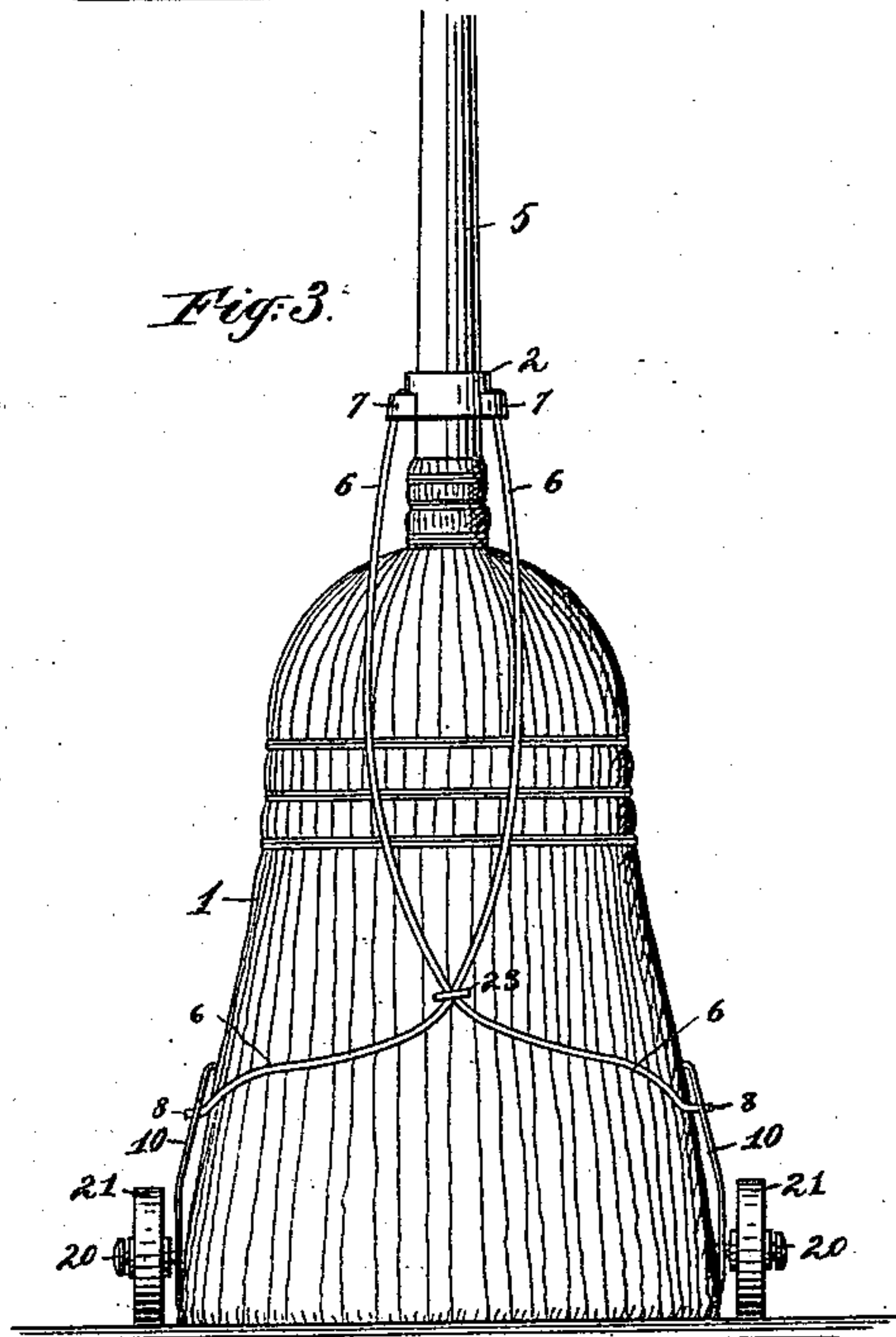
