

No. 621,441.

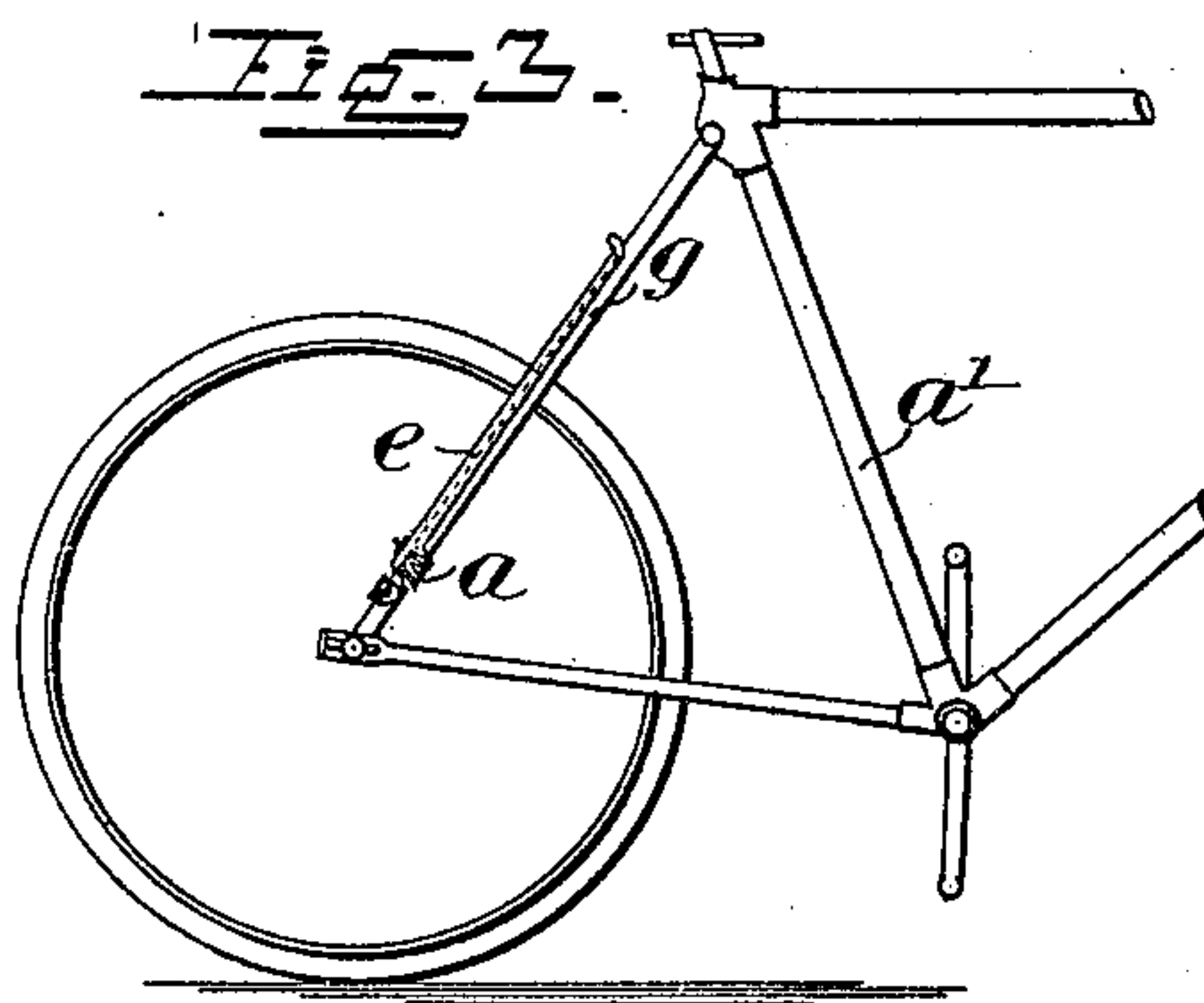
