

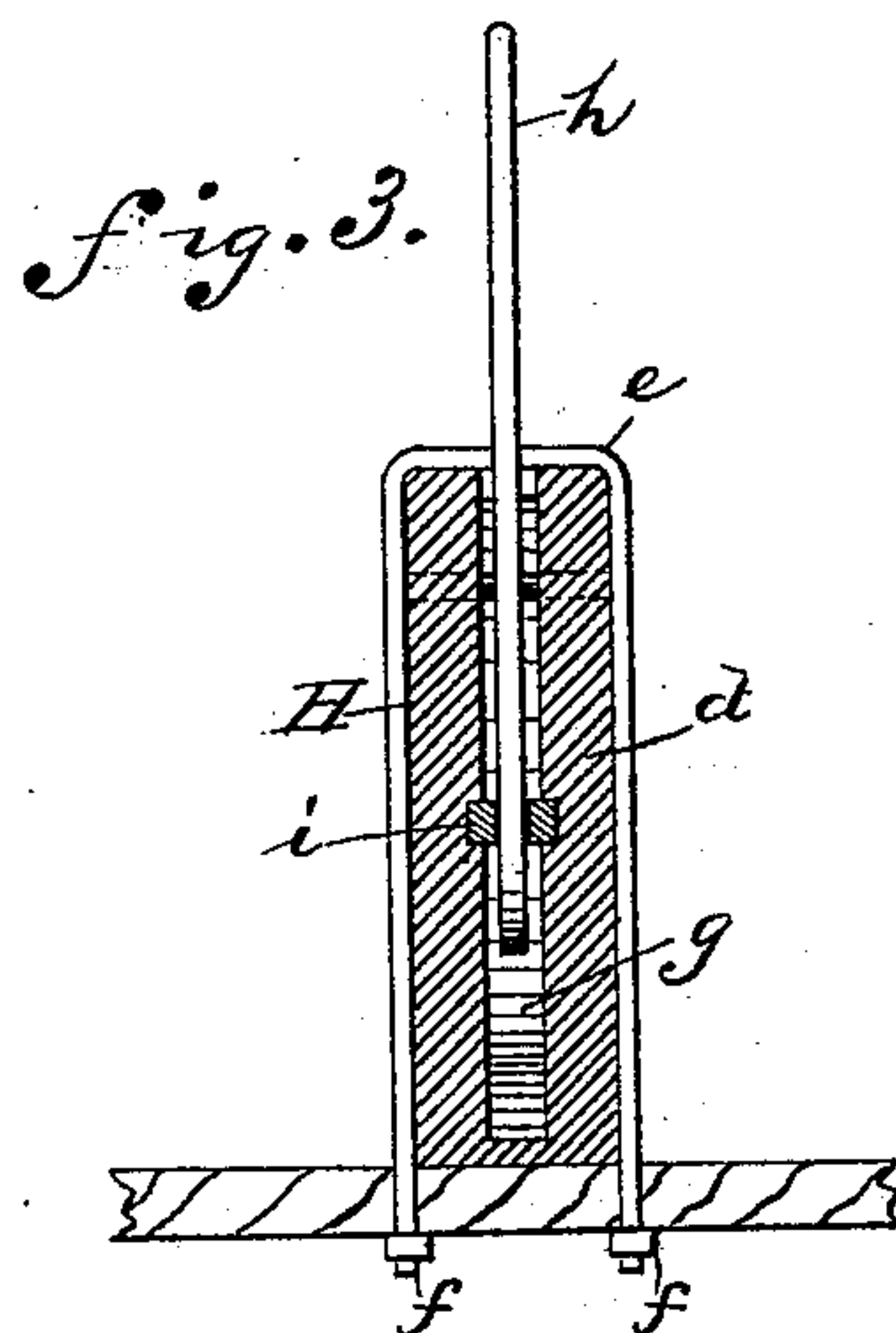
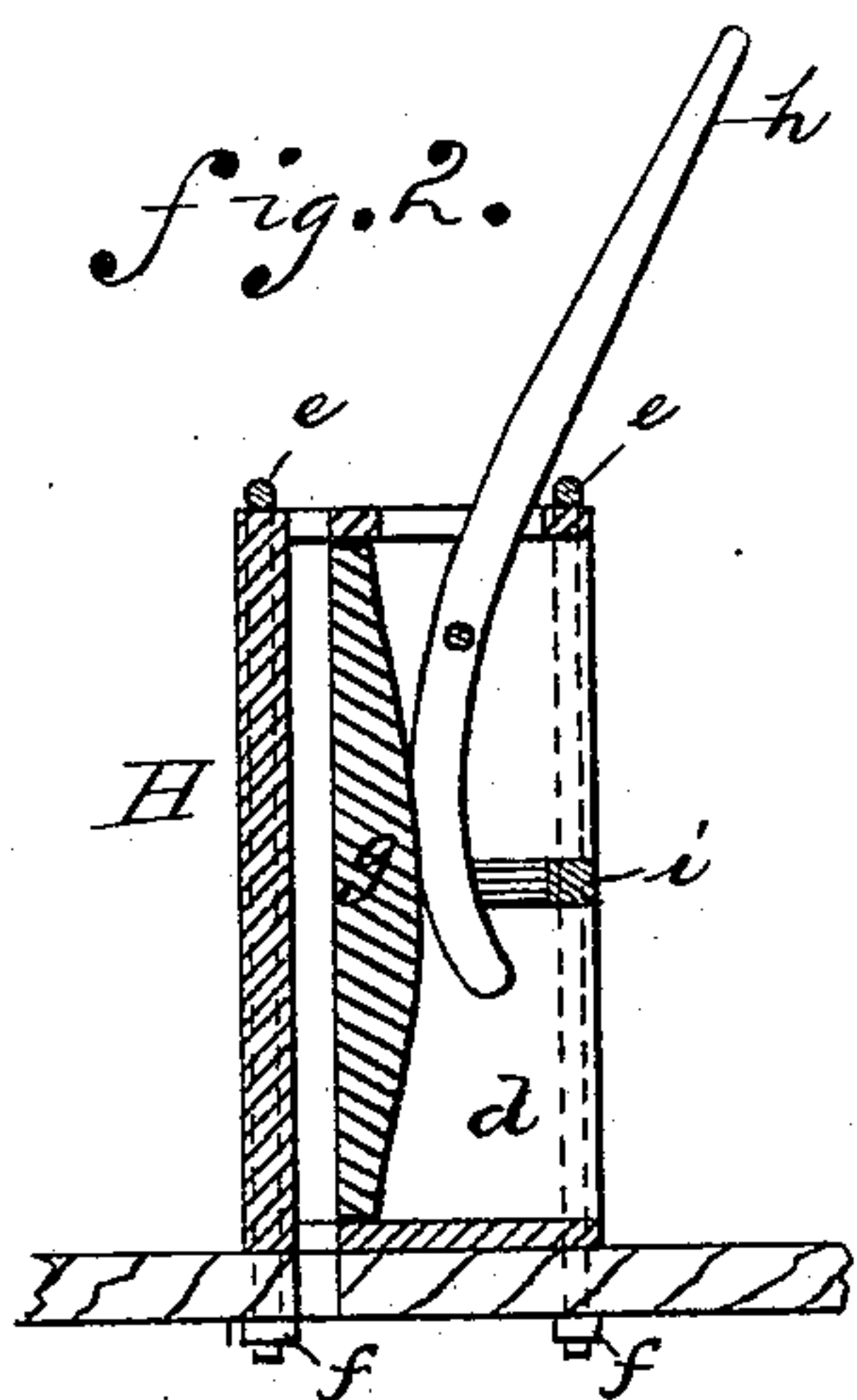
