

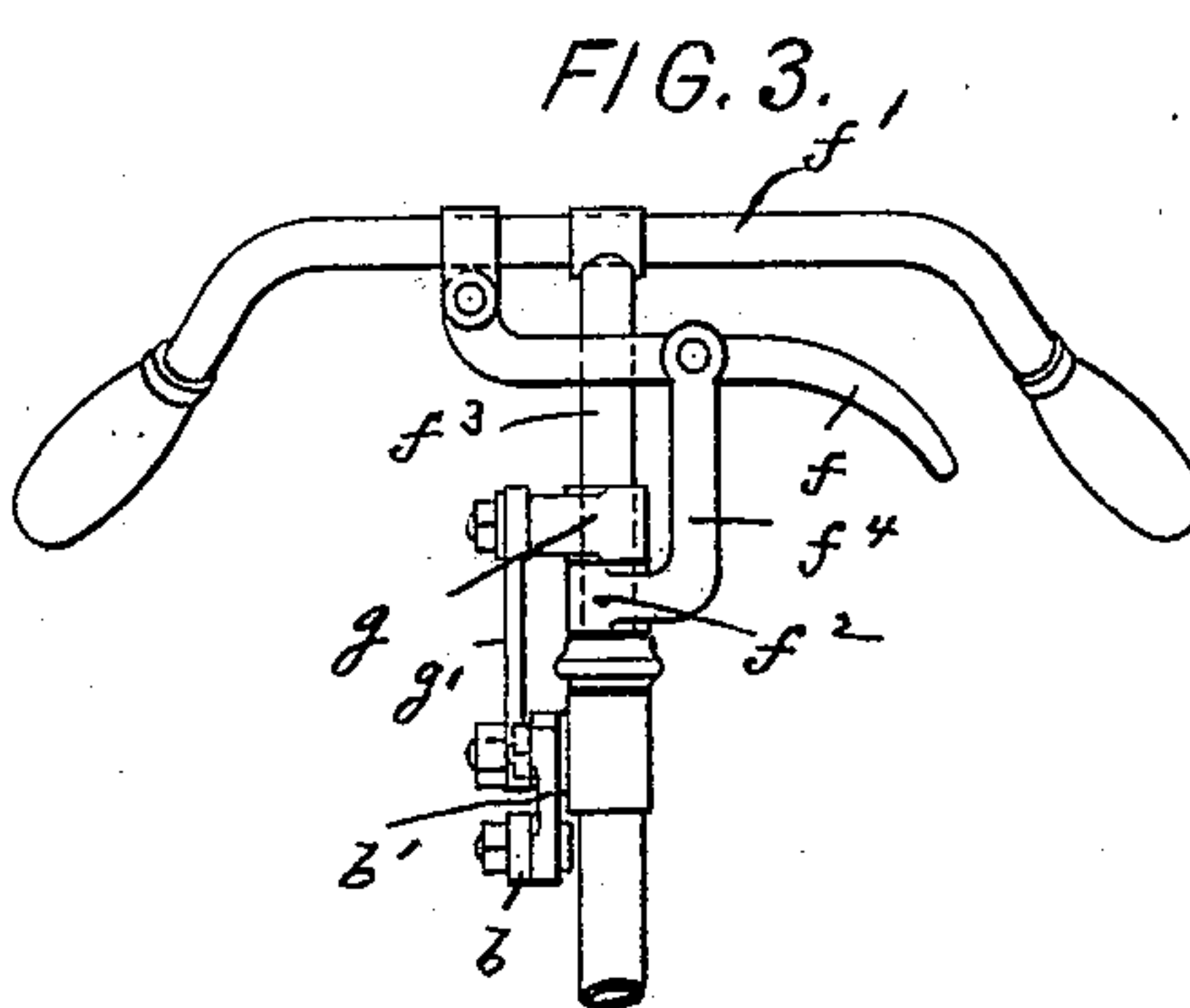
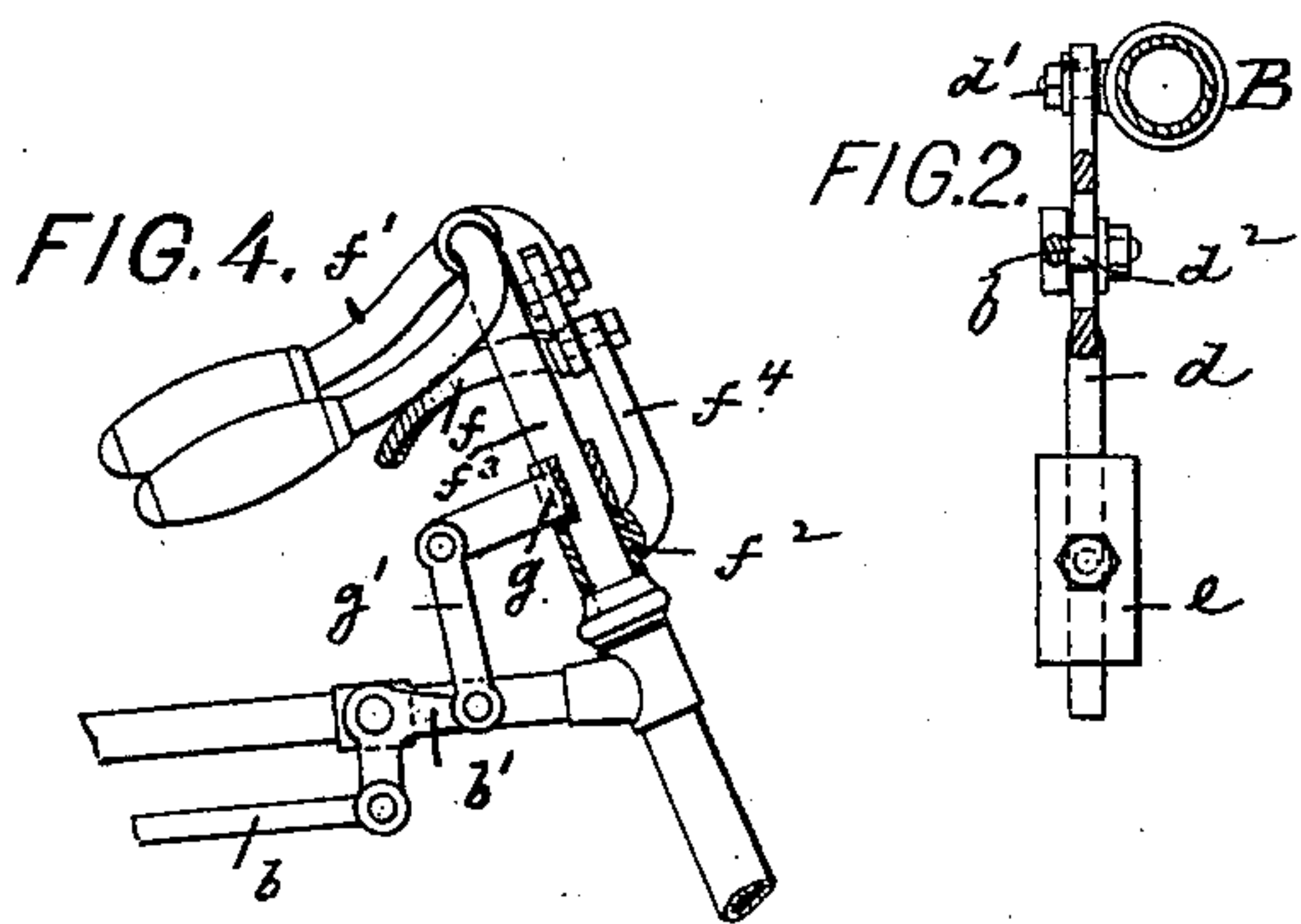
