

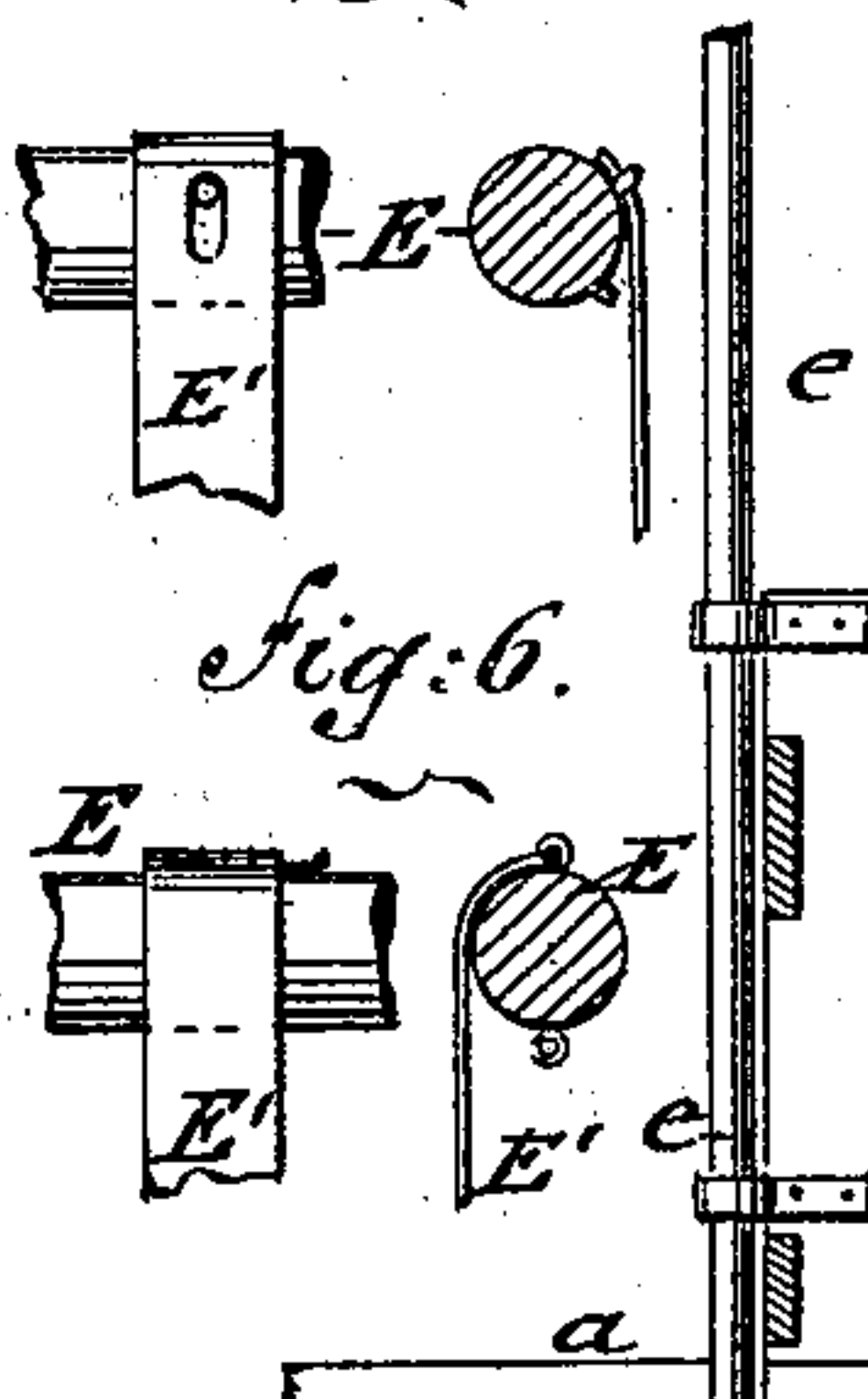