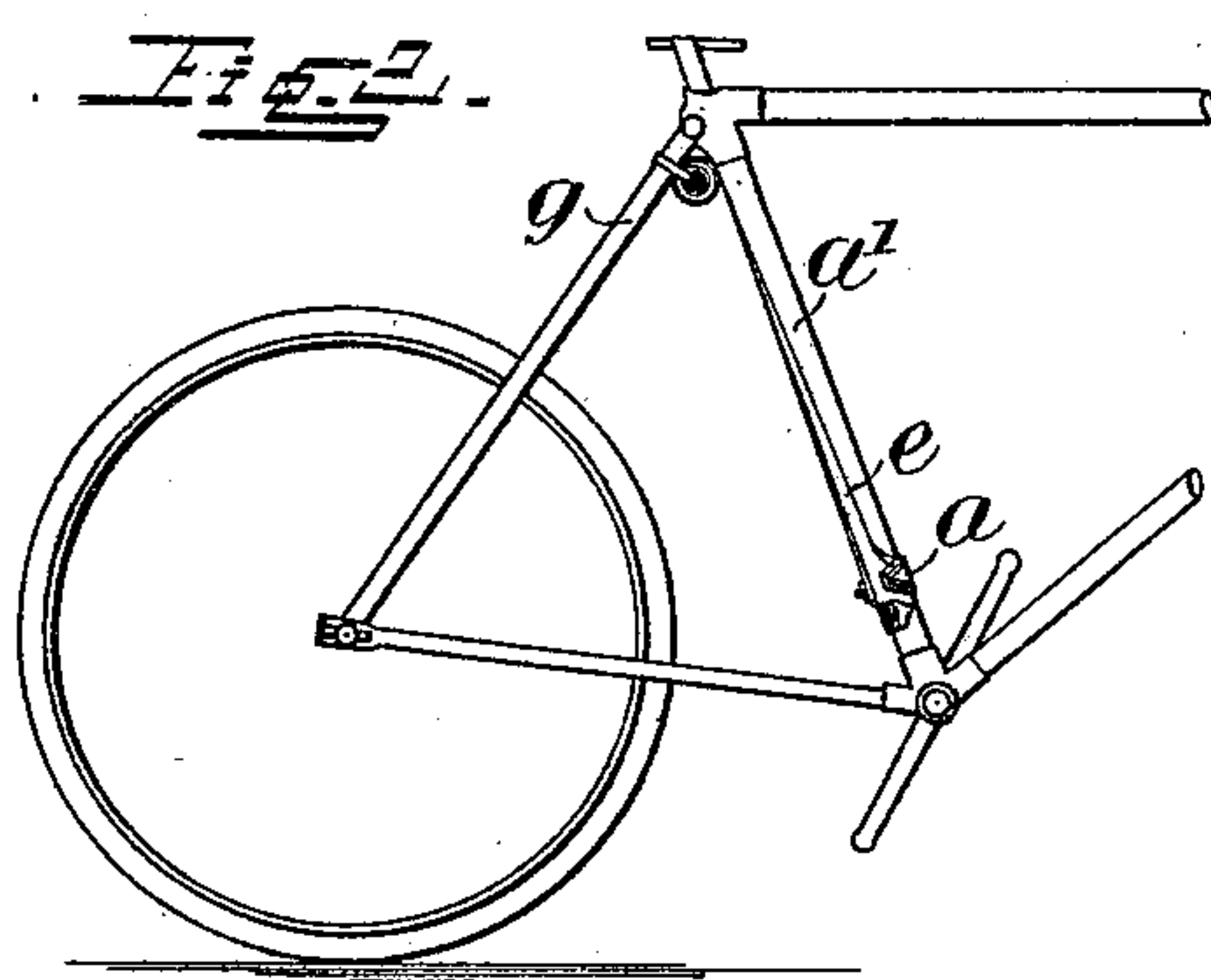