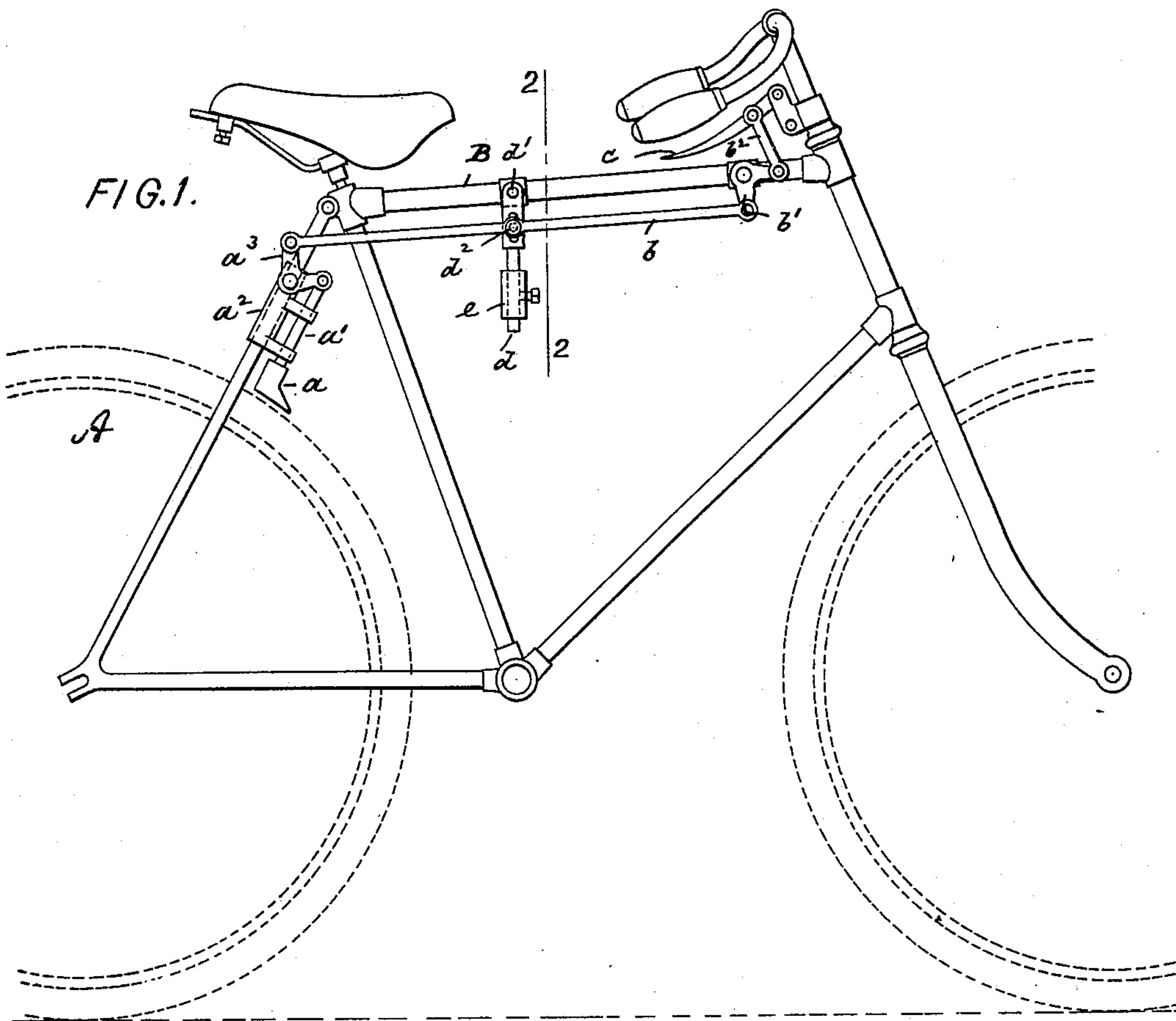
No. 612,007.