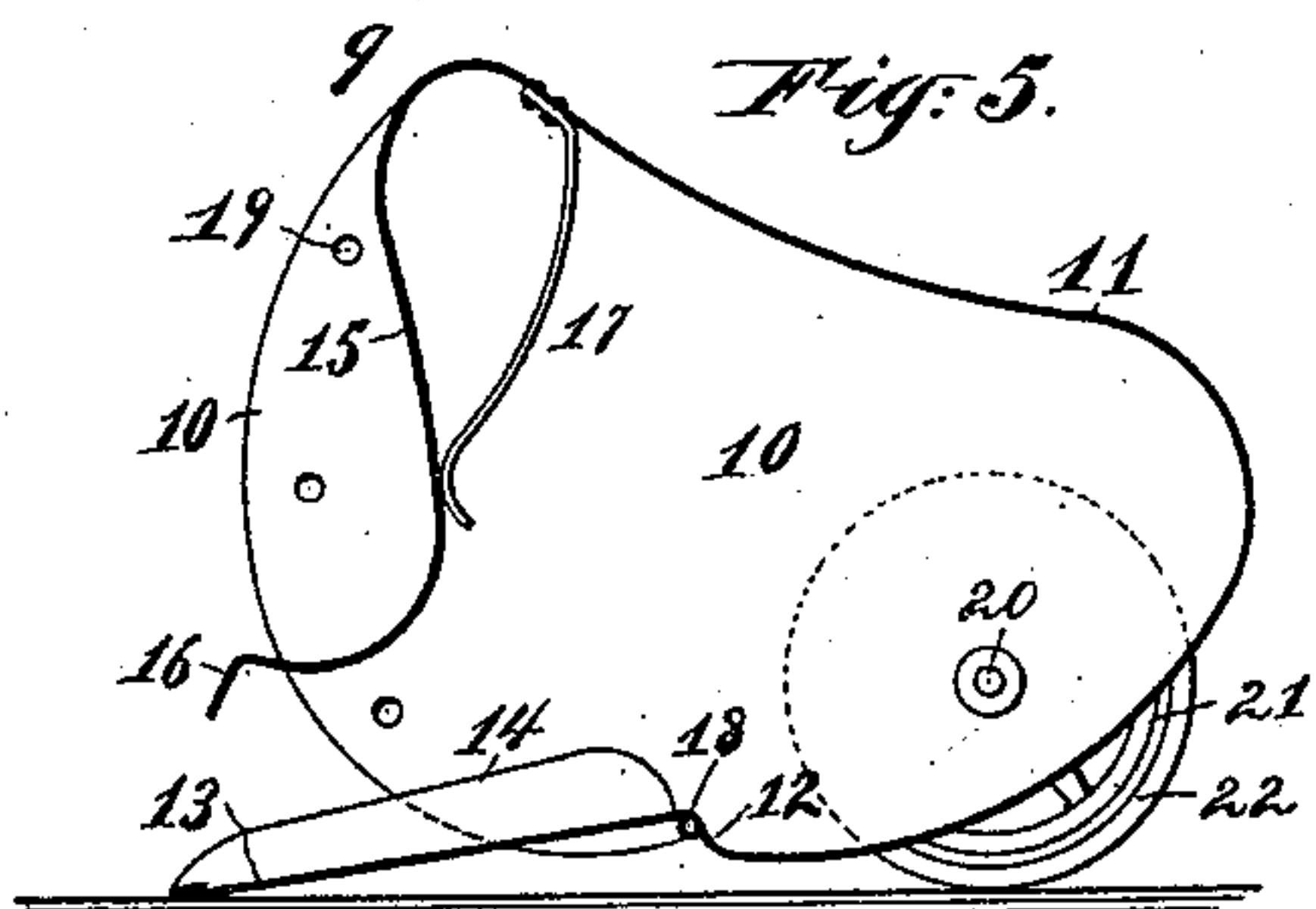
