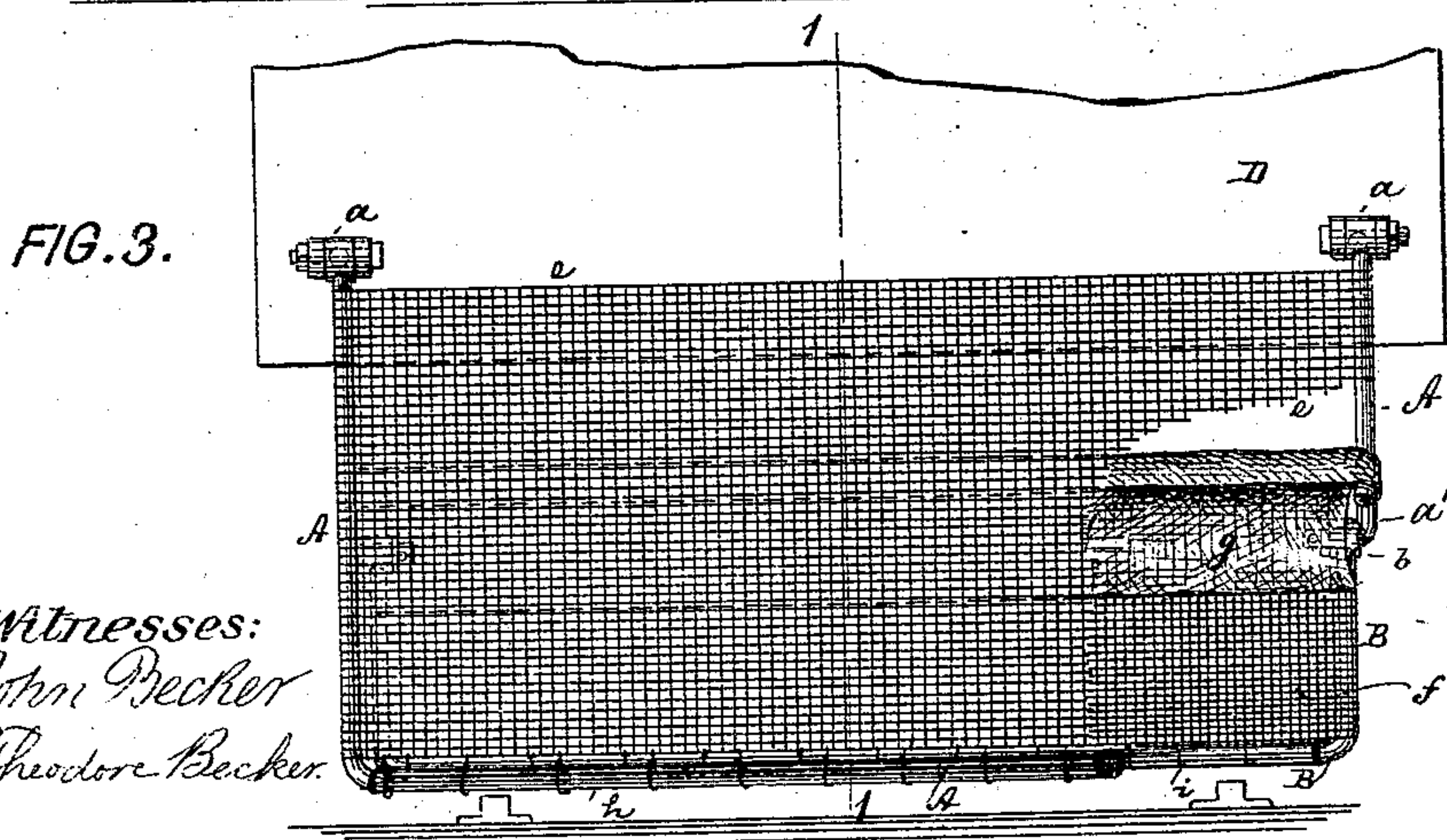
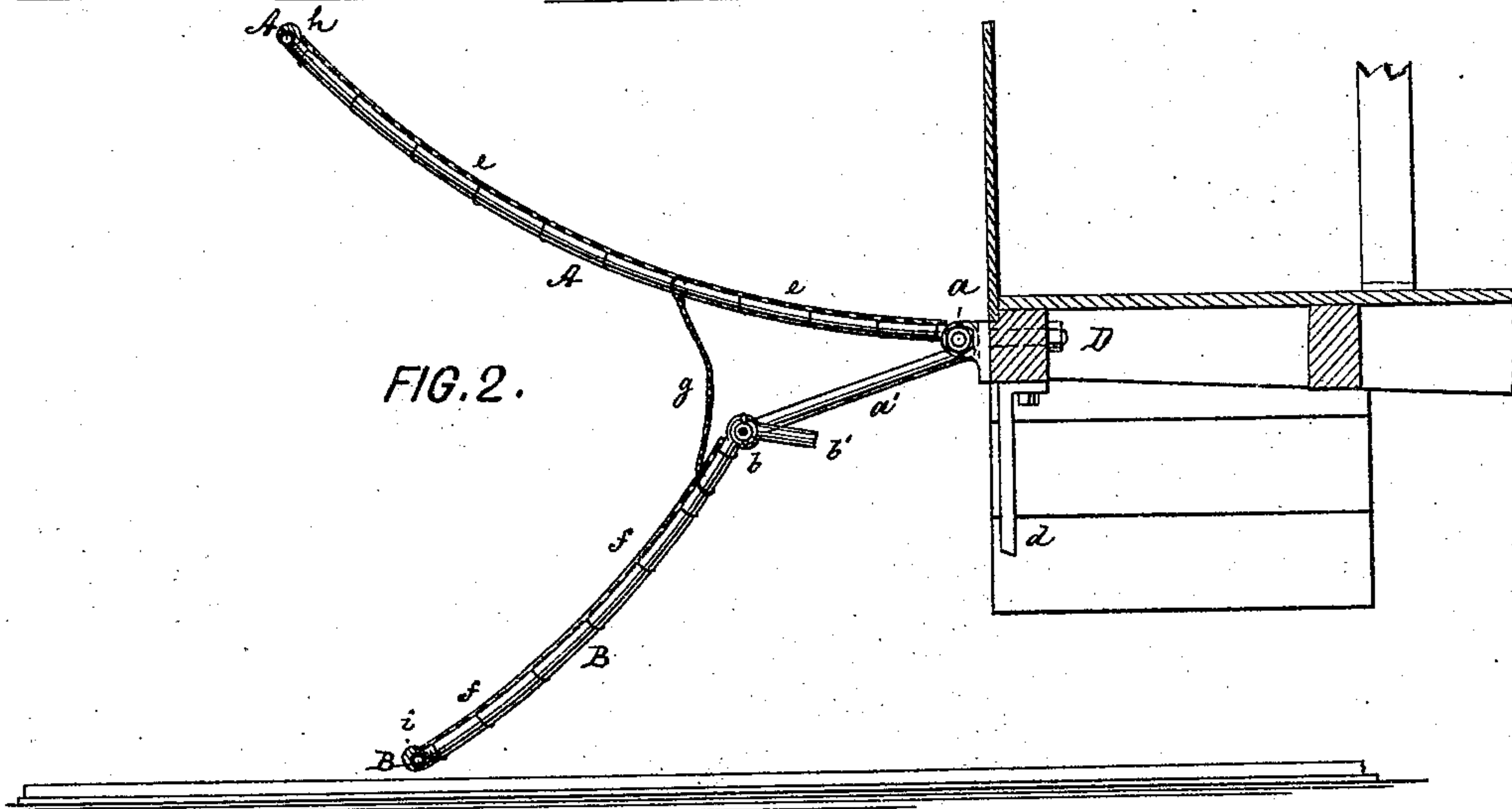
