

(No Model.)

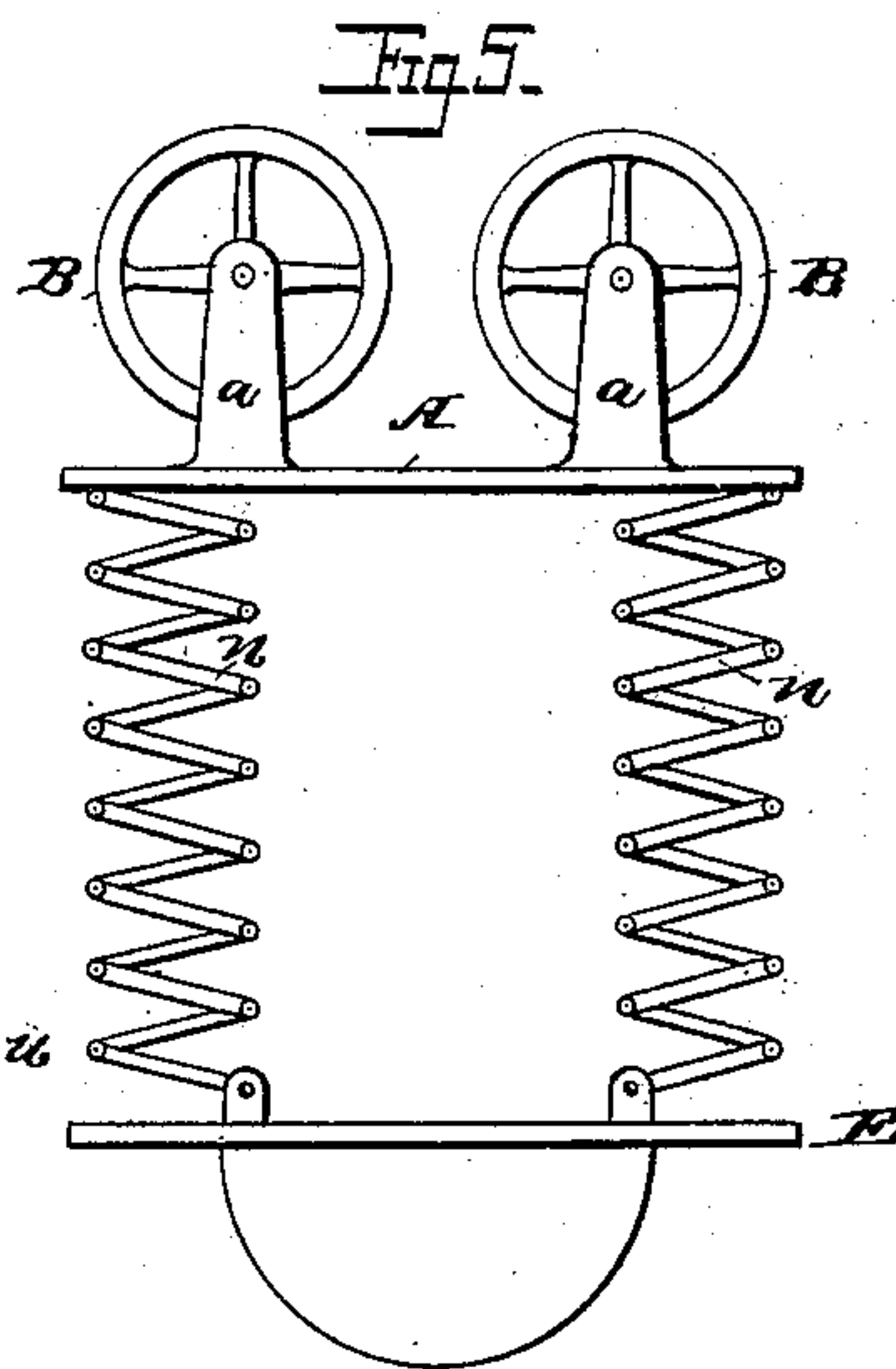