Patented Oct. 11, 1898.

F. X. ATZBERGER.
BICYCLE.

(Application filed Apr. 18, 1898.)

(No Model.)



Witnesses:

John Becker.

William Schutz.

Inventor:

Franz X. Atzberger
by his attorneys
Roeder & Brienen

UNITED STATES PATENT OFFICE.

FRANZ X. ATZBERGER, OF LAKEWOOD, NEW JERSEY.

BICYCLE.

SPECIFICATION forming part of Letters Patent No. 612,007, dated October 11, 1898.

Application filed April 18, 1898. Serial No. 677,934. (No model.)

To all whom it may concern:

Be it known that I, FRANZ X. ATZBERGER, a citizen of the United States, and a resident of Lakewood, Ocean county, New Jersey, have
5 invented certain new and useful Improvements in Bicycle-Brakes, of which the following is a specification.

This invention relates to an improved bicycle-brake which will be automatically applied on a downgrade and taken off on an up-
10 grade.

In the accompanying drawings, Figure 1 is a side elevation of a bicycle-frame provided with my improved brake; Fig. 2, a cross-section on line 2 2, Fig. 1; Fig. 3, a front view
15 of a modification of the brake-lever; and Fig. 4, a side view, partly in section, of the same.

The brake-shoe *a* is applied to the rear wheel A and has a stem *a'* sliding freely in a
20 bracket *a''*, attached to the machine-frame. A bell-crank *a'''* connects stem *a'* with the rear end of a rod *b*, the forward end of which is by bell-crank *b'* and link *b''* connected to handle
25 *c*, pivotally supported by the machine-head. If the handle *c* is raised, the rod *b* will be drawn forward to apply the brake, while when the handle is depressed the brake will be taken off.

To provide for an automatic action of the
30 brake, I pivot to the machine-frame B at *d'* a lever *d*, which is at *d''* likewise connected to rod *b*, and which carries a weight *e* at its lower end. On ascending a grade the weight *e* will be tilted backward and will draw the
35 bar *b* along, so as to take off the brake-shoe,

while on descending a grade the weight will be tilted forward to apply the shoe.

It will be seen that while the brake is always in full control of the rider it will act automatically when a dangerous grade is
40 reached, thus adding greatly to the safety of the machine.

In Figs. 3 and 4 the brake-lever *f* is pivoted to the handle-bar *f'* and turns with the same, so that it may always be held in the grasp of
45 the rider. A circular collar *f''*, surrounding steering-tube *f'''*, is connected to lever *f* by link *f''''*. A second circular collar *g*, surrounding steering-tube *f'''* above collar *f''*, is connected to the bell-crank *b'* of brake-rod *b* by
50 link *g'*. If the brake-lever *f* is raised, the collar *f''* will be lifted to lift collar *g*, and thus draw rod *b* forward to apply the brake, while when the brake-lever is released the brake
55 will be taken off.

What I claim is—

In a bicycle-brake, the combination of a brake-shoe adapted to engage the rear wheel, with a handle, a rod for transmitting the motion of the handle to the brake-shoe, a lever
60 pivoted to the machine-frame and the rod, and a weight suspended from said lever, substantially as specified.

Signed by me at Lakewood, New Jersey,
this 4th day of April, 1898.

FRANZ X. ATZBERGER.

Witnesses:

B. H. FIELDER, Jr.,
ALLUT. M. BRADSHAW.