(No Model.)

S. KEIM.

ELEVATOR.

No. 306,834. Patented Oct. 21, 1884.

Fig 1

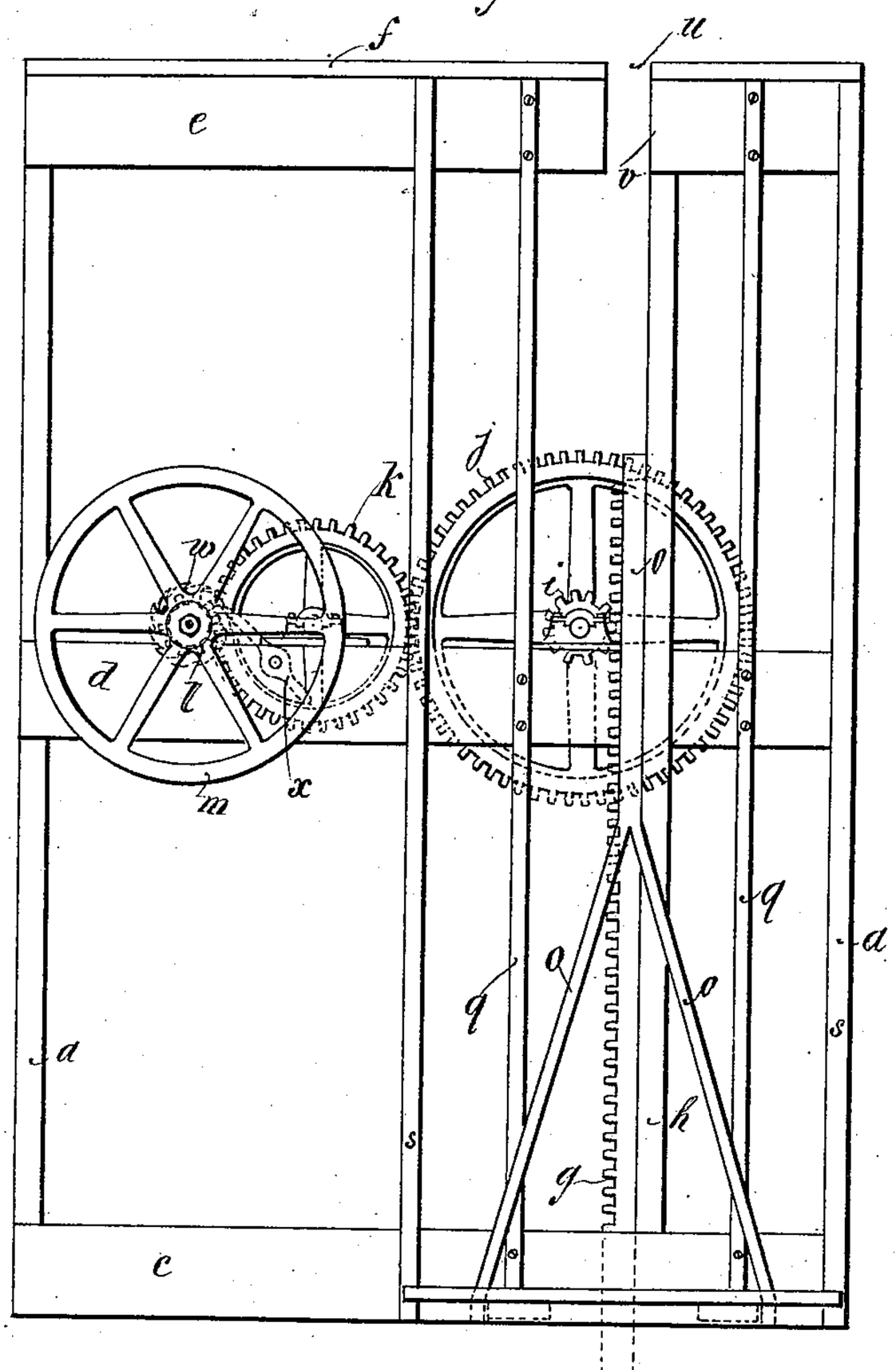