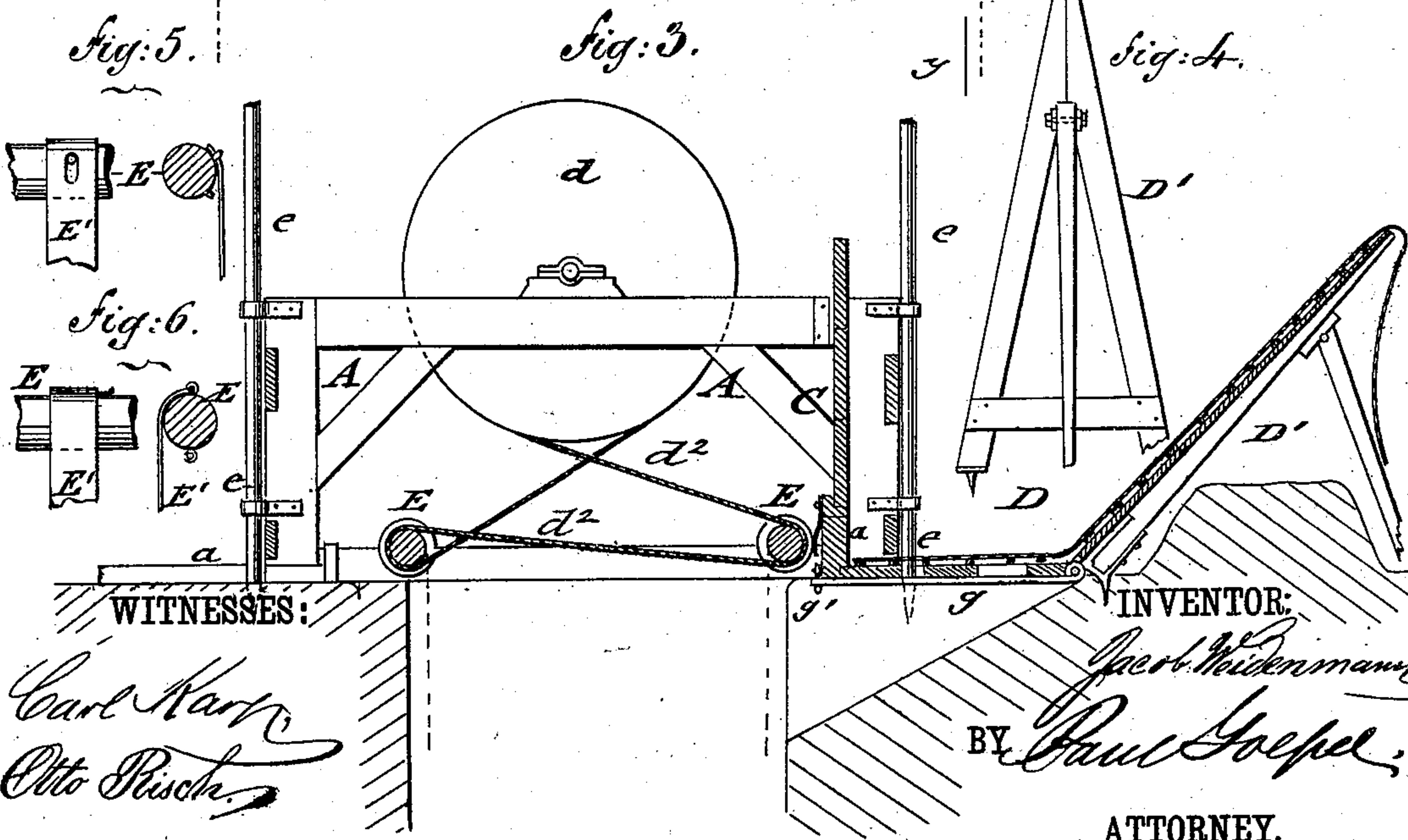
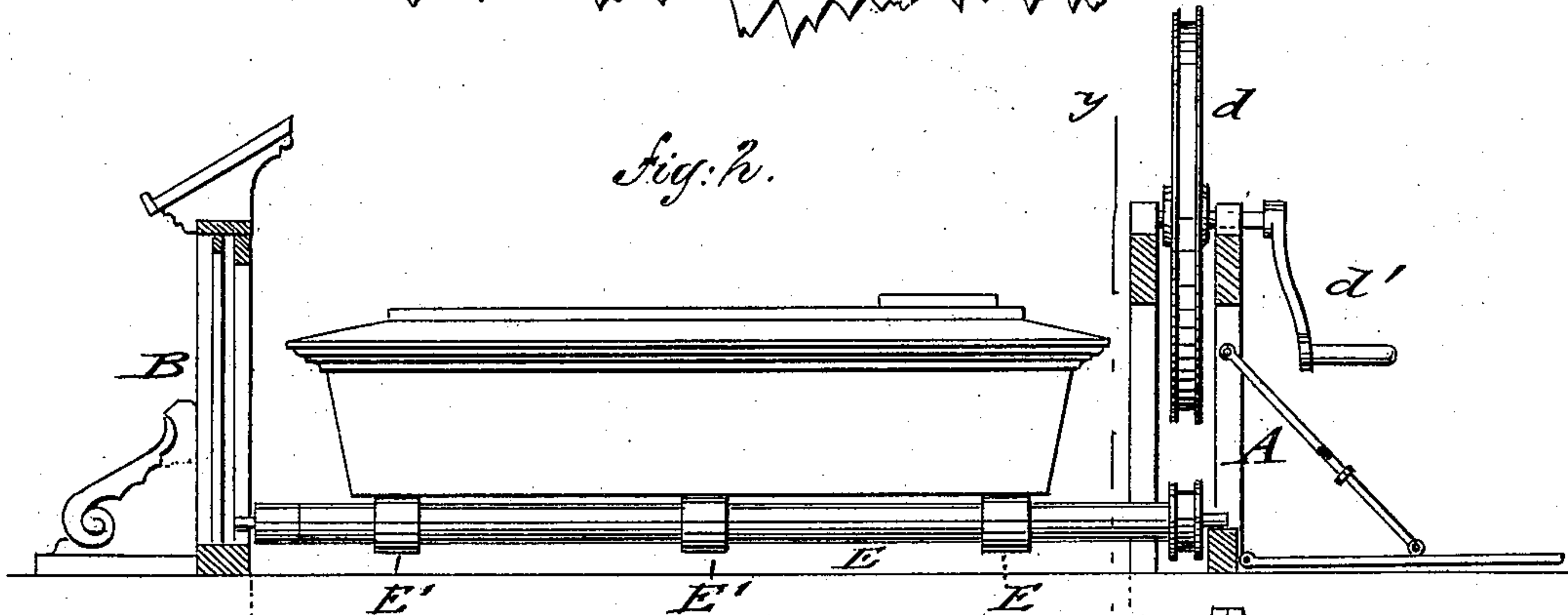