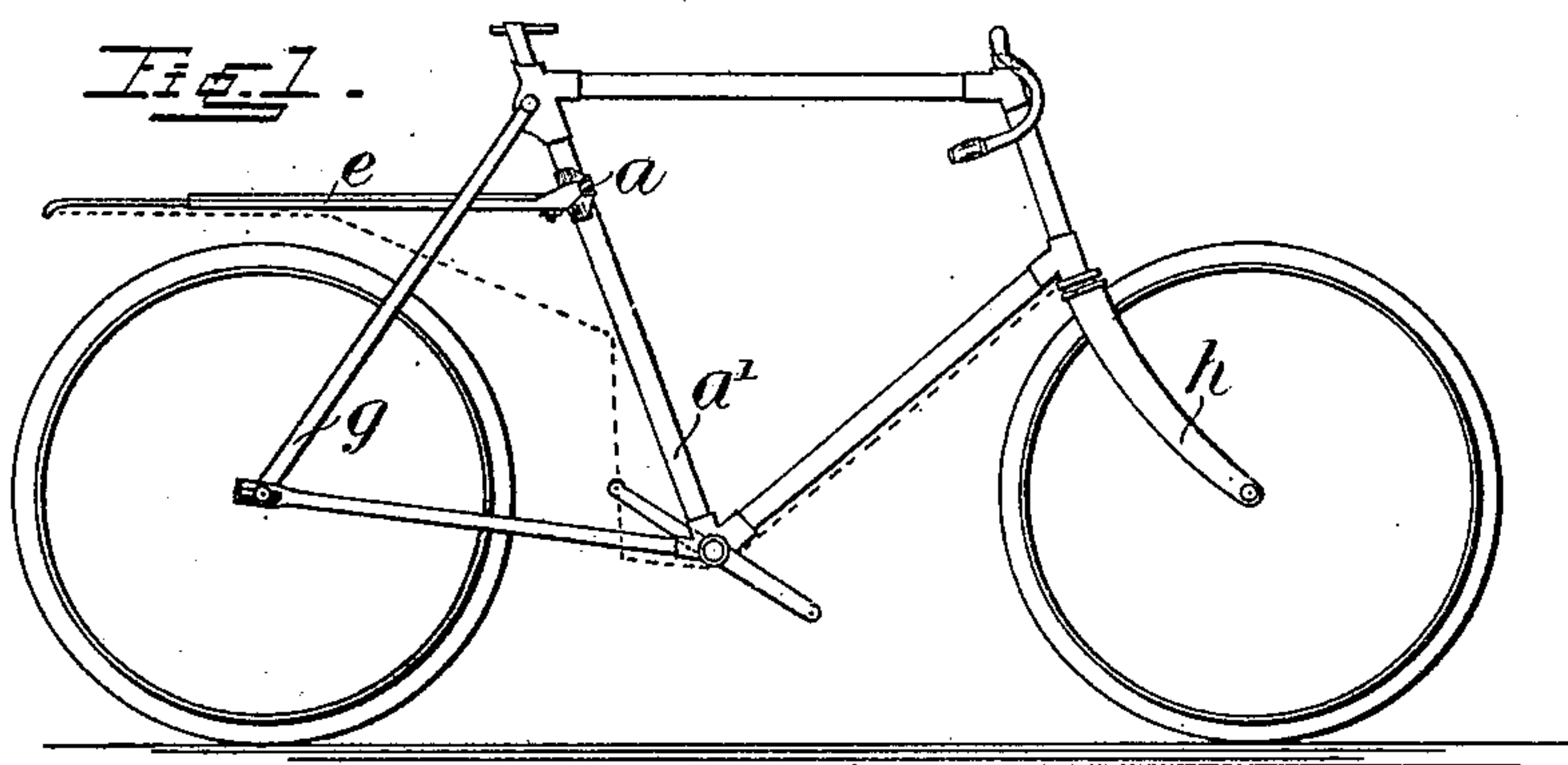
Patented Mar. 21, 1899.