Fig 2

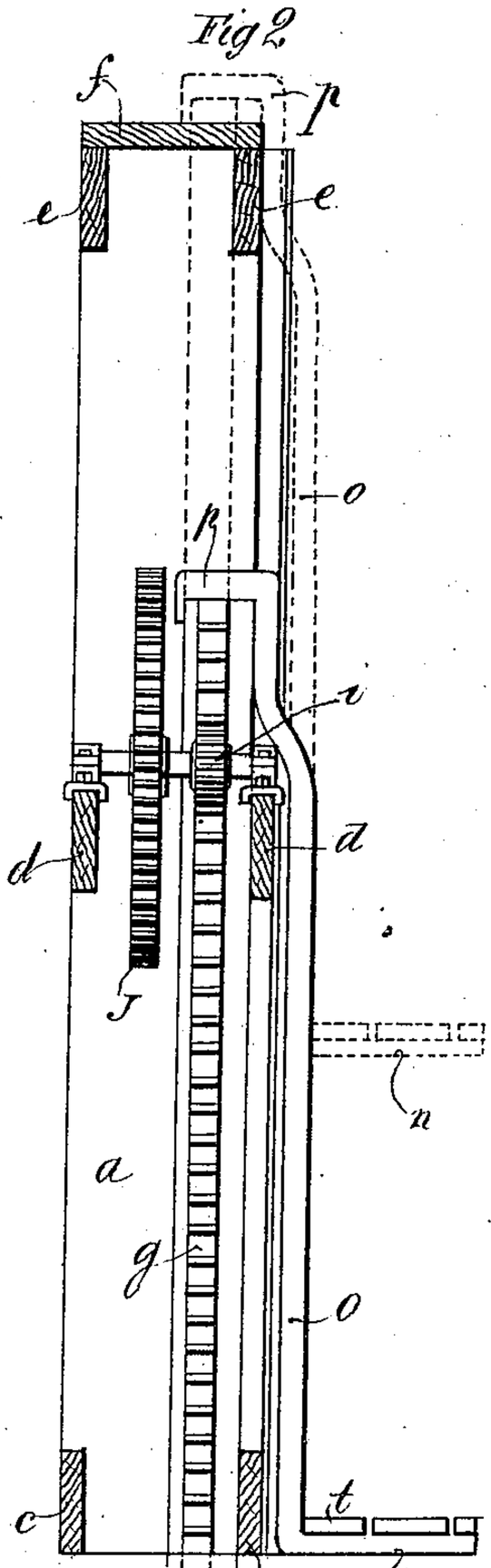
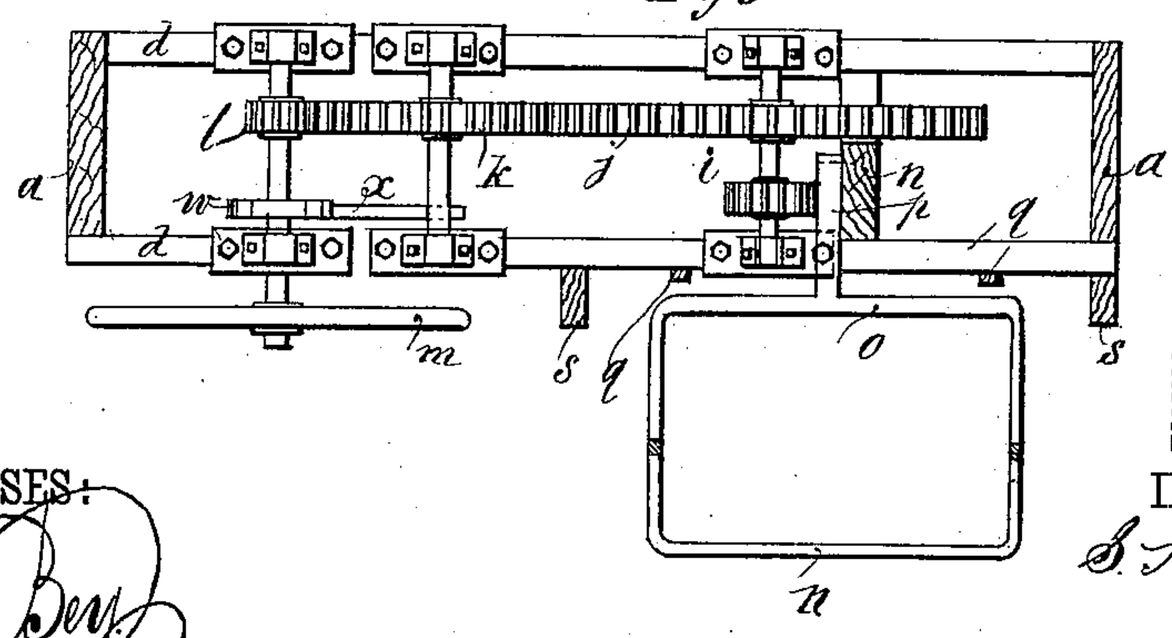