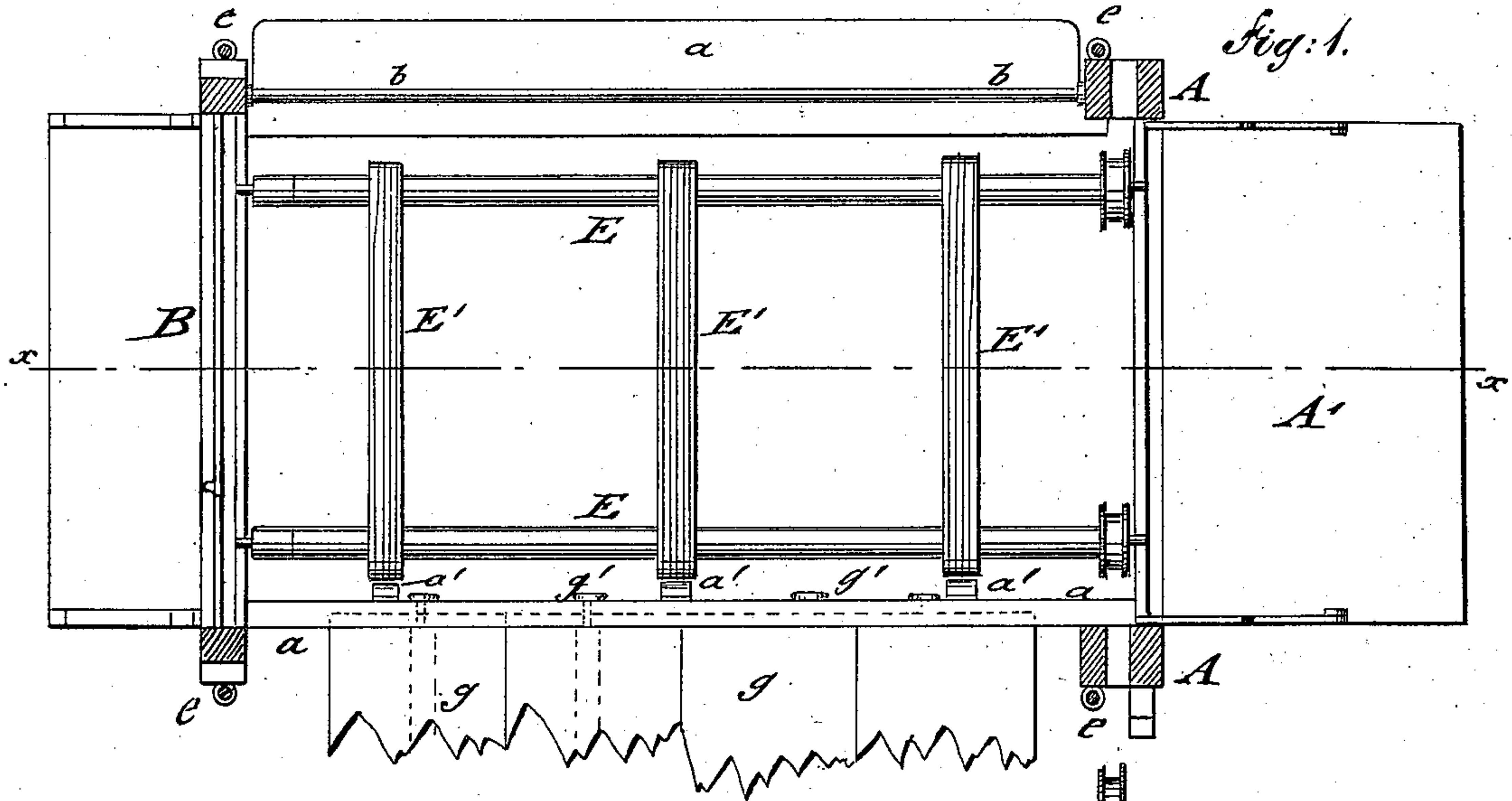
(No Model.)

