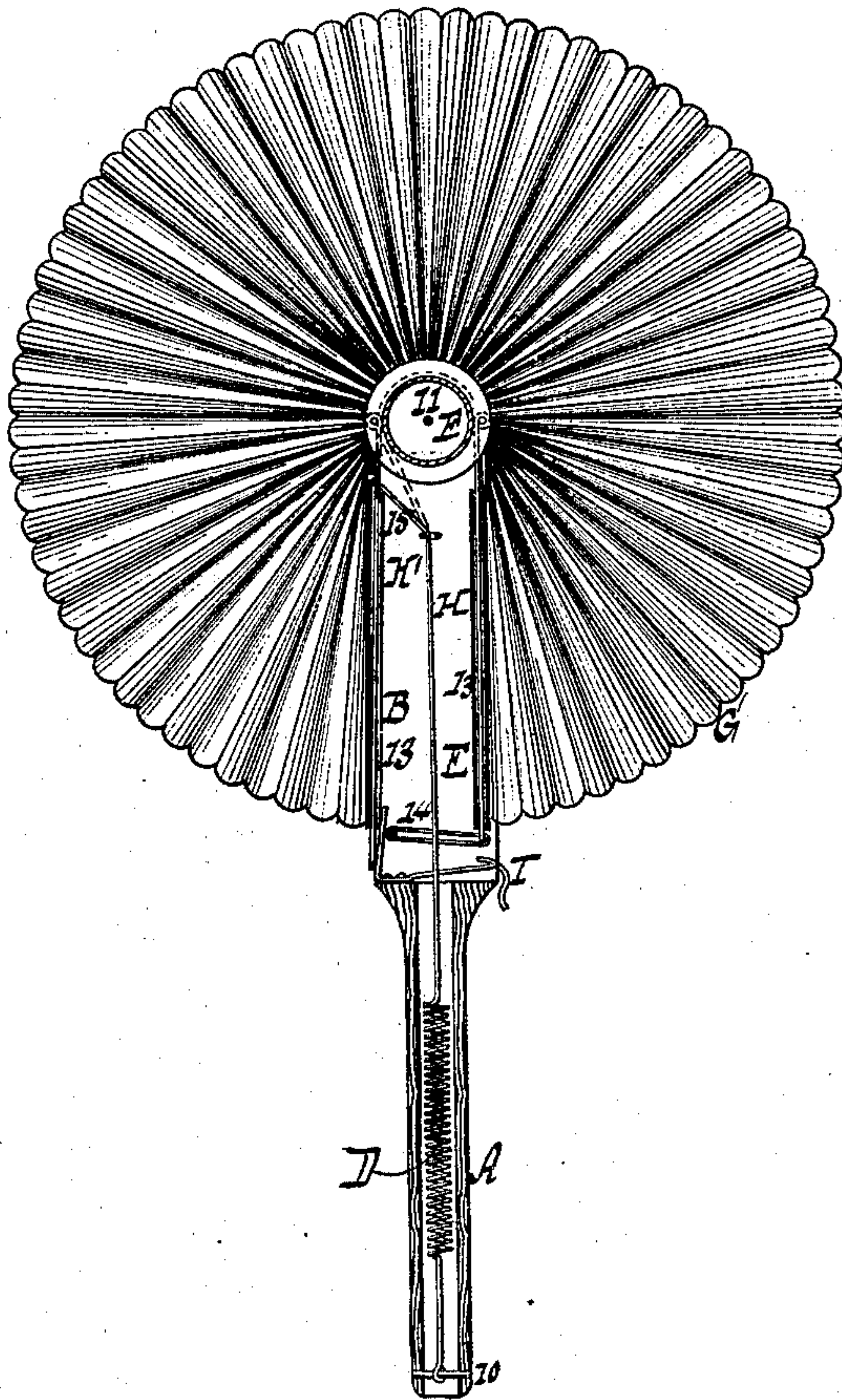


Fig. 3.