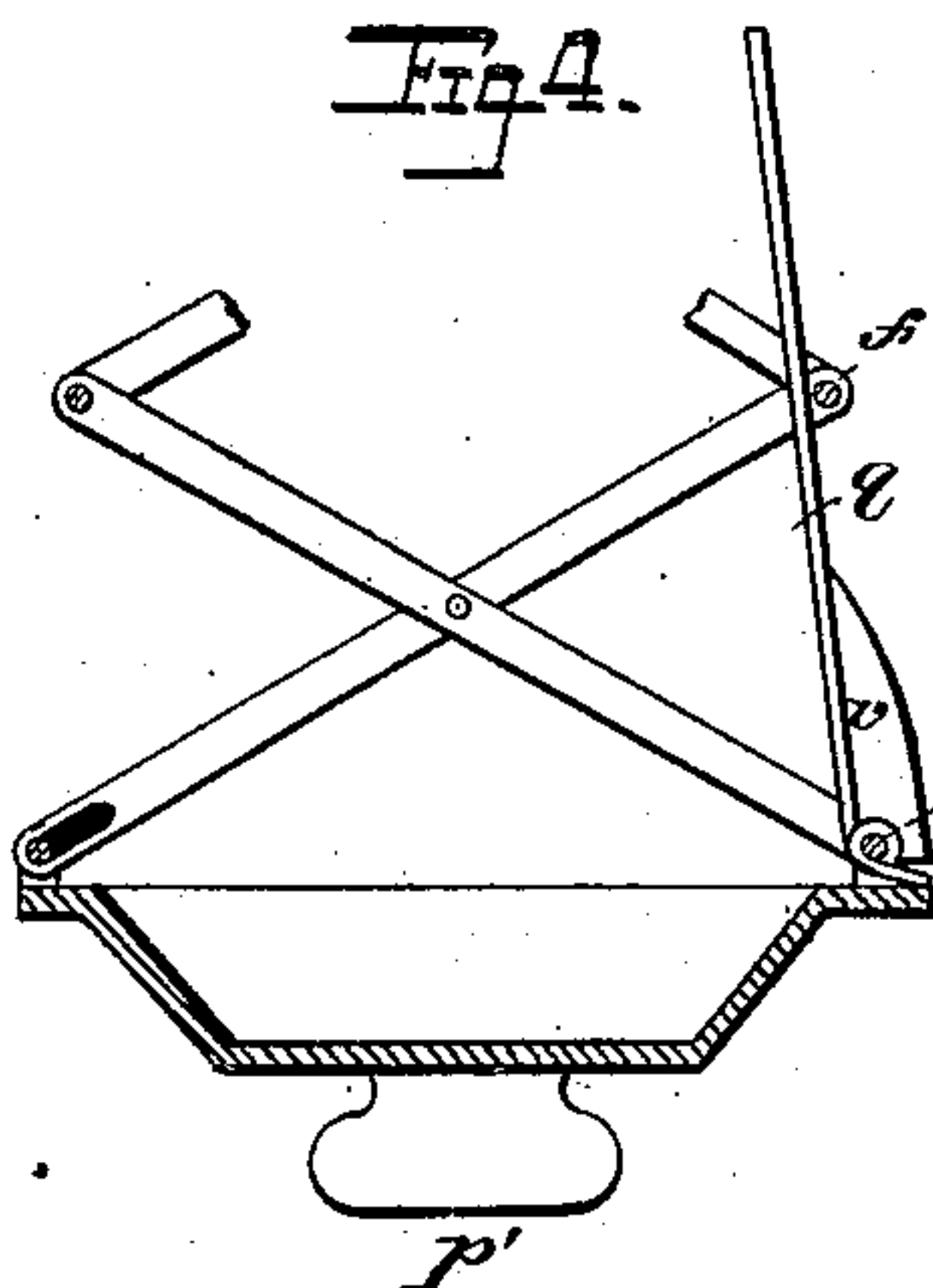
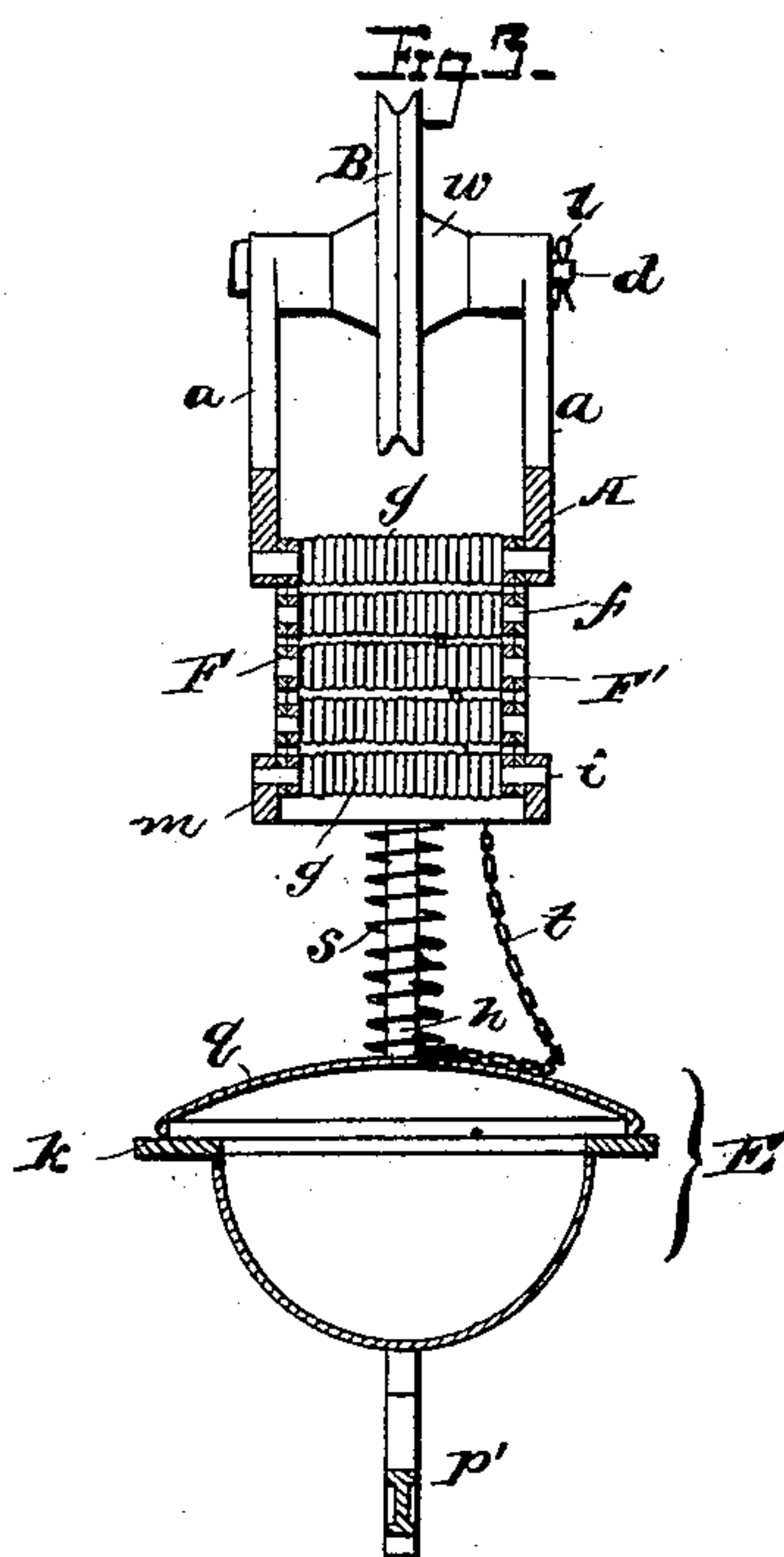