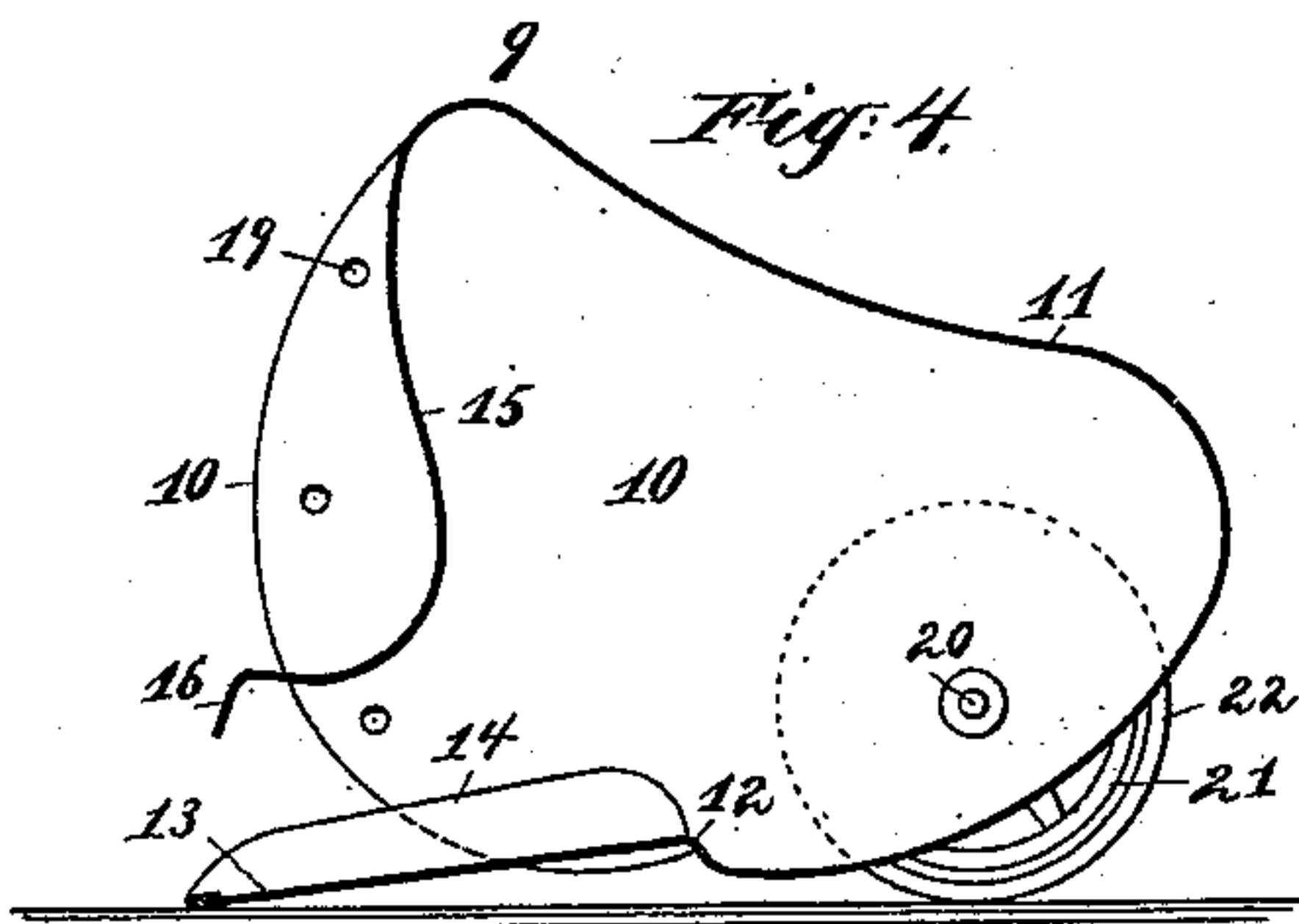