Fig 3



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UNITED STATES PATENT OFFICE.

SAMUEL KEIM, OF ALTOONA, PENNSYLVANIA.

ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 306,834, dated October 21, 1884.

Application filed August 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL KEIM, of Altoona, in the county of Blair and State of Pennsylvania, have invented a new and Improved Elevator, of which the following is a full, clear, and exact description.

My invention consists of a simple contrivance of mechanism and the supporting-frame therefor for working an elevator-platform by a hand-crank for raising and lowering barrels and other heavy goods out of and into cellars, also for loading and unloading wagons with the same, and for other like uses, all as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improved elevator. Fig. 2 is a sectional elevation of the same, and Fig. 3 is a horizontal section.

I make a light vertical frame of wood, consisting of two upright narrow planks, *a*, with, say, three pairs of parallel cross-bars, *c*, *d*, and *e*, and the cap *f*, said frame being adapted to be placed at the foot of an outside cellar-stairway, with its back against one side wall of the stairway or an ordinary hatchway, and to extend a suitable distance above the surface of the ground, and on the frame I mount a toothed rack-bar, *g*, of about the same length as said frame, in or against any suitable slideway, *h*, so as to be worked up and down by a pinion, *i*, mounted in suitable bearings on the middle cross-bars, *d*, and connected by a train of gear-wheels, *j k*, and a pinion, *l*, with a hand wheel or crank, *m*, to be turned with ease, for lifting weights of a ton or more; and to this sliding toothed rack I connect a platform, *n*, by hooking the rod *o*, having said platform formed on the lower end of it, and also having a hook, *p*, on the upper end, onto the top of said rack, so that the platform hangs outside of the supporting-frame and bears against the guideways *q*, attached to the side of the frame for the purpose. The platform also runs between the guideways *s* on the side of the frame, against which the back floor-board, *t*, of the platform may run for supports to resist the lateral thrust of the overhanging platform. The cap *f* is notched at *u*, and one of the upper cross-pieces, *e*, is cut apart at *v*, to allow the hook end *p* of the platform-rod *o* to rise above the top of the frame, and a well is to be made in the ground under the toothed rack for allowing it to descend, as indicated in Fig. 2, low enough for the platform to descend to the bottom of the cellar. The rod *o* is branched in the lower part suitably for supporting the platform at both ends.

The rack-bar may have one or more clips, hooking around the inner edge of the slideway *h*, or a tongue running in a groove of the way, if desired, for the better securing of it.

On the shaft of the hand-wheel *m* I provide a ratchet, *w*, and fit a suitable holding-pawl, *x*, therewith, to hold the platform at rest when it may be desired to do so.

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

The improved elevator consisting of the vertical frame having the slideway *h*, platform-guides on the side, toothed rack *g*, gear-train and hand wheel or crank for working the same, platform *n*, hook-bar *o p*, and the holding ratchet and pawl, all combined and arranged substantially as described.

SAMUEL KEIM.

Witnesses:
S. M. SELLERS,
G. B. HOLLAND.