

(No Model.)

2 Sheets—Sheet 1.

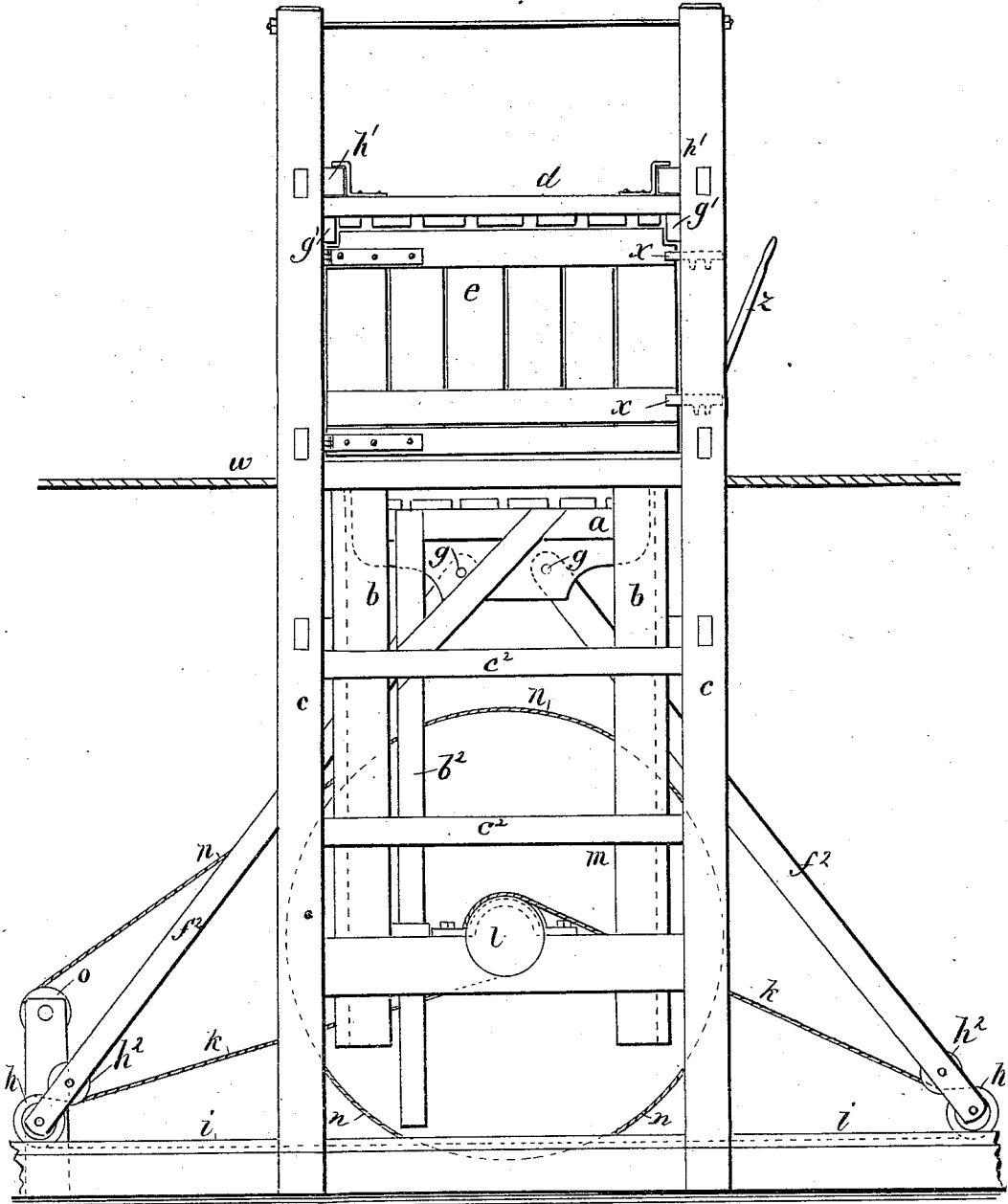
F. L. FAISON & G. M. NEWELL.

COTTON PRESS.

No. 292,000.

Patented Jan. 15, 1884.

