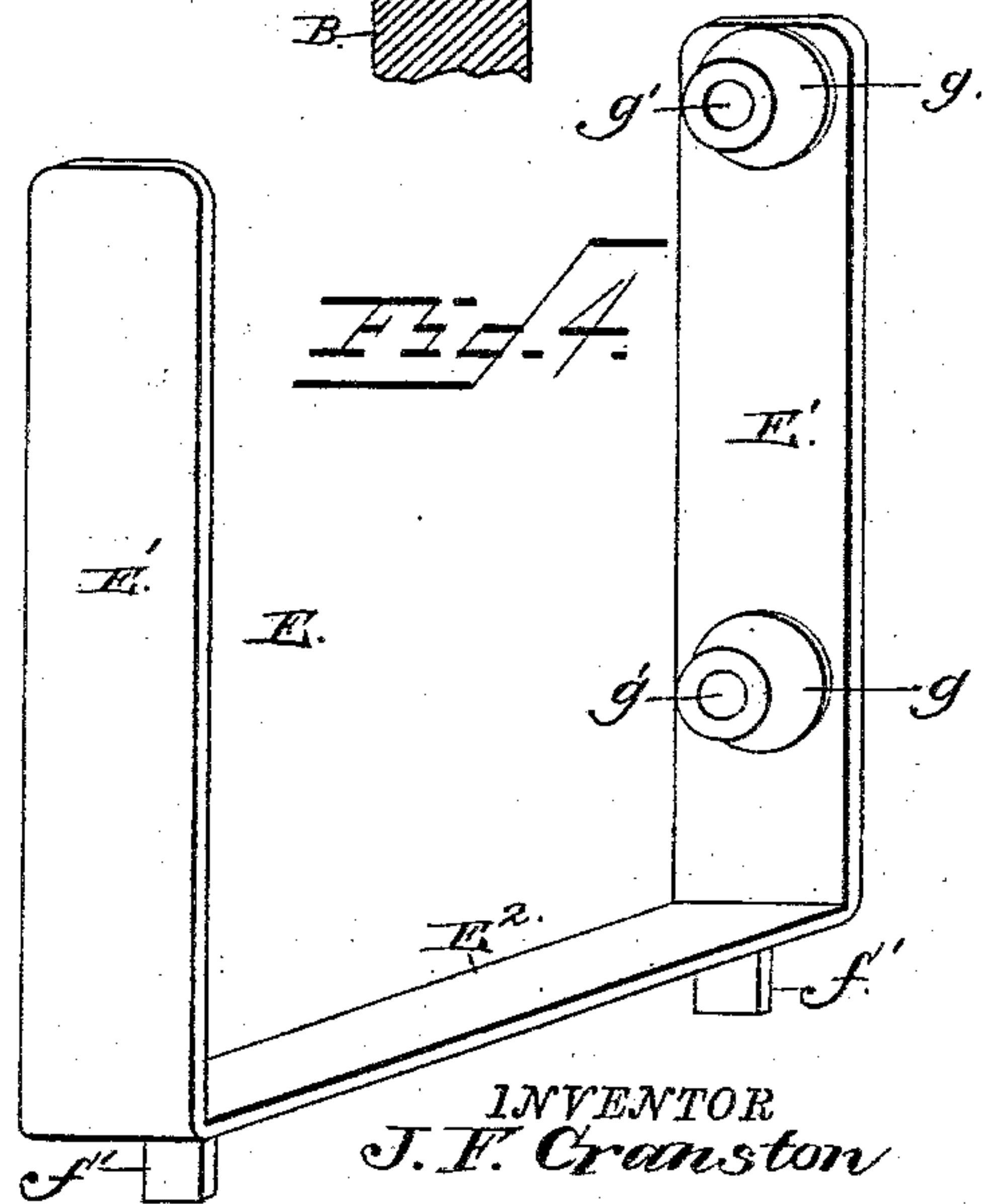