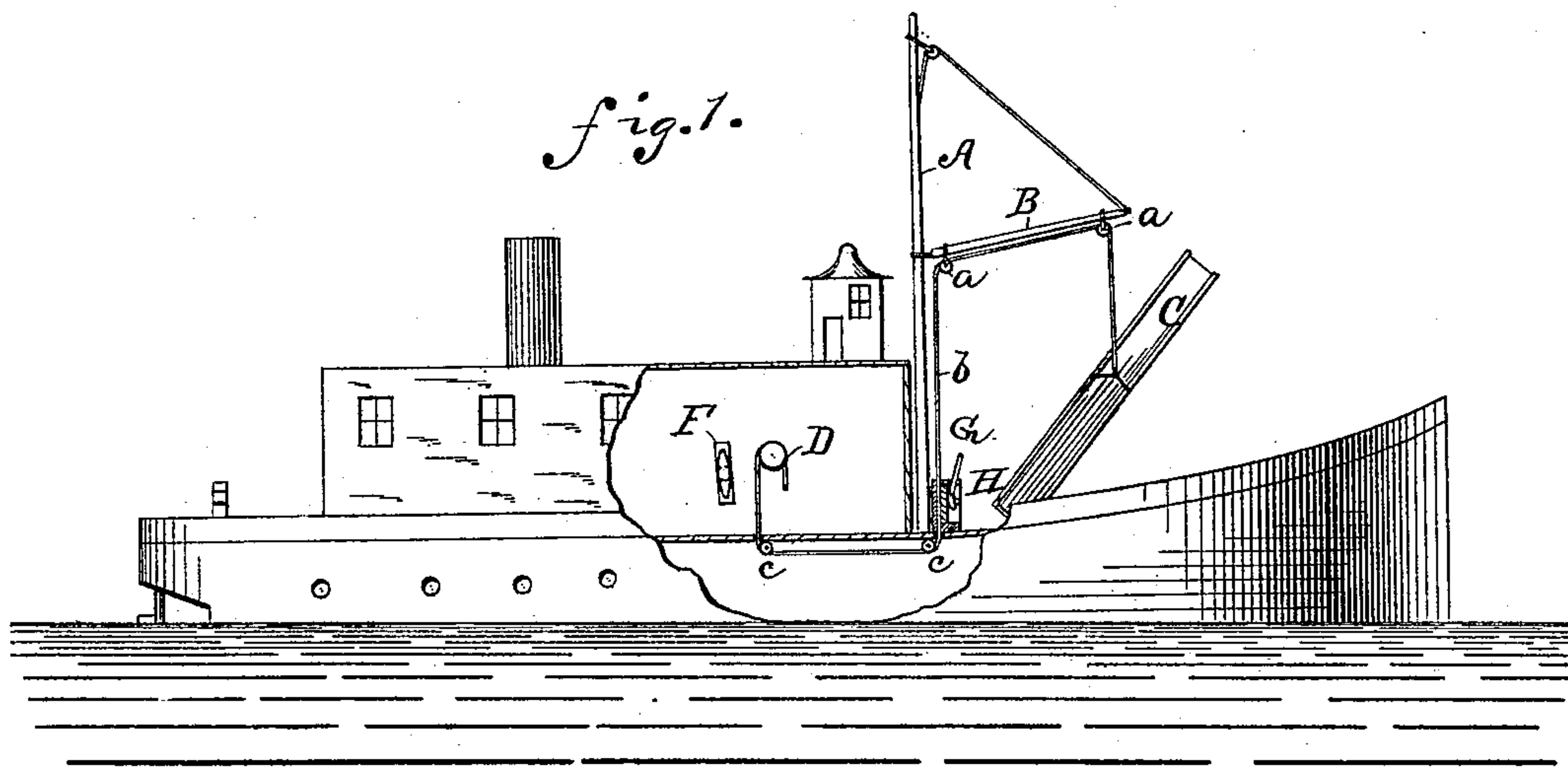
(No Model.)