Fig 1



WITNESSES:

J. S. Gardner
C. Sedgwick

INVENTOR:

F. L. Faison
G. M. Newell

BY

Mum Co

ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

F. L. FAISON & G. M. NEWELL.

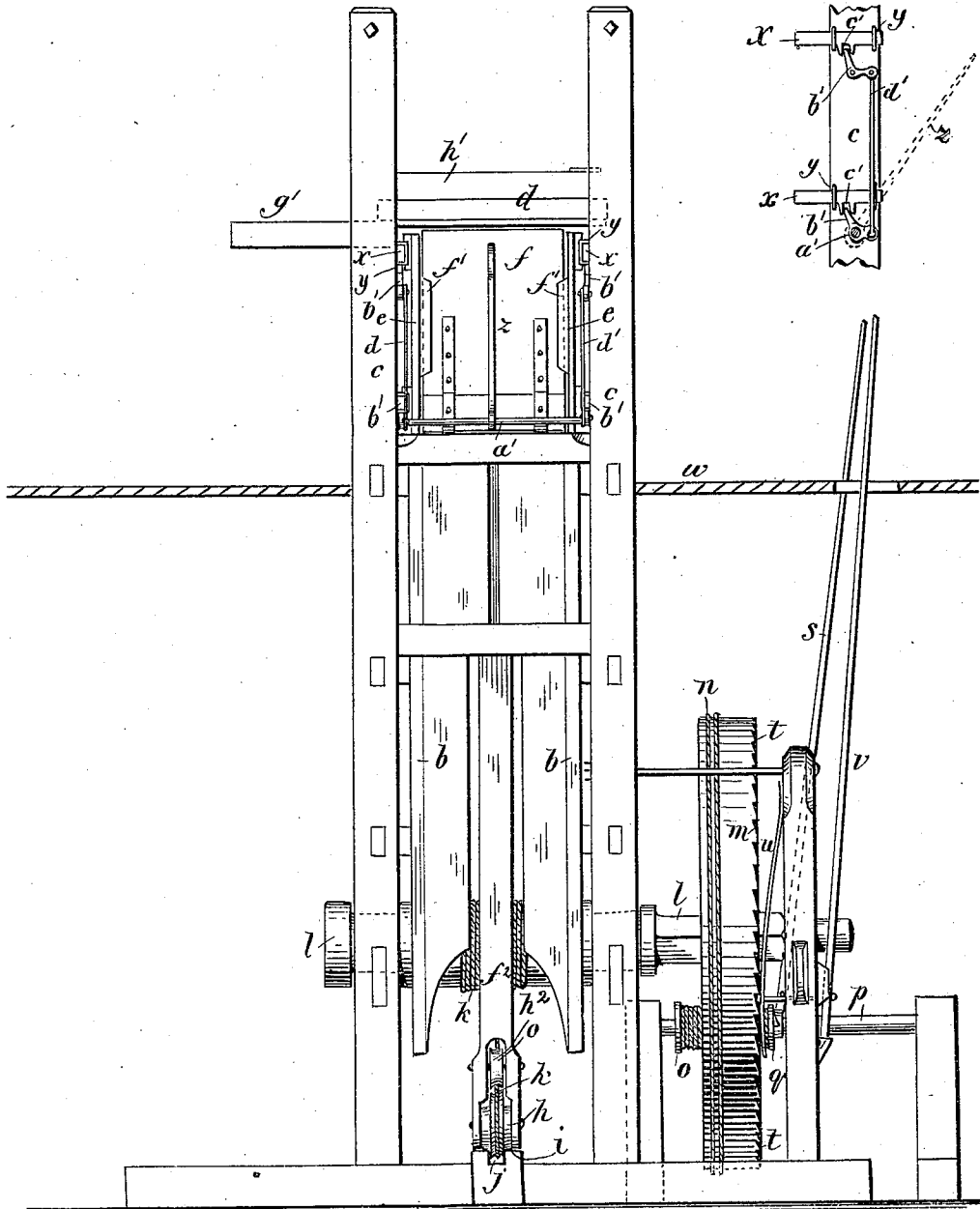
COTTON PRESS.

No. 292,000.

Patented Jan. 15, 1884.

fig 2

fig 3



WITNESSES:

J. D. Sanford
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INVENTOR:

F. L. Faison
G. M. Newell

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UNITED STATES PATENT OFFICE.

F. LEONIDAS FAISON AND GEORGE M. NEWELL, OF WAKE FOREST COLLEGE, NORTH CAROLINA.

COTTON-PRESS.

SPECIFICATION forming part of Letters Patent No. 292,000, dated January 15, 1884.

Application filed November 2, 1883. (No model.)

To all whom it may concern:

Be it known that we, F. LEONIDAS FAISON and GEORGE M. NEWELL, of Wake Forest College, in the county of Wake and State of North Carolina, have invented a new and Improved Cotton-Press, of which the following is a full, clear, and exact description.