W. BEHREND.  
MUD GUARD FOR CYCLES.

(Application filed July 2, 1898.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses.

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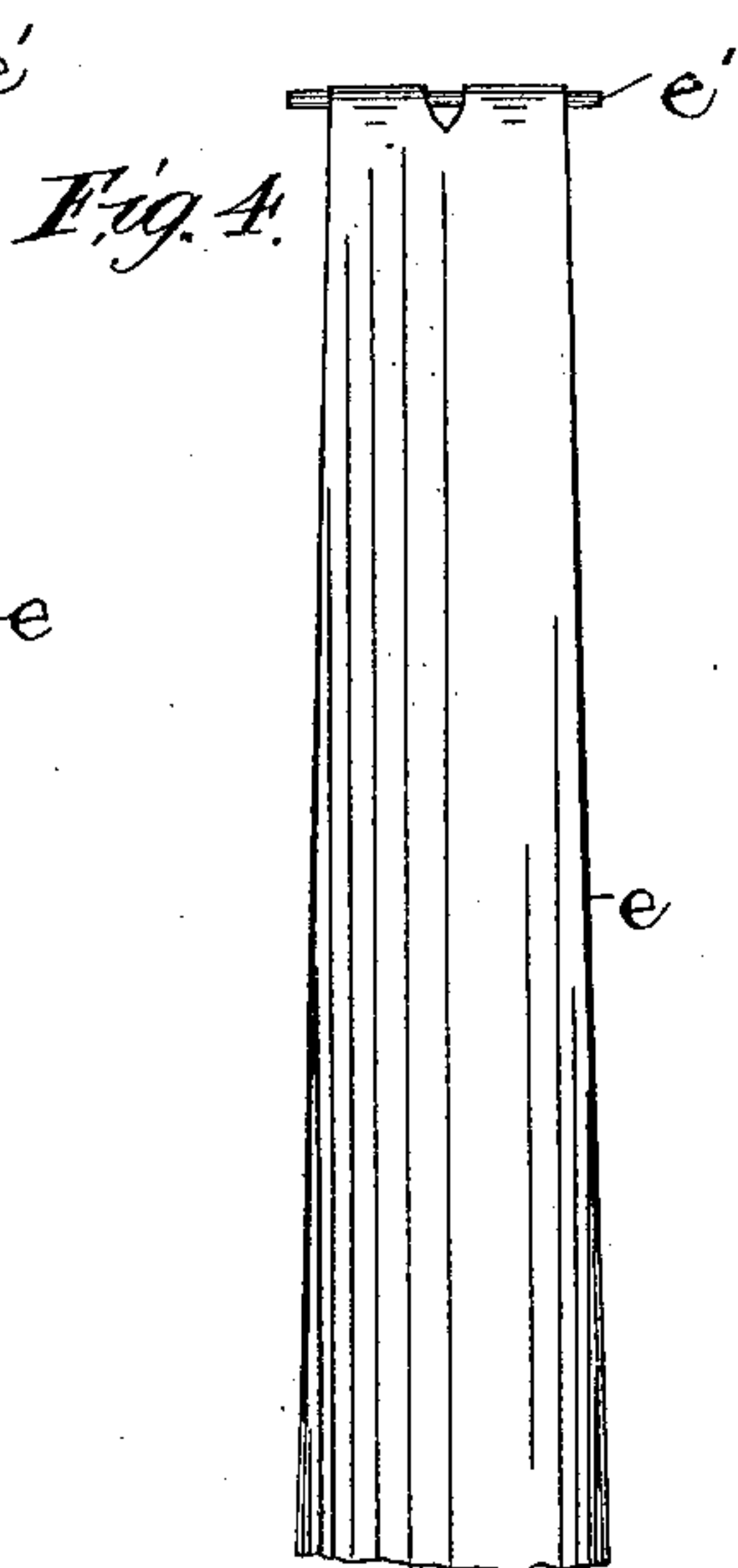
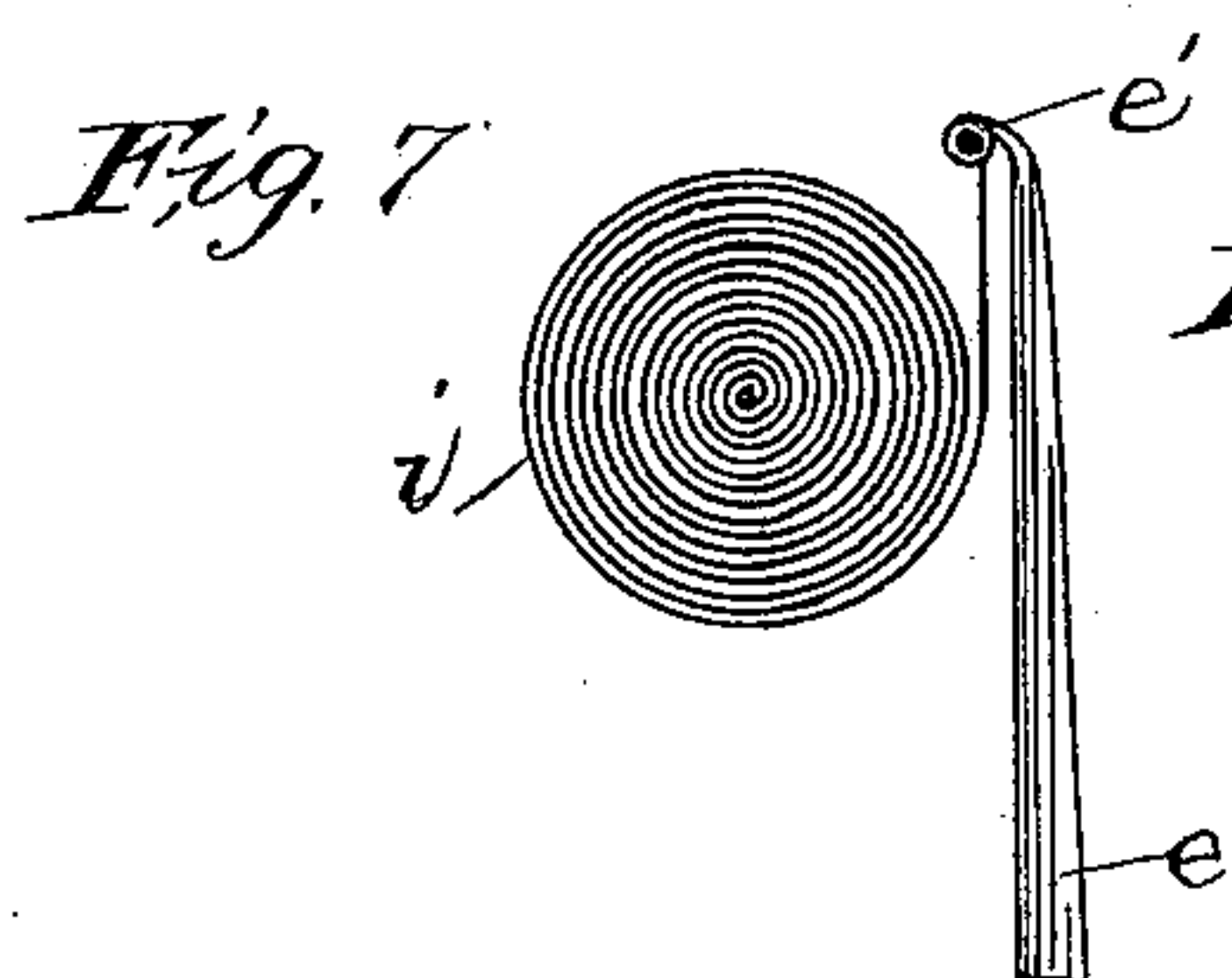