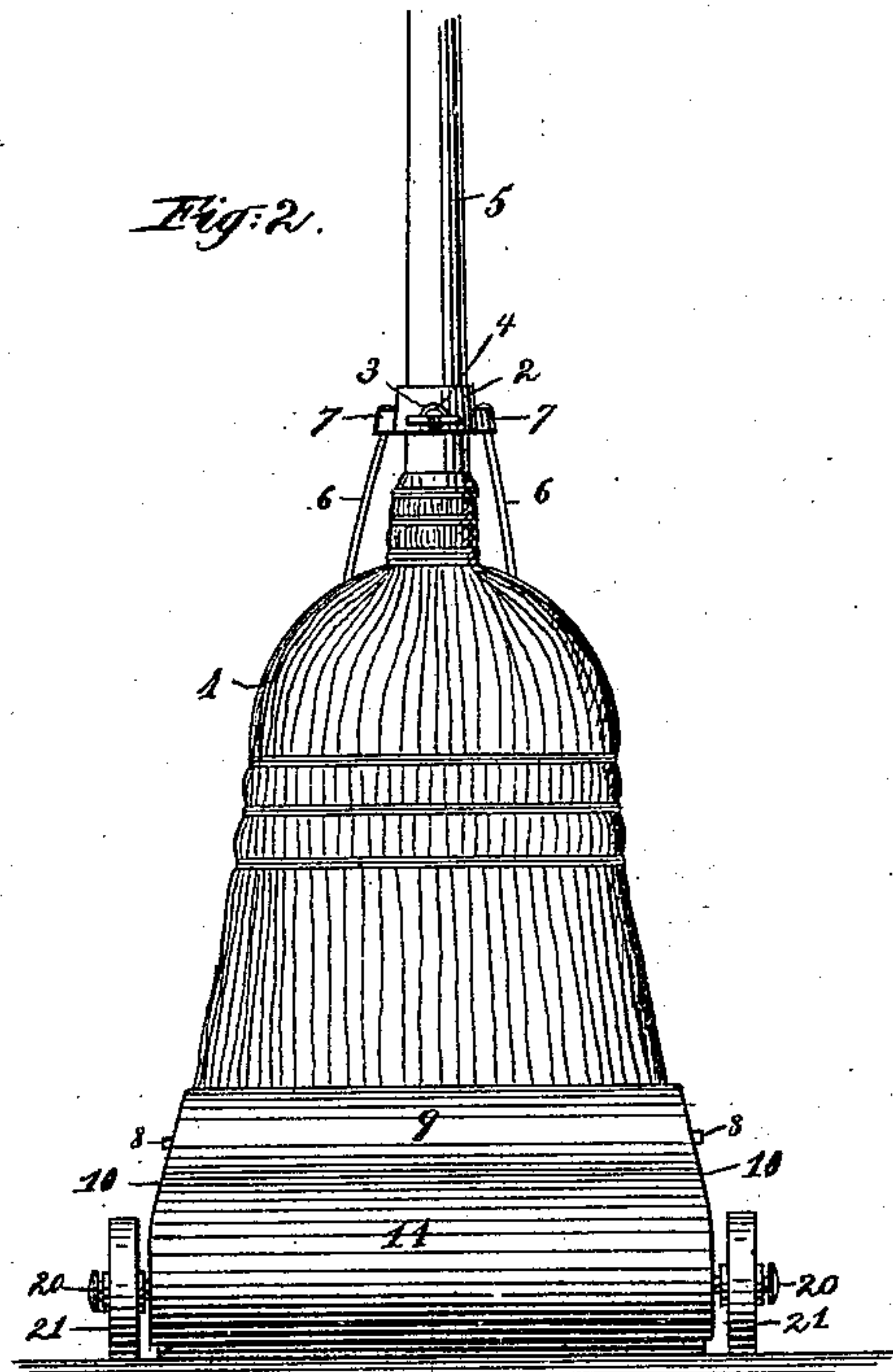