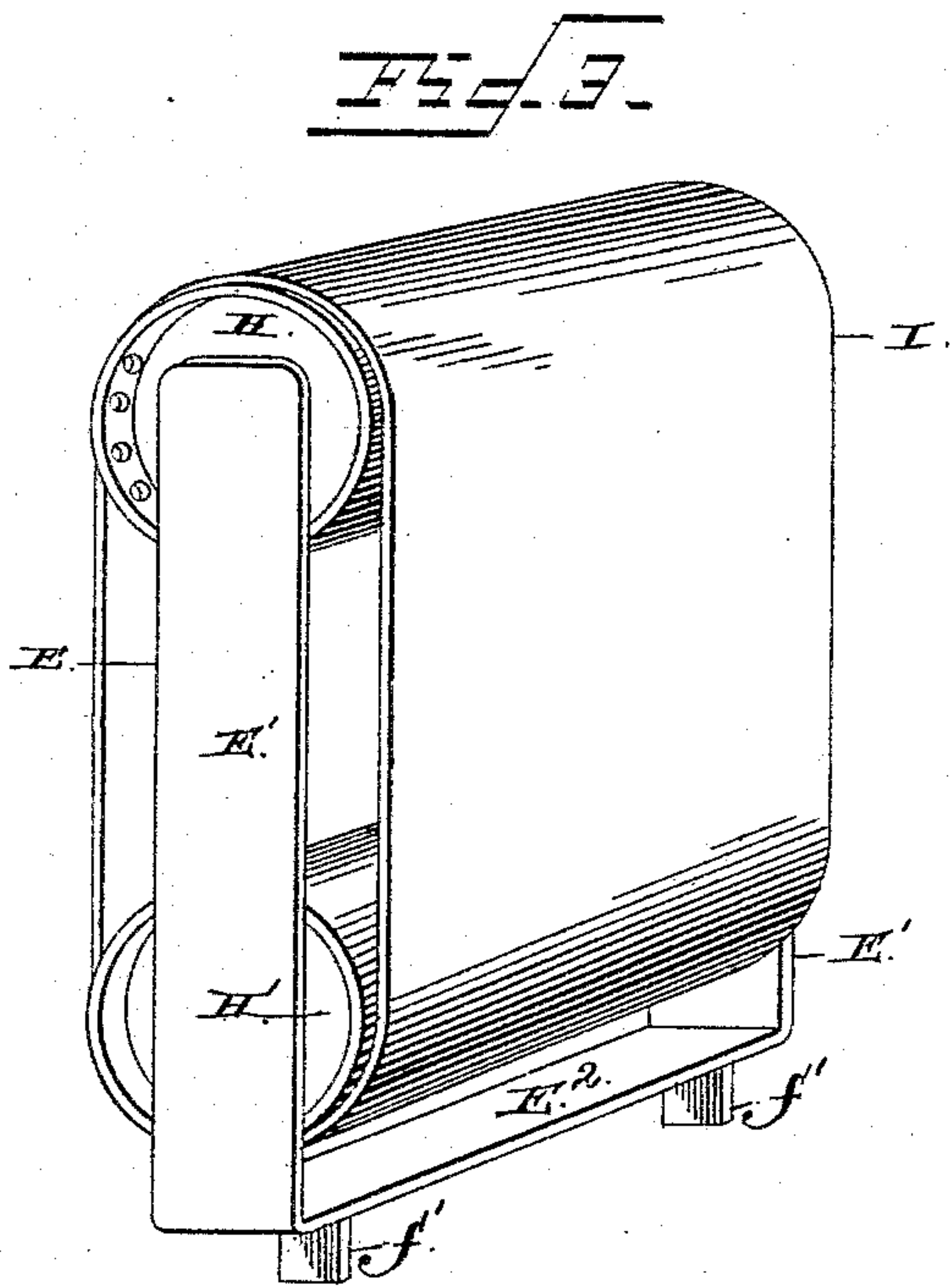