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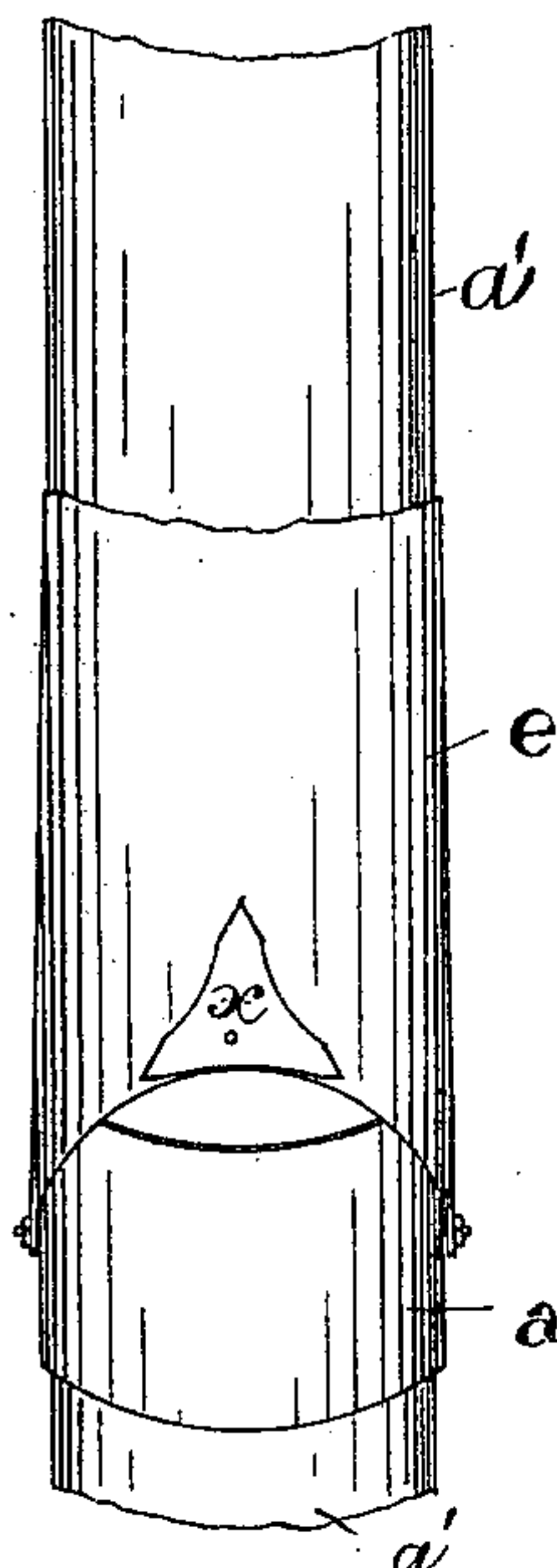
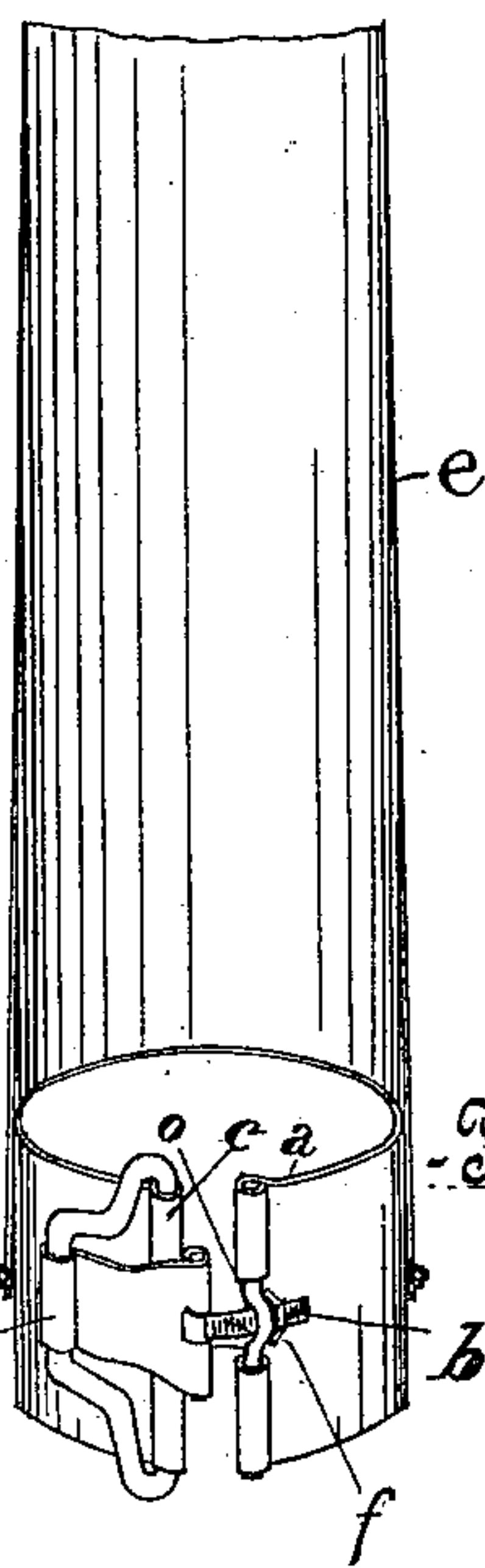
(Application filed July 2, 1898.)