J. WEIDENMANN.

Apparatus for Lowering Coffins.

No. 230,682.

Patented Aug. 3, 1880.



WITNESSES:
Carl Marx
Otto Pisch

INVENTOR:
J. Weidenmann
BY Paul Goepel
ATTORNEY.

UNITED STATES PATENT OFFICE.

JACOB WEIDENMANN, OF NEW YORK, N. Y.

APPARATUS FOR LOWERING COFFINS.

SPECIFICATION forming part of Letters Patent No. 230,682, dated August 3, 1880.

Application filed June 17, 1880. (No model.)

To all whom it may concern:

Be it known that I, JACOB WEIDENMANN, of the city, county, and State of New York, have invented certain new and useful Improvements in Apparatus for Lowering Coffins, of which the following is a specification.

The object of this invention is to furnish for the burial service in cemeteries an improved apparatus by which the coffins are lowered into the graves and the latter filled with the excavated earth in such a manner that the attendants are not seen by the mourners, and thereby the ceremony made more solemn and less distasteful to the feelings of the mourners.

The invention consists in a portable head and foot frame, the former of which carries the mechanism for lowering the coffin. The two frames are properly connected, and support two longitudinal rollers having lowering belts or straps which are permanently attached to one roller but automatically detachable from the other roller. By means of the straps and the mechanism of the head-frame the coffin is lowered at the proper moment. A cradle extends along one side of the grave, from the head to the foot frame, for receiving the excavated earth, which is dropped by means of trap-doors and conducted into the grave when the locking devices of the trap-doors are withdrawn.

In the accompanying drawings, Figure 1 represents a top view; Fig. 2, a vertical longitudinal section on line *x x*, Fig. 1; Fig. 3, a vertical transverse section on line *y y*, Fig. 2, of my improved apparatus for lowering coffins into the graves. Fig. 4 is a detail rear view of the cradle-brace, and Figs. 5 and 6 are detail side views and sections of the lowering belts or ropes and their detaching devices.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents an upright double head-frame, and B an upright foot-frame, which are placed in position respectively at the head and foot of the grave. The frames A and B are connected by longitudinal side boards, *a*, which connect the frames, so as to give them a proper support. The head and foot frames are furthermore supported at one side by one or more longitudinal connecting-rods, *b*, and at the opposite

side by the vertical wall C, which forms at the same time the side wall of a cradle, D, which receives the earth dug out from the grave.

Within the double head-frame A is arranged a cast-iron wheel, *d*, the shaft of which turns in bearings of the frame, and is provided at the outside with a crank, *d'*, for turning the same.

The wheel *d* is connected, by a belt, rope, or chain, *d²*, with pulleys *d³* at the ends of two longitudinal rollers, E, which extend along both sides of the grave from the head-frame to the foot-frame, the ends of the rollers turning in bearings of transverse bottom pieces of the frames. The belt, rope, or chain *d²* passes around the pulleys in such a manner that the rollers are turned in opposite directions to each other, so as to unwind or wind up transverse belts or straps *E'*, which extend across the grave from one roller to the other.

To the outer part of the head-frame A is hinged a platform, *A'*, which is hung to the frame by means of pivoted and folding rods, so as to be let down on the ground for the attendant to stand upon in operating the wheel. The platform is thrown up against the frame when the apparatus is moved from one place to another.