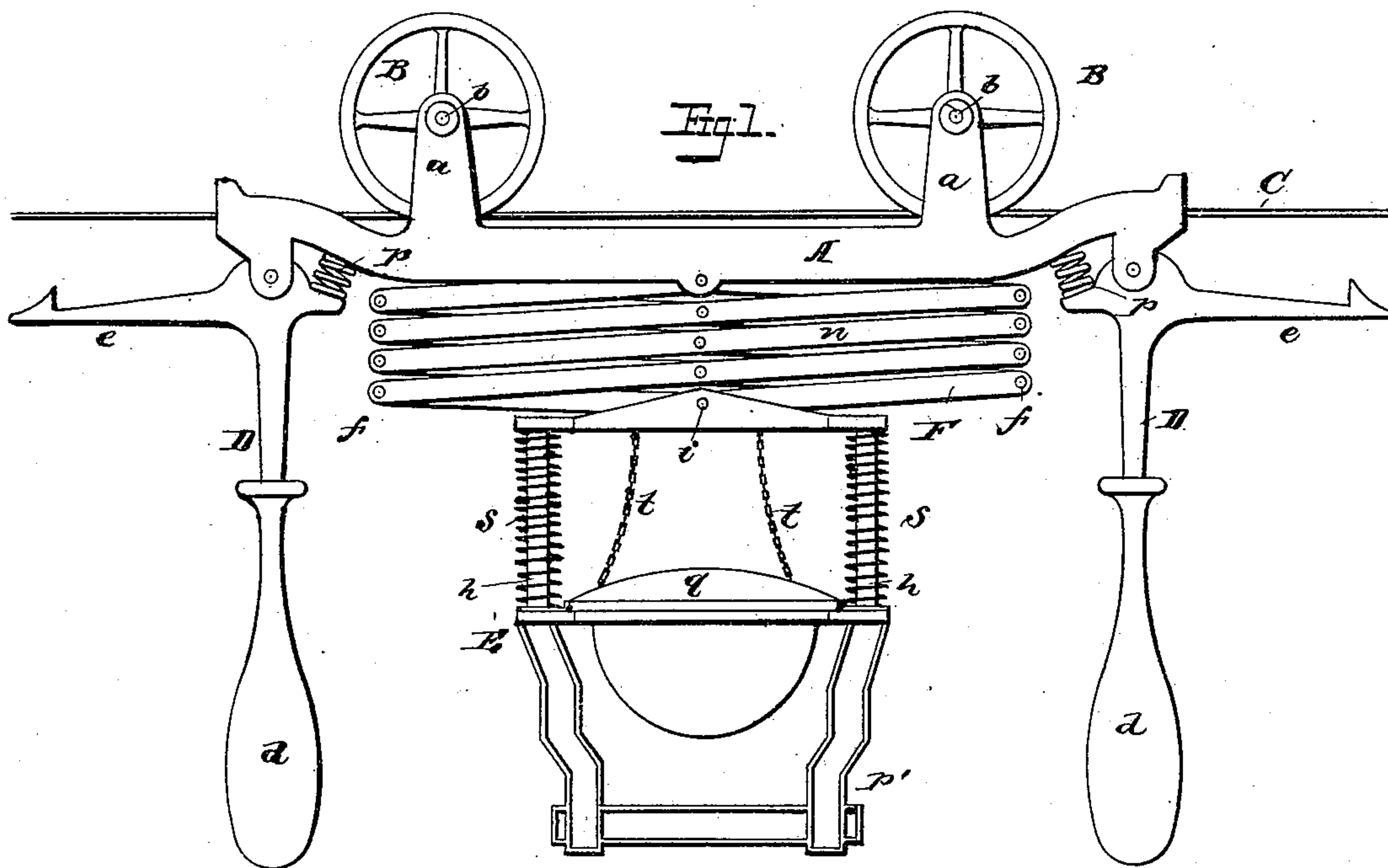
2 Sheets—Sheet 1.