(No Model.)

2 Sheets—Sheet 2.

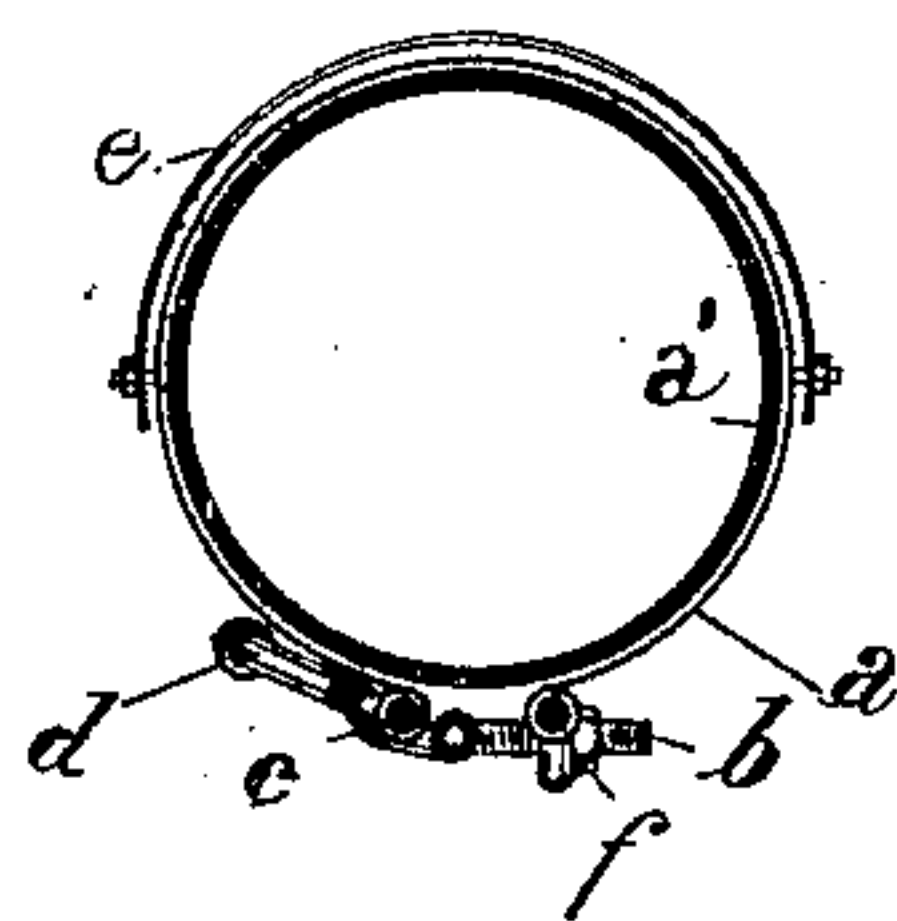


*Fig. 5.*



*Fig. 6.*

*Fig. 6.*



*Witnesses.*

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# UNITED STATES PATENT OFFICE.

WILLY BEHREND, OF BERLIN, GERMANY.

## MUD-GUARD FOR CYCLES.

SPECIFICATION forming part of Letters Patent No. 621,441, dated March 21, 1899.

Application filed July 2, 1898. Serial No. 685,040. (No model.)

*To all whom it may concern:*

Be it known that I, WILLY BEHREND, a subject of the Emperor of Germany, residing at Berlin, Germany, have invented new and useful Improvements in or Connected with Mud-Guards for Cycles, (for which I have applied for a patent in Great Britain, No. 12,773, dated June 7, 1898,) of which the following is a specification.

This invention relates to improvements in or connected with mud-guards for cycles.

In the manufacture of cycles considerable attention is paid to lightness, so that the mud-guards should be made as light as possible. For this reason metal mud-guards have practically gone out of use, and endeavors have been made to substitute waterproof-fabric bands for the sheet-metal guards.

My invention relates to special means of construction in connection with the mud-guard and with its clamp, whereby it is applied to the cycle and whereby the clamp being shifted up or down upon its supporting-bar permits of causing the mud-guard holder to lie closely along the side of its supporting-bar when not in use and to project therefrom when in use; and it relates also to other particulars hereinafter set forth.