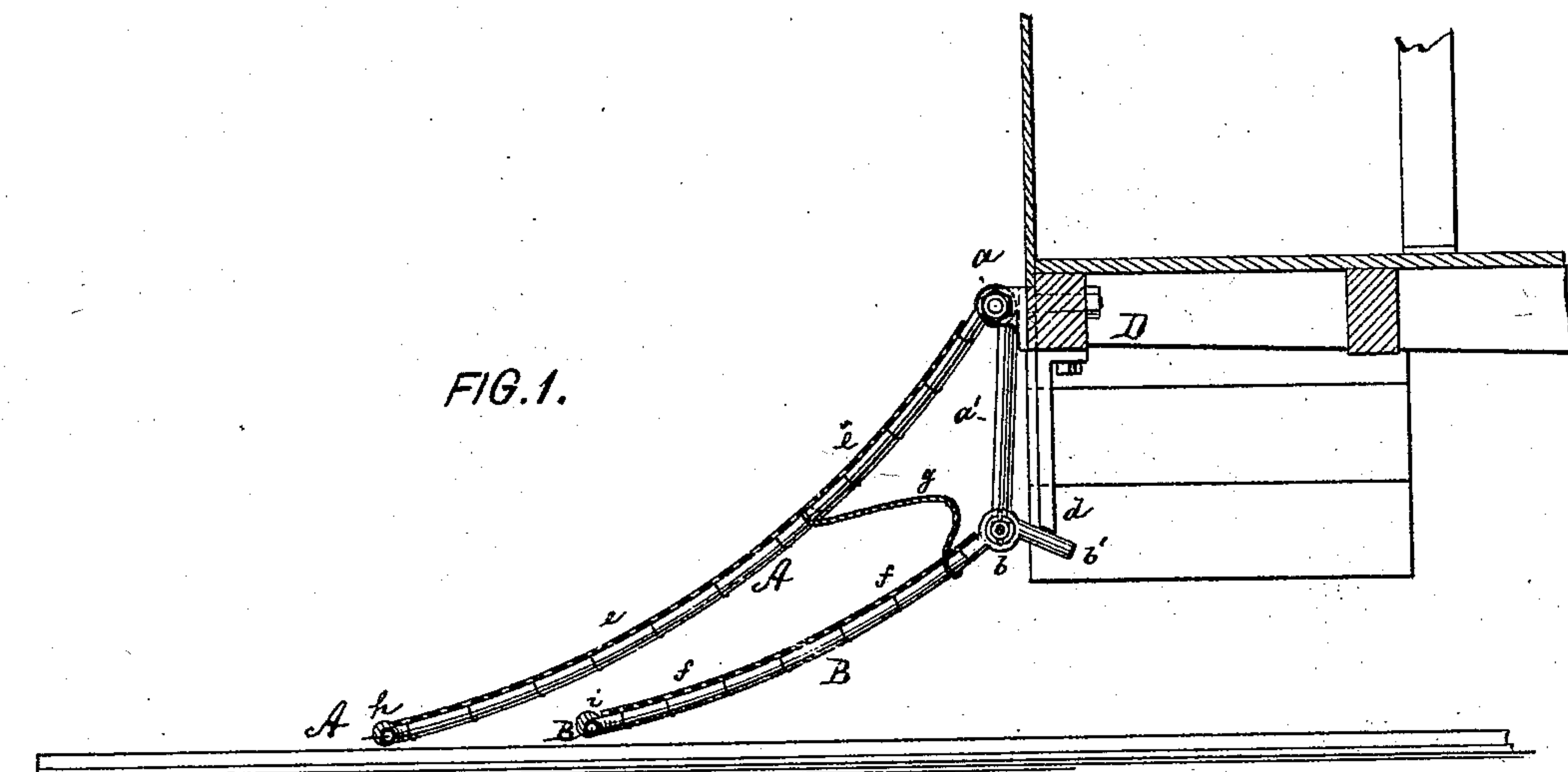