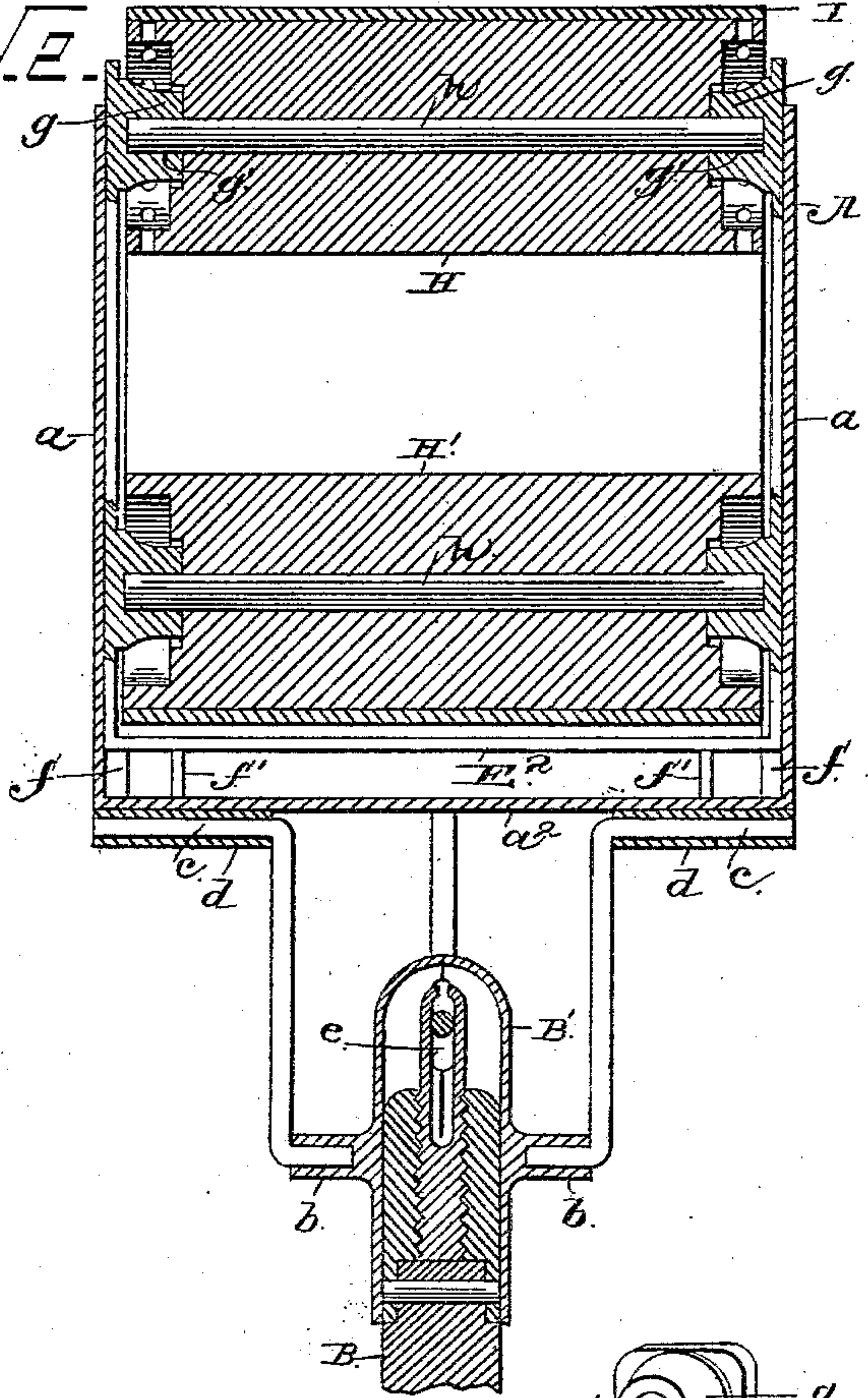