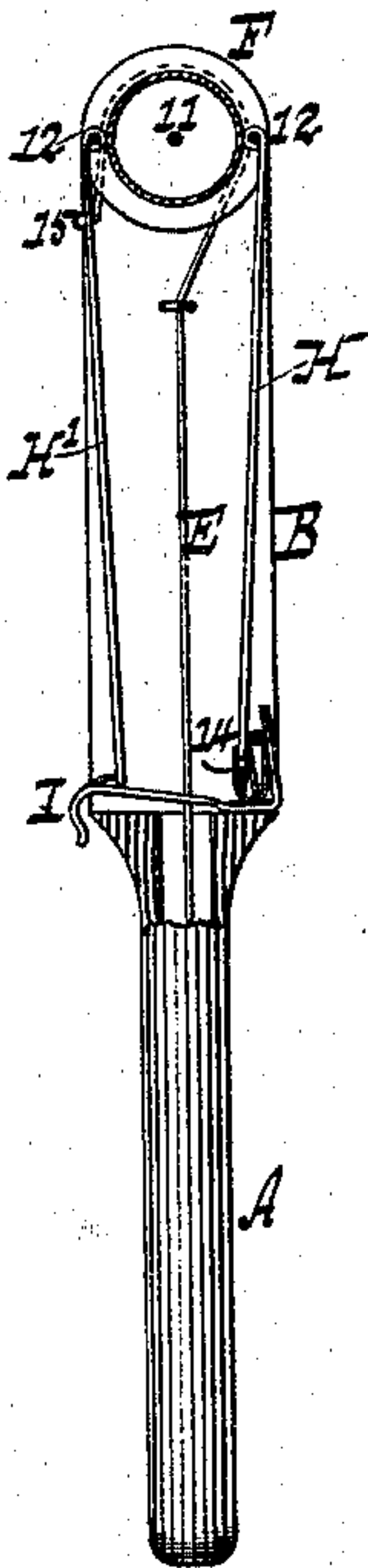
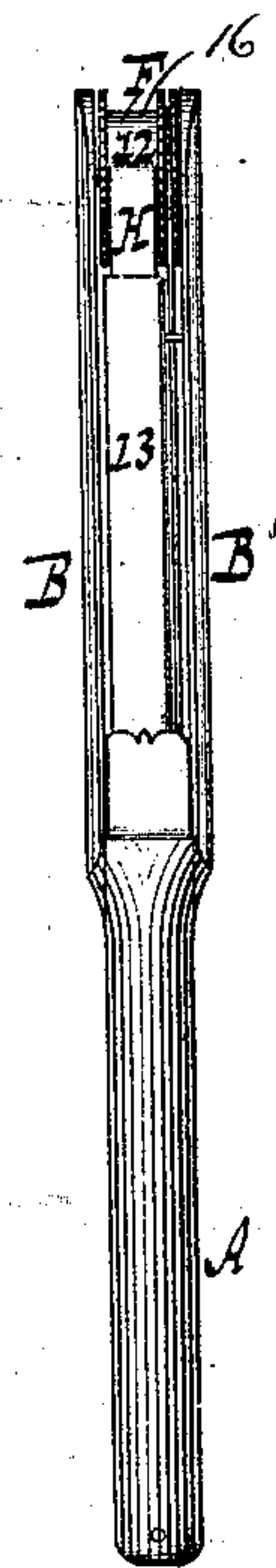


Fig. 2.



Witnesses
Otto Kufeland
William Miller

Inventor.
Charles Prahl.
by Van Santvoord & Hauff
his attorneys

UNITED STATES PATENT OFFICE.

CHARLES PRAHL, OF NEW YORK, N. Y., ASSIGNOR TO LAZARUS FRIED, OF
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FAN.

SPECIFICATION forming part of Letters Patent No. 235,808, dated December 21, 1880.

Application filed October 15, 1880. (No model.)