In the accompanying drawings, Figure 1 is a side elevation of a bicycle having my mud-guard and clamp attached thereto and showing the mud-guard extended for use. Fig. 2 is a similar view of a portion of the bicycle, showing the position of the mud-guard and clamp when not in use. Fig. 3 is a view similar to Fig. 2, showing the device attached to the rear fork; and Fig. 4 shows a rear elevation, on a larger scale, of the clamp and band-holder; Fig. 5, a front elevation of the same; Fig. 6, a section of the same in the line E F of Fig. 4; and Fig. 7, a detail, enlarged, showing the wound-up mud-guard band connected to its holder.

The invention consists, essentially, of the sleeve or clamp *a*, which is secured to the seat-stay *a'*. The said clamp comprises a broad severed or unclosed metal ring *a*, the two ends of which are bent back, so as to receive the clamp tightening and releasing devices *c d* and the adjusting-screw *b*, with the nut *f*. The part *c* is a bent-wire bar or loop held at one of its sides within one of the bent edges of ring

*a*, and *d* is a spring plate or clamp connected with the loop or part *c* and serving normally to bear down upon the outer portion of the loop *c*. Upon raising by hand the plate *d* the band or ring *a* may be opened sufficiently for any needed adjustment, and by pressing this plate down again it will be clamped to bar *c*, the screw *b* and the nut *f* serving as the adjusting means. In order to fasten the clamp to the seat-stay, the nut *f* is taken off, the open ring *a* is passed around the said seat-stay, and the screw *b* is then passed through the holes or notch *o* in the metal ring. By screwing up the nut *f* the double lever *c d* forces the ends of the ring *a* toward one another, and the clamp has the appearance indicated in Fig. 4. To the clamp *a*, Fig. 2, there is pivotally secured the band-holder proper, *e*, which when not required for use is applied against the seat-stay. In this position the cycle has the appearance shown in Fig. 2 of the accompanying drawings. The clamp or clip *a* surrounds the lower part of the seat-stay *a'*, to which the band-holder *e* is also secured. The mud-guard band is rolled up and secured to the rear fork *g*.

To stretch the mud-guard band, the clamp *a* is pushed up upon the seat-stay into the position indicated in Fig. 1. The band-holder *e* is then turned down, so that it assumes a horizontal position. At the bottom of the holder there is fitted an eccentric triangular or square stop-piece *x*, Fig. 5, which lies against the clamp secured to the seat-stay. By this arrangement it is possible to incline the holder *e* in three or four different positions, which is of considerable importance, owing to variations in the build of cycles.

The mud-guard band is secured in position by suitable means to the holder *e* and the seat-stay *a'*. A suitable arrangement (see Figs. 4 and 7) consists in forming the ends of the band-holder with a wire eye or ear of the width of the band, which is sewed to it. The band is extended by hand under the bottom bracket to the head of the front fork *h* and is secured in this position. The mud-guard band then occupies the position indicated in dotted lines in Fig. 1. In the case of very low machines the band-holder *e* can be replaced by suitably-bent wires.

The advantage of my mud-guard is that



when not required for use the band-holder *e* and the clamp *a* are practically unnoticeable, the weight of the device being also very small and the manipulation thereof extremely simple. It is also possible to fit the device to the rear fork *g*, Fig. 3, instead of to the seat-stay *a'*. Under certain circumstances the sheet-metal band-holder *e* can be replaced by suitably-bent wires.

10 The main feature of the invention consists in the band holder or support *e*, which is pivotally secured to the adjustable clamp or clip *a*, and in the stretching of the mud-guard band by raising the clamp *a*.

15 Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is—

20 1. A mud-guard for cycles, composed of a band and band-holder, the holder being adapted to be folded close to its supporting cycle-bar when not in use, and combined with

and pivoted on a clip or clamp adapted to be lowered on such bar a distance equal to the length of the holder, and to be pushed up on the bar and held at a height to permit the holder to be projected over the rear wheel, the holder being then sustained in this position, all substantially as set forth.

2. The described adjustable clip or clamp for cycles, consisting of an open band or ring *a*, combined with its loop *c*, spring-plate *d*, and the adjusting-screw *b*, and its nut *f*, all substantially as and for the purposes set forth.

3. In combination with the band-holder *e*, and clamp *a*, the adjustable eccentric stop-piece *x*, serving to sustain the holder at different inclined positions, as and for the purposes set forth.

WILLY BEHREND.

Witnesses:

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H. STEINBRENNER.