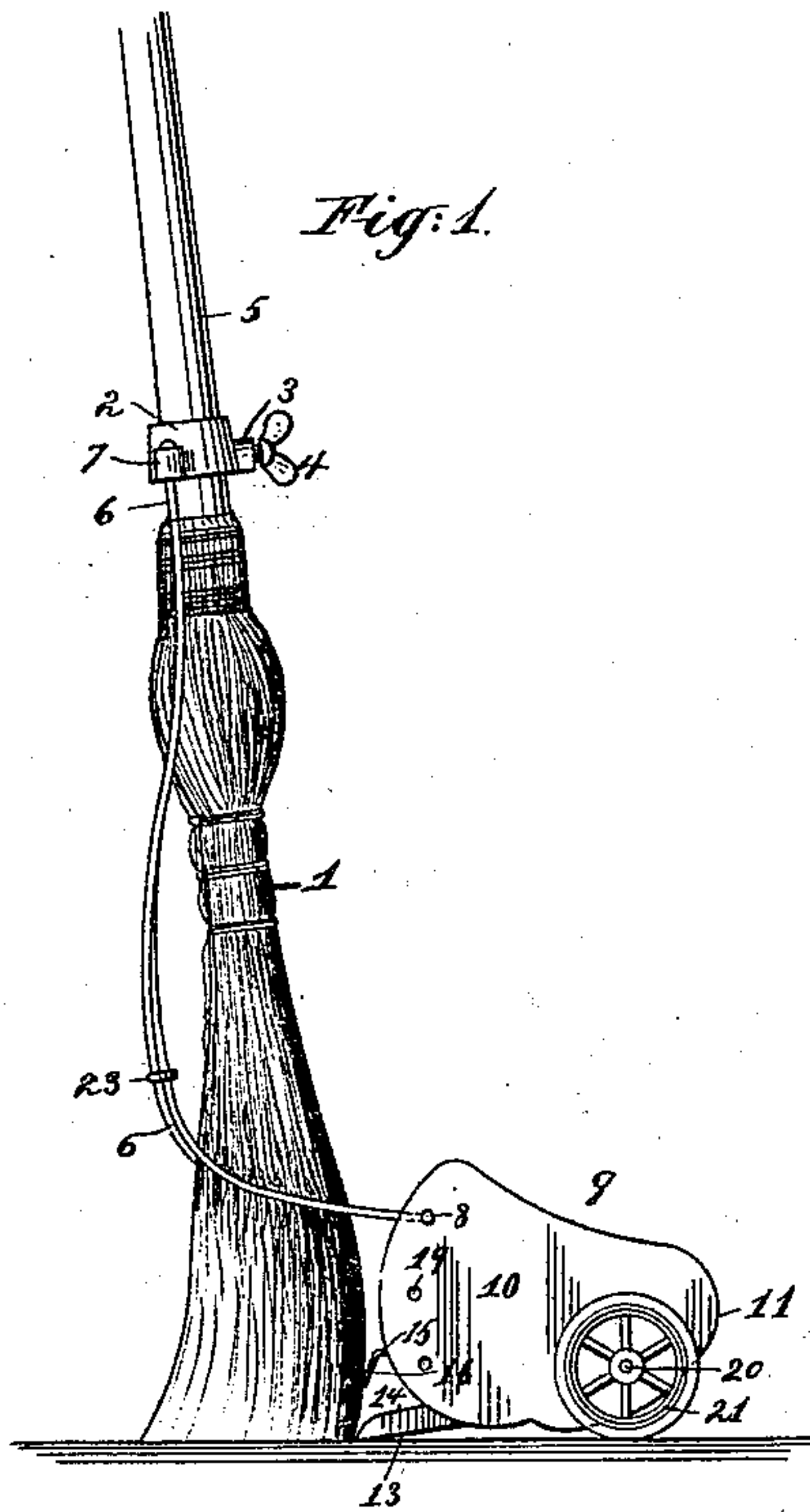