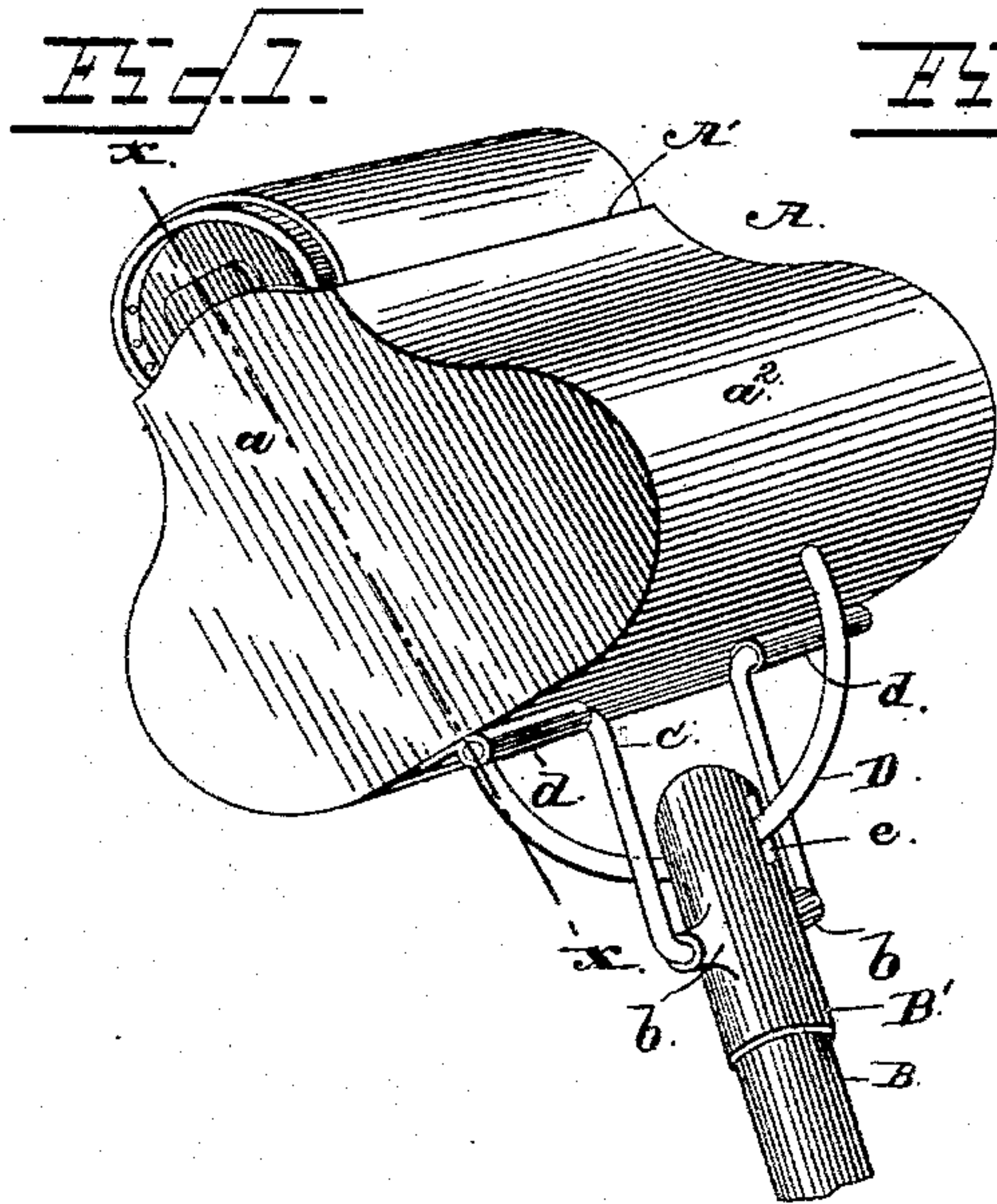