To all whom it may concern:

Be it known that I, CHARLES PRAHL, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Spring-Fans, of which the following is a specification.

This invention relates to that class of fans in which the body swings on a pivot or axis and is opened by the action of a spring; and it consists in a novel arrangement of the spring, also in a novel construction of the fan-body, as hereinafter fully described, and pointed out in the claims.

This invention is illustrated in the accompanying drawings, in which Figure 1 represents a longitudinal section when the fan is open. Fig. 2 is a side view. Fig. 3 is a longitudinal section when the fan is shut.

Similar letters indicate corresponding parts.

The letter A designates the fan-handle, which is hollow and constructed with upwardly-projecting arms B B', between which the fan-body swings.

D is the spring for opening the fan-body. This spring D may be made in the form of a spiral wire or of a strip of india-rubber, and it is fitted into the handle A, the same being connected thereto at one end, as by a pin, 10, while it is connected to the fan-body at its opposite end by means of a band, E, which, in this example, is a piece of cord, but which may be made of wire or other material.

The fan-body consists of a central rotating head, F, which is hung between the arms B B' of the fan-handle on a pivot, 11, and of a circular folding web, G, and of rigid strips H H', which are hinged to the central head, as at 12, so as to swing thereon, and are fitted into pockets 13 on the opposite ends of the folding web in such a manner as to be capable of sliding in the pockets. The hinged strip H is connected to the fan-handle, as by a band, 14, in such manner as to allow the folding web G to take its place between the arms B B', while the band E passes over or around the central head, F, and is attached to the hinged strip H', as at 15. At the place where the band E passes around the central head, F, the latter is provided with a circular groove, 16.

A stop, I, is used to hold shut the fan-body, and when the latter is set free the connecting-band E is drawn toward or into the hollow handle by the spring D, and acts on the hinged strip H' to swing the same on its hinge and on the axis of the central head, F, to a position for unfolding the web G, said strip being at the same time checked by its connection 14 with the handle. If the hinged strip H is then swung back, together with the central head, F, against the action of the spring D, the web G folds up between the arms B B' of the handle. The stop I consists in this example of a spring-catch, which is attached to the handle in an appropriate manner to engage the free end of the hinged strip H' when the web G is folded up between the arms B B' of the handle.

By arranging the spring D within the handle A it is brought entirely out of sight, and can be made of sufficient strength and durability to answer the purpose in a practical manner, while the peculiar construction of the fan-body relieves the web G of all strain in folding or unfolding the same.

I am aware that it is not new, broadly, to open a fan by a spring inclosed in a hollow handle; but such spring has never, to my knowledge, been used in a fan the body of which swings on an axis.

What I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a fan-body consisting of a folding web connected with a central rotating head journaled between the arms of a hollow handle, a spring arranged within said hollow handle and having a band passing over the central rotating head and connected with the fan-body, all substantially as shown and described, for the purpose set forth.

2. The combination of a fan-body consisting of a folding web attached to a central rotating head, F, journaled in the two arms B B' of a hollow handle, A, and provided at its ends with the rigid strips H H', with a spring, D, arranged in said handle and provided with a band, E, passing over the rotating head and connected with the hinged strip H' of the fan-body, all substantially as shown and described.

3. The combination of a fan-handle con-

5 structed with upwardly-projecting arms, a fan-
body consisting of a central rotating head hung
between the arms of the handle, a circular
folding web, and of rigid strips, which are
hinged to the central head and fitted into
pockets on the opposite ends of the folding
web, one of such strips being also connected
to the handle and the other to a spring for
spreading the folding web, and a stop adapted
10 to hold the web shut against the action of the

spring, the whole adapted to operate substan-
tially as described.

In testimony whereof I have hereunto set
my hand and seal in the presence of two sub-
scribing witnesses.

CHARLES PRAHL. [L. s.]

Witnesses:

W. HAUFF,

CHAS. WAHLERS.