(No Model.)

G. H. ABRAMS.  
ATTACHMENT FOR BROOMS.

No. 486,066.

Patented Nov. 8, 1892.



Witnesses:  
Charles R. Searle.  
M. F. Boyle.

Inventor:  
George H. Abrams  
by his attorney  
Thomas D. Stebbins



# UNITED STATES PATENT OFFICE.

GEORGE H. ABRAMS, OF BROOKLYN, NEW YORK.

## ATTACHMENT FOR BROOMS.

SPECIFICATION forming part of Letters Patent No. 486,066, dated November 8, 1892.

Application filed September 22, 1891. Serial No. 406,468. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE H. ABRAMS, a citizen of the United States, residing in Brooklyn, Kings county, in the State of New York, have invented a certain new and useful Improvement in Attachments for Brooms, of which the following is a specification.

This invention relates to an improved attachment for brooms, which is in the nature of a dust-pan or receptacle for the sweepings, and to prevent the dust from being scattered promiscuously during the operation of sweeping.

The invention comprises a holding device adapted to be mounted adjustably upon the handle of an ordinary broom, and a pan or receptacle connected with such holding device and adapted to be carried by the broom during the operation of sweeping. The said pan or receptacle may be of any suitable shape, and it is provided with a lip adapted to rest upon the floor and with a flexible or elastic apron, which latter serves the twofold purpose of preventing the dust or sweepings from flying back against the broom and of bearing against the latter, so as to maintain the receptacle in the proper position for operation.

The invention consists in the detailed construction, arrangement, and combination of parts which will be hereinafter fully described and claimed.

The accompanying drawings form a part of this specification, and represent what I consider the best means of carrying out the invention.

Figure 1 is a side elevation showing the device in place upon a broom. Fig. 2 is a front view. Fig. 3 is a rear view. Fig. 4 is a vertical section of the pan detached. Fig. 5 is a similar view showing a modified form of the pan.

Like numerals of reference indicate like parts in all the figures where they appear.

1 designates an ordinary broom, upon the handle of which is mounted a sleeve 2, which may be formed of malleable iron or other suitable material. The sleeve 2 is provided with a boss or bushing 3, having a screw-threaded portion in which a set-screw 4 is mounted, by means of which the said sleeve may be secured in any desired position upon

the handle 5 of the broom. Suitably attached to the sleeve 2 are springs 6, which may be formed of brass wire. The said springs may be soldered or otherwise suitably attached to the sleeve, and the latter may be provided at its lower edge with perforated lugs, as 7, to receive the upper ends of the said springs. The springs may, if preferred, be formed integrally of a single piece of wire. The said springs are extended downwardly and across each other, so as to rest lightly against the side of the broom-head, and at the point at which they cross each other I place a sleeve or washer 23, by means of which the said springs are loosely connected. The lower ends of the springs are provided with laterally-extending fingers or brackets 8, forming pivots for the attachment of the dust-pan 9. The latter is preferably constructed of tin or other light cheap material. It is composed of the cheeks or side pieces 10, which are soldered or otherwise suitably connected with the body 11. The body is by preference constructed of a single sheet of metal, which is bent to conform to the outline of the side pieces. The preferred shape of the latter has been delineated in the drawings in Fig. 5, from which it will be seen that they are wide or broad at their rear ends and tapering toward the front. The body 11 is attached to the side pieces at the upper and lower edges and at the front, only the rear end being left open for the admission of the dust or sweepings. The bottom of the pan is bent upwardly, so as to form a transverse ridge or rib 12, beyond which it is extended to form the lip 13, the sides of which are provided with flanges 14, adjoining the side pieces 10. That portion of the body which constitutes the lip 13 is not attached to the side pieces 10, but is free to move and to rest flexibly upon the floor during the operation of sweeping. The upper rear portion of the body is bent downwardly and curved so as to form the apron 15, the lower edge of which has a flange 16. This apron, owing to the nature of the material of which it is constructed, is somewhat elastic or flexible, and it therefore serves not only to retain the dust and sweepings in the pan, but also to press against the broom and to maintain the device in proper position for operation. In order to assist the



flexibility of this apron, I may place a spring, as 17, within the receptacle in such a position as to press against the apron. In Fig. 5 of the drawings I have shown such a spring.

5 I would have it understood, however, that instead of the flat spring shown in the drawings a coiled or other suitable form of spring may be used without departing from the spirit of my invention.

10 In Fig. 5 of the drawings I have shown a further modification of the invention, which consists in constructing the lip 13 of a separate piece of sheet metal, which is connected with the lower rear edge of the body of the  
15 pan by means of a hinge 18 of ordinary construction. It is very desirable that the rear edge of the lip 13 should rest lightly upon the floor during the operation of sweeping in order that during the forward movement of the  
20 broom it may ride easily over the dust and sweepings upon the floor without scattering the same. Ordinarily the material of which the device is constructed will be sufficiently flexible or elastic to permit the said lip to operate  
25 in the manner just described; but I reserve the right to construct the lip separately and to hinge or attach it to the body of the pan in any suitable manner, inasmuch as it may sometimes be found convenient to use non-  
30 flexible material in the construction of the device.