(No Model.)

J. F. CRANSTON.
PAINTING MACHINE.

No. 339,529.

Patented Apr. 6, 1886.



WITNESSES

M. S. Fowler
John N. Moore

INVENTOR

J. F. Cranston

By C. A. Snow & Co

His Attorneys

UNITED STATES PATENT OFFICE.

JAMES FOLSOM CRANSTON, OF SPRINGFIELD, MASSACHUSETTS.

PAINTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 339,529, dated April 6, 1886.

Application filed August 25, 1883. Serial No. 175,306. (No model.)

To all whom it may concern:

Be it known that I, JAMES FOLSOM CRANSTON, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Improvement in Device for Applying Paint, Whitewash, &c., to the Walls, &c., of Houses, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in devices for applying paint, whitewash, calcimine, &c., to the walls and ceilings of houses; and the novelty consists in the construction, combination, and arrangement of the various parts for service, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

The object of my invention is to provide a device for applying liquids—such as whitewash, paint, &c.—to the walls or ceiling of a house or building in an economic and thorough manner without danger of dropping the material or liquid over the floor, &c., as is common in the use of brushes at present universally practiced; to apply the liquid or paint uniformly and evenly over the surface of the wall, and to provide means which shall be simple, strong, and durable in construction, efficient in operation, cheap of manufacture, and capable of being readily removed and taken apart to fill the receptacle with a supply of paint, &c., or for repairs.

In the accompanying drawings, which form a part of this specification, I have shown an embodiment of my invention, and in which—

Figure 1 is a perspective view of a device for applying paint to a wall, &c., embodying my invention. Fig. 2 is a longitudinal vertical section view thereof on the line *xx* of Fig. 1. Fig. 3 is a detached perspective view of the endless traveling belt with its supporting rollers and frame. Fig. 4 is a detailed view of roller-supporting frame.

Like letters of reference in the accompanying drawings denote like or corresponding parts.

Referring by letter to the drawings, A designates the liquid-receptacle, preferably made of sheet metal, having side walls, *a a*, and a

top, bottom, and rear wall, *a'*, curved, as shown herein, and suitably connected or secured by soldering or otherwise to the end walls. At the upper or front end is provided an opening, *A'*, of a diameter a little larger than the diameters of the belt-supporting rollers, which are arranged to work in the receptacle, as will be fully described presently.

The form, shape, and size of the liquid-receptacle can be varied or changed to accommodate the various requirements of the work to be performed and the taste of the manufacturer, it only being necessary to leave the opening *A'* therein for the passage of the traveling belt and its frame, the opening *A'* preferably extending clear across the upper contracted end of the receptacle, as at *a''*, and from one side wall to another, as shown.

B designates a handle arranged at the lower end of the receptacle and connected thereto by a bail, C, the lower end of which passes through lugs *b b*, secured to or formed with the head *B'* of the handle, while the opposite end of said bail is bent outwardly, as at *c c*, to provide pivot-pins, which are journaled in bearings *d d*, secured to the receptacle A, and permit the handle to move backward and forward therein.

The handle B is limited in its movements, and held in position when being used to apply paint to a wall by a guide, D, which is curved, as shown, and passes through a longitudinal slot, *e*, formed in the head *B'* of the said handle. The guide D is arranged parallel with the plane of the handle and transversely across the bail C beneath the same, the ends of said guide being secured in any preferable manner to the exterior face of the lower wall.

E designates the frame for supporting the belt-rollers, which comprises two parallel side bars, *E' E'*, and connected at their rear or lower ends by a cross-bar, *E''*, the front ends of said side bars being left free, and the frame made of metal, so that the side bars are free to give or spring outward to permit the belt-supporting rollers to be easily and readily detached from and replaced in said frame. The frame is supported in the receptacle by means of cleats or ways *f f*, two of which are arranged on the inner faces of each end wall of the re-

ceptacle. Said cleats may be formed with or separate from the end walls of the receptacle, and each pair thereof is arranged on the same horizontal or vertical plane, to maintain the traveling belt in its proper position. The cleats upon one end wall are arranged parallel with and a distance from each other equal to the width of the side bars of the frame, which are fitted therein and held from any lateral play or movement thereby. The rear or lower bar of the frame is provided with downwardly-projecting lugs $f' f'$, which are secured to said frame in any preferable manner, at or near the sides thereof, and are adapted to bear against the lower wall of the receptacle, to prevent the frame from coming in contact therewith.

Each of the side bars of the frame is provided on its inner face with two lugs, $g g$, having recesses g' therein, adapted to form bearings for pins or studs h , secured to the rollers $H H'$ at each end thereof. One of the lugs g is arranged at each front end of the side bars of the frame, so as to cause the front roller, H , to project beyond the side bars of the frame, while the other bearing-lugs are arranged near the cross-bar of said frame.