W. S. HILL.

CAR FOR STORE SERVICE.

No. 333,300.

Patented Dec. 29, 1885.



Attests:

John G. Hinkel Jr.
J. F. Jagers.

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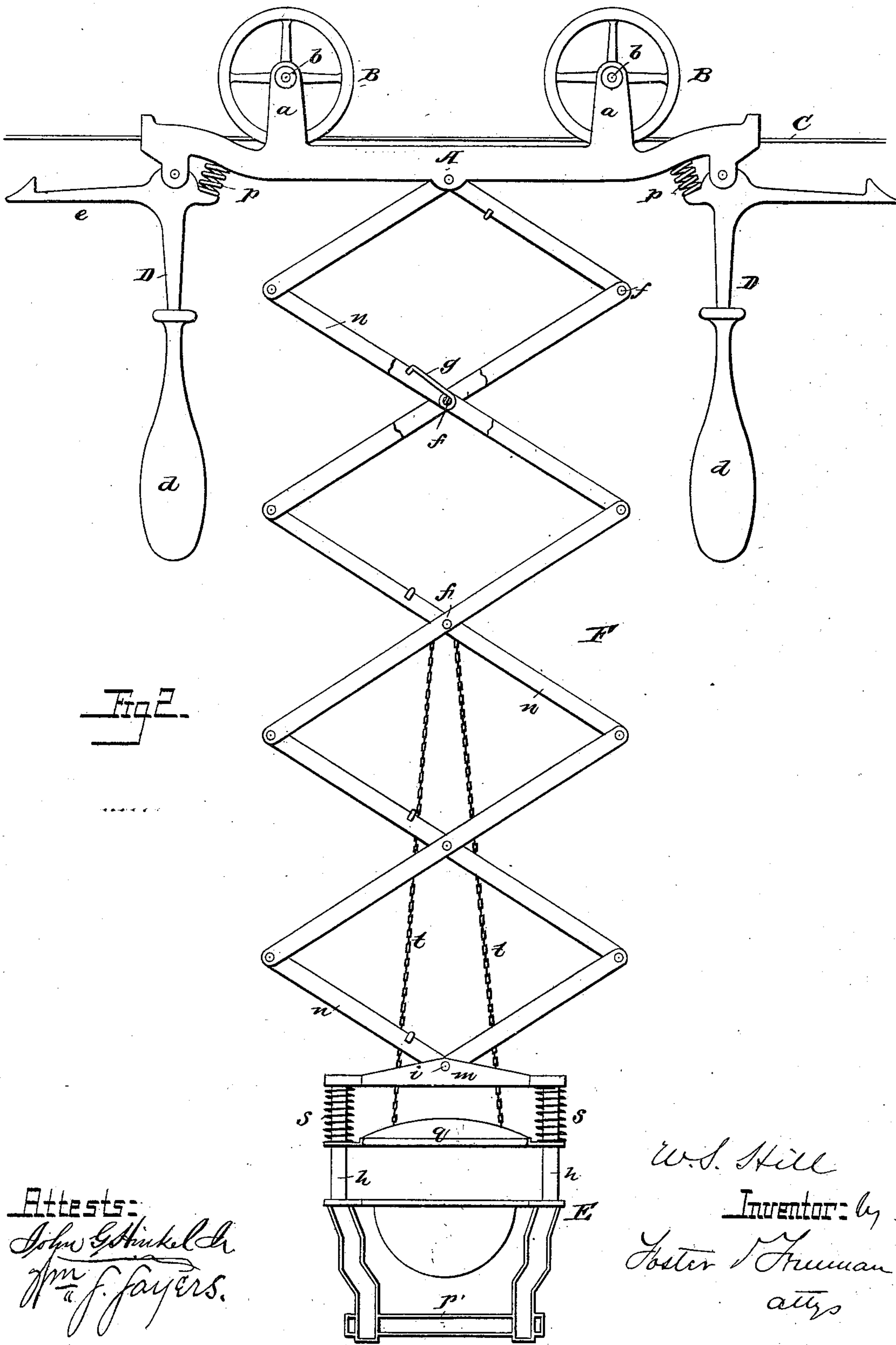
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UNITED STATES PATENT OFFICE.

WARREN S. HILL, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE LAMSON CASH RAILWAY COMPANY, OF SAME PLACE.

CAR FOR STORE-SERVICE.

SPECIFICATION forming part of Letters Patent No. 333,300, dated December 29, 1885.

Application filed June 2, 1885. Serial No. 167,417. (No model.)

To all whom it may concern:

Be it known that I, WARREN S. HILL, a citizen of the United States, residing at Boston, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Cars for Store-Service Apparatus, of which the following is a specification.

My invention relates to that class of store-service cars, in which the receptacle is connected extensibly to the frame; and my invention consists in constructing the connecting parts and providing a receptacle with an automatically-operated lid or cover, as fully set forth hereinafter, so as to facilitate access to the receptacle, and insure its automatic elevation after its release.

In the drawings, Figure 1 is a side view of my improved car, the receptacle in its elevated position. Fig. 2 is the same, showing the receptacle drawn down. Fig. 3 is a section on the line 1 2, Fig. 1. Figs. 4 and 5 are side views illustrating modifications.

The body A of the car or carrier may be of any suitable shape or construction or material. As shown, it is an oblong metallic open frame, provided near each end with a pair of standards, *a*, through which passes an axle, *b*, supporting the grooved wheel B, that runs upon the way C. It will be apparent that the character of the wheel and structure of the frame will depend to a certain extent upon the character of the way, the construction shown being adapted for the ordinary wireway.