R. H. PURNELL.

HOISTING DEVICE FOR VESSELS.

No. 297,536.

Patented Apr. 22, 1884.



WITNESSES:

H. B. Brown
Edw. W. Byers

INVENTOR:

R. H. Purnell
BY *Merrill L.*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

RICHARD HOPE PURNELL, OF ROSEDALE, MISSISSIPPI.

HOISTING DEVICE FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 297,536, dated April 22, 1884.

Application filed September 29, 1883. (No model.)

To all whom it may concern:

Be it known that I, RICHARD H. PURNELL, a citizen of the United States, residing at Rosedale, in the county of Bolivar and State of Mississippi, have invented a new and useful Improvement in Hoisting Devices for Vessels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a view of a steamboat, showing my invention applied to the same. Figs. 2 and 3 are sections through the brake, the views being taken in planes at right angles to each other.

My invention relates to hoisting devices for vessels, and more particularly to means for controlling the rope in hoisting devices used on steamboats for lifting and adjusting the gangway or stage-planks.

It consists in the peculiar construction of a brake and its combination with the other parts of the hoisting device, as will be fully described hereinafter.

In the drawings is shown a steamboat, in the bow of which is rigged a mast, A, with a boom or sprit, B, fastened near the top and projecting sidewise to the mast. Around sheaves *a* on the mast and boom there runs a rope, *b*, which is adapted to be fastened to the stage-plank C, and which rope passes down below the deck and around pulleys *c c* to the winding-drum D, usually called the "nigger," and worked by steam to wind up the rope and raise or lower the stage-planks. When the boat is under way, or when the stage is not in use, the rope is taken off the drum D and made fast to the "cavil" or large cleat F. In order to change the rope from the drum to the cavil, several hands have to take hold of the rope at G and hold hard until the change is made, and the stage very frequently gets away from the men, and falls overboard and breaks the rigging. To obviate this difficulty I con-

struct the brake H and place it at G for this purpose. This brake consists of a strong housing, *d*, fastened down to the deck by loops *e e*, which are placed over the top of the housing, and extend down through the deck, and are secured by nuts *f* under the deck. The rope passes vertically through a hole in the housing, and beside the rope in the housing is a brake-shoe, *g*, which is loosely connected to an upright lever, *h*, fulcrumed in the housing, the lower end of the lever being contained in a strap or yoke, *i*, of the shoe, which yoke slides in grooves horizontally in the housing, one side of which housing is left open. Now, when the lever is deflected, the shoe is strongly pressed against the rope, and a sufficient frictional contact is obtained to hold the rope during the shifting of the latter from the drum to the cavil.

I am aware that various forms of brakes have been combined with a hoisting-rope—such, for instance, as shown in Patents Nos. 69,978, 135,398, 256,354, and reissued Patent No. 10,127—and, furthermore, that the general arrangement of the mast, boom, and hoisting-rope is not new; and I therefore confine my invention to the particular form of brake shown and its combination with the hoisting devices.

Having thus described my invention, what I claim as new is—

The brake H, consisting of the housing *d*, the shoe *g*, with yoke *i*, sliding in grooves in the housing, and the lever *h*, fulcrumed in the housing, and having its lower end loosely inserted in the yoke of the shoe, in combination with the mast A, boom B, and rope *b*, swung from pulleys on said boom, as and for the purpose described.

RICHARD HOPE PURNELL.

Witnesses:

ALBERT MILLER,
JAKE SUGARMAN.