The side pieces or cheeks 10 are provided with perforations 19 to receive the fingers or pivots 8 of the springs 6. The said fingers may  
35 very easily be sprung into the perforations 19, thus connecting the device pivotally with the broom, to which the said springs are attached, as hereinbefore stated.

The side pieces 10 are provided near their  
40 front ends with spindles or journals 20, upon which supporting-wheels 21 are mounted. These wheels may be of any suitable construction, and they may, when desired, be provided with rubber tires 22. The lower edges  
45 of said wheels are extended somewhat below the bottom of the pan, so as to support the latter during operation.

The device is attached to a broom for operation by mounting the sleeve 2, carrying  
50 the springs 6 upon the handle and mounting the pan or receptacle upon the fingers 8 of the said springs, as herein described. The sleeve 2 is adjustable upon the handle, thus adapting the device to be mounted upon  
55 brooms of various sizes, it being obviously important that the adjustment should be such as to cause the edge of the lip 13 to rest lightly upon the floor in advance of the broom. The set-screw 4 with which the sleeve 2 is provided  
60 is for the purpose of effecting such adjustment; but any other suitable means may be employed for retaining the sleeve in the proper position. When the broom is moved forwardly during the operation of sweeping,  
65 the lint and dust will be guided over the lip 13 and thrown over the ridge 12 into the re-

ceptacle, the apron 15 serving to retain the sweepings in said receptacle. During the backward movement of the broom the latter is usually raised from the floor, and the edge  
70 of the lip 13 will consequently be raised while the body of the receptacle rides upon and is supported by the wheels 21. It follows that the weight of the device, which, however, is not heavy, is at all times supported and does  
75 not call for any unusual exertion on the part of the operator. On the contrary, the weight of the broom is actually supported and the operation of sweeping is correspondingly facilitated.  
80

My improved broom attachment differs from the ordinary carpet-sweeper in this respect, that the usual action of the broom is retained. There is no revolving brush and complicated  
85 operating mechanism for such brush, which is always liable to get out of order. When equipped with my improved attachment, an ordinary broom may be used in the ordinary manner, and there is nothing to prevent it from reaching into corners which could not  
90 be reached by means of the carpet-sweeper.

The device is very simple and inexpensive. To empty the pan or receptacle of the dust and sweepings, it is not necessary to detach it from the broom, as, owing to the pivotal con-  
95 nection with the fingers of the elastic arms or springs 6, it may at any time be readily tilted or inverted and its contents be dumped out.

I have described the form of my invention which I consider to be preferable. I desire it  
100 to be distinctly understood, however, that my invention is capable of being modified in many respects. I therefore do not limit myself to the construction herein described, but reserve the right to any and all changes and  
105 modifications to which recourse may be had without departing from the spirit of the invention.

Having thus described my invention, I claim—  
110

1. In combination with a broom, a sleeve mounted upon the handle, springs attached to the said sleeve, and a dust pan or receptacle mounted pivotally on said springs, substantially as set forth.  
115

2. The combination, with a broom, of a sleeve adapted to be shifted up and down upon the handle, means, such as a set-screw, for retaining said sleeve at any desired adjustment, springs attached to the said sleeve,  
120 and a dust pan or receptacle mounted pivotally upon said springs, substantially as set forth.

3. An attachment for brooms, consisting of a receptacle having a yielding lip adapted to  
125 rest upon the floor and provided with supporting wheels or rollers, in combination with means including a sleeve and spring-supports for the receptacle for connecting such receptacle detachably with an ordinary broom, sub-  
130 stantially as described.

4. The described attachment for brooms,



consisting of a receptacle pivotally mounted  
on spring-supports and having a flexible lip  
adapted to rest lightly upon the floor and  
provided at the inner edge of said lip with a  
5 transverse rib or ridge to retain the sweepings  
in the body of the receptacle, substantially  
as set forth.

In testimony that I claim the invention  
above set forth I affix my signature in pres-  
ence of two witnesses.

GEORGE H. ABRAMS.

Witnesses:

CHARLES R. SEARLE,  
M. F. BOYLE.