I designates an endless traveling belt, arranged over the rollers, extending from side to side thereof, and adapted to carry the liquid or paint from the receptacle and apply it to the surface of the wall or ceiling, the upper front roller being pressed against the wall or ceiling and rotated by frictional contact therewith, thus causing the belt to move or travel over the rollers through the liquid in the vessel, and carrying it up to the wall.

The belt may be made of cotton or other fabric, leather, rubber, or other suitable or preferable material, and in passing through the liquid it becomes saturated, or the liquid adheres to its face, and when brought in contact with and pressed against a wall or ceiling, the liquid is applied thereto evenly and uniformly, and obviating the objection and annoyance of spilling or dropping the paint upon the floor or other surface incident upon the use of a brush, as commonly practiced.

Each face of the roller may have circumferential recesses in its ends, in which the bearing-lugs of the frame are adapted to fit, to allow the rollers to be arranged closely within the frame.

The operation of my invention is as follows: The liquid, paint, whitewash, calcimine, or other substance is poured or placed in the receptacle through the opening A' therein while the frame and belt are in the receptacle; or it may be removed and the liquid placed therein, and the frame and its rollers and belt afterward placed in proper position therein within the ways or cleats, the forward or upper roller projecting beyond the side and front ends of the rear and front walls through the transverse opening A' therein at the reduced or contracted end of the receptacle. The device

is now ready for use, and the receptacle is held at an angle to the wall or ceiling, with the front roller in contact with the surface thereof, and upon moving the device over the surface of the wall the roller is caused to revolve and move the belt over the rollers and through the liquid in said receptacle, which adheres to said belt, is carried thereby and applied to the wall, &c.

From the foregoing description it will be observed that my invention combines simplicity, strength, and durability of construction with effectiveness of operation and cheapness of manufacture.

The liquid or paint is applied evenly and uniformly to a wall, does not permit the liquid to escape and drop upon a floor, and the frame can be readily removed from the receptacle and the rollers and belt from the frame when desired for any purpose.

Other means than that shown herein for holding the handle at an angle to the receptacle, which is thus arranged against the wall in an inclined position, and for supporting the frame in the receptacle, can be provided without departing from the spirit or sacrificing the advantages of my invention, the essential features of which will be readily understood from the foregoing description, taken in connection with the drawings.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a receptacle having an adjustable handle, of a frame supported in said receptacle and adapted to be withdrawn therefrom, detachable rollers mounted in said frame, one of which projects beyond the receptacle through an opening therein, and an endless traveling belt arranged over said rollers, substantially as described.

2. The combination, with a receptacle having a transverse opening, a removable frame arranged in said receptacle and supported therein by cleats or ways, detachable rollers mounted in said frame, and an endless traveling belt arranged over said rollers, substantially as described.

3. The combination, with the receptacle, of a handle pivotally connected thereto and held at an angle by means of a guide adapted to engage said handle and connected to the receptacle, substantially as described.

4. The combination, with a receptacle, of a handle having a slotted head, a bail pivotally connected to the receptacle and rigidly secured to the handle, and a curved guide arranged parallel with the handle, through the slotted head of which it passes and is secured at its ends to the receptacle, substantially as described.

5. The combination, with a receptacle having a transverse opening and parallel ways upon its end walls, of a frame arranged within the ways of the receptacle and having lugs $f' f'$ at its rear ends and bearing-lugs $g g$ on

their inner faces, rollers having studs adapted to bear in said lugs *g g*, and an endless traveling belt arranged over the rollers and adapted to be rotated by frictional contact with the
5 surface of a wall or ceiling, substantially as and for the purpose described.

In testimony that I claim the foregoing as my

own I have hereto affixed my signature in presence of three witnesses.

JAMES FOLSOM CRANSTON.

Witnesses:

HENRY W. BOSWORTH,
CHARLES W. BOSWORTH,
MARY E. BOSWORTH.