Both ends of the head and foot frame A and B are provided with sockets or rings to support upright rods *e* of gas-pipes, whose lower pointed ends are forced into the ground to secure the frames into position and prevent their being moved out of place. The upright rods *e* support a canopy, as well as other drapery which is required for the proper ornamentation of the apparatus.

The open spaces between the head-frame and the canopy and the cradle-wall and canopy are preferably filled by painted panels or back-grounds, for the purpose of bringing the workmen attending to the lowering apparatus entirely out of sight.

The foot-frame B is provided with a movable desk and foot-board for the officiating clergyman.

For placing the coffin into position on the lowering-belts, the longitudinal connecting-rods *b* at one side of the frame are removed from their sockets, the coffin then placed on the belts, which are tightly stretched across

the grave from one roller to the other, as shown in Figs. 1 and 2.

At the proper time the attendant begins to turn the crank, so as to unwind the belts and lower the coffin until the same arrives at the bottom of the grave. The belts are then automatically disconnected from one of the rollers, to which they are applied at the ends by slots and pins *f*, as shown in Fig. 5. The other ends of the belts are attached by means of a hinge connection to the other roller, upon which the belts are wound by a continuation of the motion of the crank-wheel after they have passed below the bottom of the coffin.

At the inside of the connecting-board *a* of the head and foot frames are arranged springs *a'*, which bear on the belts of the winding-up roller *E*, so as to produce the tight winding up of the same thereon.

In excavating the grave the earth dug out is thrown into the cradle *D*, which is arranged along one side of the grave, said cradle being provided with hinged trap-doors *g*, which form the trap-bottom of the cradle. The trap-doors are connected by locking device *g'* to the connecting-board *a* of the head and foot frames, as shown in Fig. 3. The vertical wall *C*, connecting the head and foot boards, forms the inner wall of the cradle, while the outer wall is formed of inclined frames *D'*, which latter are secured to the ground by spurs at their lower ends and supported by hinged braces at their upper ends, as shown in Figs. 3 and 4.

Over the inclined frames *D'* of the cradle is placed a piece of canvas, which is stiffened by light cross-strips of wood, which are riveted to the under side of the canvas. After use the canvas may be easily rolled up and secured by leather straps when the apparatus is to be removed.

The ends of the cradle are closed by pieces of canvas, which are attached to studs or buttons or other fastening devices at the ends of the upright wall *C*, and connected by spring-snaps to the inclined wall. A plain piece of canvas extends from the inclined side frames of the cradle over the supporting-braces, so as to keep them dry in wet weather.

Below the trap-doors a triangular cutting is made along the whole length of the grave, for admitting the dropping of the trap-doors on releasing the locking devices and the sliding of earth along the inclined plane formed by the trap-doors into the grave, without requiring any workmen to do it. The locking devices of the trap-doors are connected by means of cords to a point near the desk of the foot-frame, so as to be taken hold of and re-

leased simultaneously at the proper moment for dropping the trap-doors and discharging the earth into the grave.

By the use of this apparatus the ceremony at the grave may be performed with greater solemnity and with less objection, as the lowering of the coffin and filling the grave with earth is performed without any visible help and at the proper moment. All the devices employed are covered and out of sight, and are worked at the proper time, so that the burial service is more impressive and satisfactory to the mourners.

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

1. An apparatus for lowering coffins, consisting of connected head and foot frames, longitudinal rollers, transverse lowering-belts applied thereto, and of mechanism, substantially as described, by which the belts are unwound for lowering the coffin and wound up when the coffin has been lowered, substantially as and for the purpose set forth.

2. The combination of the foot and head frames *A* and *B* with longitudinal rollers, and with transverse belts which are connected permanently to one roller and detachably to the other roller, substantially as set forth.

3. The combination, with upright head and foot frames *A* and *B*, of a cradle, *D*, extending along one side of the grave from the head of the foot frame, substantially as specified.

4. The combination, with the head and foot frame *A* and *B*, of a cradle extending along the grave from one frame to the other, and being provided with trap-doors and releasing devices, for discharging the earth from the cradle at the proper moment, substantially as described.

5. The combination of a head and foot frame, *A B*, and fixed longitudinal connecting-wall *C* with hinged bottom trap-doors and with locking devices, substantially as set forth.

6. The combination, with a head and foot frame, *A B*, of a cradle, *D*, composed of a fixed upright wall, *C*, bottom trap-doors, *g*, braced inclined frames *D'*, and a covering-canvas, all as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 10th day of June, 1880.

JACOB WEIDENMANN.

Witnesses:

PAUL GOEPEL,
CARL KARP.