This invention pertains to improvements in cotton-presses; and it consists of the detailed construction and combination of parts, substantially as hereinafter fully set forth and claimed.

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 our improved press. Fig. 2 is an elevation in a plane at right angles to that of Fig. 1, and Fig. 3 is a detail of the door-unlatching contrivance in side elevation.

The follower *a* is arranged to slide up and down in the press-case *b* on the guides *b'*, fitted in guide-notches in cross-bars *c'* of the vertical frame *c*, to press the bales against the head *d* and in the space inclosed by the doors *e* and *f*. For forcing the follower up, we employ two thrust-bars, *f'*, which we pivot to the follower at *g*, and provide with a roller, *h*, at the lower end, to run on the rail *i*, said roller having a grooved flange, *j*, in the middle, running in a groove in the rail, and also having the working-rope *k*, running in the groove of said flange, the rope being connected to the axle *l* of drum *m*, so as to wind on it from opposite directions, and extending around pulleys *h*, and from one to the other along the groove of rail *i*, so that when the axle is turned so as to wind the rope on the axle the thrust-bars *f'* will be drawn from the slanting position which they assume to lower the follower into the upright position by which they raise it. We arrange the guide-rollers *h'* in the slots of the thrust-bars *f'*, above the grooved rollers *h*, to carry the rope under the shoulders of the slots and prevent it from rubbing thereon when the thrust-bars are widely separated, and the angles between them and the ropes are such that contact would otherwise take place. We use an endless rope, *k*, for this purpose, and connect it to the axle *l*,

from which we extend it around the rollers of both thrust-bars, so that we insure even thrust on the follower, whereby it works without binding in the guides *b*, and presses the bales evenly, whereas when separate ropes are used they do not stretch alike, and one draws more than the other, which tilts the follower, making it bind and work hard, damaging the press and doing imperfect work. To work the drum *m*, we have a rope, *n*, wound several turns around it, and connected to a small drum, *o*, that is mounted on the main gin-shaft *p*, to be turned by a belt or other means, and is provided with a clutch, *q*, and a shifting-lever, *s*, to throw it in and out for starting and stopping the drum, as required. The drum *m* is also provided with a ratchet-rim, *t*, on its side, and a holding-pawl, *u*, to prevent the follower from being forced back by the pressure of the bale while the latter is being tied and removed. A lever, *v*, is connected with said pawl, to detach it from the drum when the follower is to be lowered, which is caused by its own weight. The drum and the rest of the gear for working the follower are to be placed in the lower story of the building, while the portion of the chamber in which the bale is pressed is to extend above the floor *w*, through which the shifting-levers *s* and *v* are to extend for the convenience of the attendants working on the said floor.

To secure the side doors, *e*, we have provided sliding latch-bolts *x* on two of the posts of the frame, and in suitable guide-staples, *y*, to slide forward past the edges of the doors, as shown in Fig. 1, and for the purpose of using a lever, *z*, to work these bolts, particularly to withdraw them when they are exposed to the pressure of the bale, we have connected said bolts with a rock-shaft, *a'*, by means of elbow-levers *b'*, to which shaft the lever *z* is applied. The elbow-levers engage the slide-bolts by notches *c'*, and levers *b'* of the upper bolts are connected to the levers of the lower bolts by rods *d'*, the said levers of the lower bolts being mounted directly on the rock-shaft. The side doors, *e*, are provided with cleats *f'* on the ends, by which the end doors, *f*, are secured. The press-head *d* is arranged on the cleats *g'*, which are extended from the frame sufficiently to allow the press-head to be shifted from over

the bale by sliding out on said cleats, to remove said head after the bale is tied, to facilitate the discharge of the bale by rolling off from the follower. The head *d* slides under the strong
5 cleats *h'* when it returns to its place over the follower to be supported against the pressure of the follower.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

10 1. The combination of grooved rail *i*, flanged and grooved rollers *h*, endless rope *k*, thrust-

bars *f*², follower *a*, and the drum *m* and axle *l*, substantially as described.

2. The combination of lever *z*, rock-shaft *a'*, 15 elbow-levers *b'*, slide-bolts *c'*, and connecting-rods *d'*, with the side doors, *e*, substantially as described.

F. LEONIDAS FAISON.
GEORGE M. NEWELL.

Witnesses:

ED. S. ALDERMAN,
THOMAS DIXON.