(No Model.)

A. LUTZ.
CAR FENDER.

No. 551,904.

Patented Dec. 24, 1895.



Witnesses:
John Becker
Theodore Becker.

Inventor:
Adolph Lutz
by his attorneys
Roeder & Brissen

UNITED STATES PATENT OFFICE.

ADOLPH LUTZ, OF BROOKLYN, NEW YORK.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 551,904, dated December 24, 1895.

Application filed April 25, 1895. Serial No. 547,121. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH LUTZ, of Brooklyn, New York, have invented an Improved Car-Fender, of which the following is a specification.

This invention relates to a car-fender provided with two pivotally-connected guards placed beneath one another and operating in such a manner that the obstacle is caught up by the lower guard if missed by the upper guard.

In the accompanying drawings, Figure 1 is a vertical transverse section of my improved car-fender on line 1 1, Fig. 3, showing the guards lowered. Fig. 2 is a similar section showing the guards raised; and Fig. 3 a plan, partly in section, of the fender.

The letter A represents the frame of the upper guard, and B the frame of the lower guard. The frame A is hinged at its rear ends to the car-body D at *a* and is provided with the downwardly-extending arms *a'*, to the lower ends of which the lower guard-frame B is pivoted. The pivotal connection between the arms *a'* and the frame B may be effected by means of eyes *b*, formed on the frame B, and engaging the inwardly-turned ends of the arms *a'*. In the back of the eyes *b* the frame B is provided with the rearwardly-extending arms or stops *b'*, adapted to engage a projection *d* of the car-body D. These stops hold the forward ends of the frames A B slightly above the rails, as shown in Fig. 1. The upper frame A is longer than the lower frame and extends in front of the same, so that normally the lower frame is concealed and out of action. A sheet of wire-cloth, canvas, or other material *e* covers the upper frame A, a similar sheet *f* covers the lower frame B, and a third folded sheet or apron *g* connects the frames A B in front of the hinges. The front

edges of the frames A B may be provided with rubber buffers *h i*.

In use both guards are normally lowered, as shown in Fig. 1. If an object strikes the upper guard it will ordinarily be thrown upon such guard and saved from harm; but if the object should be caught beneath the lower edge of the frame A it will at once raise such frame, as shown in Fig. 2. The raising of the frame A will cause a corresponding raising of the rear end of the lower frame B, so that the stops *b'* are liberated and permit the lower frame to vibrate or open. Thus the apron *g* will be unfolded and the object will be caught upon the lower guard and the apron and will be protected against harm. My improved fender therefore possesses the important advantage of providing a double protection and of preventing an object that should miss the main guard from reaching the wheels of the car.

What I claim is—

1. A carfender composed of a pair of guards, of which the upper guard has downwardly extending arms, and the lower guard is pivoted at its rear end to such arms and has rearwardly extending stops adapted to engage the car body, all being so constructed that the raising of the upper guard will cause a raising and a vibration of the lower guard, substantially as specified.

2. A car fender composed of an upper guard having arms, a lower guard pivoted to such arms, and having rearwardly extending stops, projections on the car body adapted to engage said stops, and of a folded apron *g*, that connects the guards, substantially as specified.

ADOLPH LUTZ.

Witnesses:

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