Near each end of the frame A is pivoted a bell-crank lever, D, provided with a handle, *d*, and catch-arm *e*, and a spring, *p*, bears upon the lever, and tends to throw upward the catch-arm to cause it to engage with a suitable stop adjacent to the way or upon the same. Any suitable catch device may be substituted for that shown, and it may be arranged either upon the car or upon the way or other support.

The receptacle E for the cash or other articles is extensibly connected to the frame of the car through the medium of one or more series of jointed bars, *n*, connected to form "lazy-tongs." As shown, there are two series of jointed bars, F F', one suspended beneath

each side of the frame, and each connected to one side of the receptacle E; and I prefer to connect the two lazy-tongs together by transverse rods *f*, upon each of which is coiled a spring, *g*, connected to the rods and bars, so as to be wound up or compressed when the receptacle is drawn down, and of such combined strength that when the receptacle is released the action of the springs will lift the same until the bars *h*, constituting the lazy-tongs, are brought closely together, as shown in Fig. 1. Where it is not desired to extend the rods *f* from one lazy-tongs to the other, the springs *g* may be coiled around the pivots where the bars *h* cross; or springs of a different character may be employed, the particular form of spring being immaterial, provided it is so arranged and connected as to be compressed when the receptacle is drawn down and act to lift the receptacle when it is released.

The receptacle may be of any desired form, according to the article to be carried. As shown, it consists of a plate, *k*, with a central depression forming a basin or tray, and the plate *k* is connected to the lower bars of the series by a pivot, *i*, passing through the overlapped ends of the bars and through a slot in a frame, *m*, connecting standards *h h*, extending between the frame *m* and the plate *k*. A pendent handle, *p'*, suspended from the plate *k*, serves as a means of seizing and drawing down the receptacle. When it is desired to cover the receptacle, it is provided with a movable lid or cap, *q*, connected in any suitable manner to permit it to be readily raised to obtain access to the receptacle. I prefer to so connect the cap that it will be lifted and lowered automatically when the receptacle is drawn down and elevated. Different means of securing this automatic action of the lid will occur to one skilled in the art. One mode of effecting the result is illustrated in Figs. 1 and 2, in which the lid is shown as sliding upon and guided by the standards *h h*, springs *s* coiled around the said standards bearing upon the lid and tending to depress it, a cord, *t*, extending from the lid to one of the cross-bars *f*, and of such length that when the receptacle is nearly at the limit of its lower motion the cord will be taut and arrest the motion of the

lid, from which the receptacle is withdrawn as it is pulled further downward. When the receptacle is released, it approaches the lid until the two are in contact, when the receptacle is closed, after which the springs *g* raise the parts to the position shown in Fig. 1.

In Fig. 4 the lid *q* is shown as hinged to the receptacle at one edge, and a spring, *u*, tends to lift it into contact with one of the cross-bars or pivots *f'*, when the receptacle is drawn down and a rib or wing, *v*, upon the lid comes in contact with the pin *f'* as the receptacle rises, and causes the lid to be turned down to a horizontal position. It will be seen that the standards *a a* are widely separated, and that the grooved wheel B is provided with a hub, *w*, projecting to a considerable extent beyond the opposite sides, the ends of the hub being in contact with the standards. I thus secure a wide bearing of the wheels upon the pins *b*, not only preventing the tilting of the wheels, but reducing the wear and friction which results when the hubs do not project beyond the sides of the wheel.

To facilitate the placing of the carrier upon the wire when a way of that character is used, the pins *b* are made detachable in any suitable manner. For instance, each pin has a head at one end and an opening at the other adapted to receive a detachable key, *l*.

It will be evident that one, two, or more series of jointed bars or lazy-tongs may be used for extensibly connecting the body and receptacle of the car, and that the said bars may be jointed together in different ways—as, for instance, in either of the ways illustrated in Figs. 1 and 5.

It will be obvious that some features of the car above described may be used alone or in cars of different constructions.

Without limiting myself to the precise construction and arrangement of parts shown, I claim—

1. The combination, in a car for store-service apparatus, of a body or frame provided with wheels adapted to the way, a receptacle adapted to hold the money or other articles to be

transported, and one or more series of jointed bars connecting the holder extensibly to the frame, and springs connected to draw the said bars together and elevate the holder automatically when the same is released, substantially as set forth. 50

2. The combination, in a cash-carrier car, of a body provided with rollers or wheels adapted to the way, a receptacle provided with a lid or cover, and jointed bar extensibly connecting the body and receptacle, and springs arranged to elevate the receptacle, substantially as described. 55 60

3. The combination, with the body and receptacle of a store-service car, of extensible connections connecting the two and lifting the receptacle automatically, and a cap or cover for the receptacle connected to rise automatically as the receptacle is drawn down and to close automatically when the receptacle is released, substantially as described. 65

4. The combination, with the lid of a receptacle connected extensibly with the frame of a car, of a cord connected to the lid and to a support above the lid, and of such a length as to limit the downward movement of the lid, substantially as and for the purpose set forth. 70

5. The combination of the receptacle connected extensibly with the body of a car, of a lid, guides, springs arranged to depress the lid, and a cord connecting the lid to an upper support and limiting the downward movement of the lid, substantially as described. 75 80

6. The combination of the open frame A, provided with wheels adapted to the way, two series of jointed bars connected to the sides of said frame, springs connected to elevate the said bars, and a receptacle suspended from said bars, substantially as described. 85

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WARREN S. HILL.

Witnesses:

A. J. LANE,
E. F. ENDICOTT.