(No Model.)

C. E. WINDOM.

CASKET LOWERING DEVICE.

No. 433,113. Patented July 29, 1890.

Fig. 1.

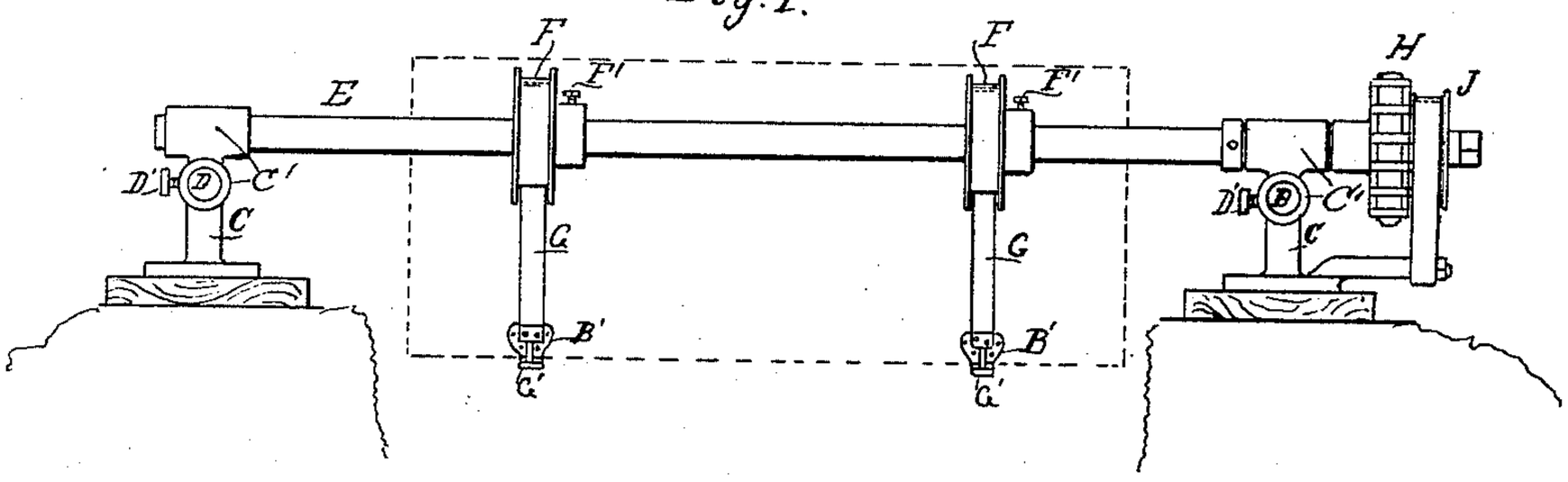

Fig. 2.

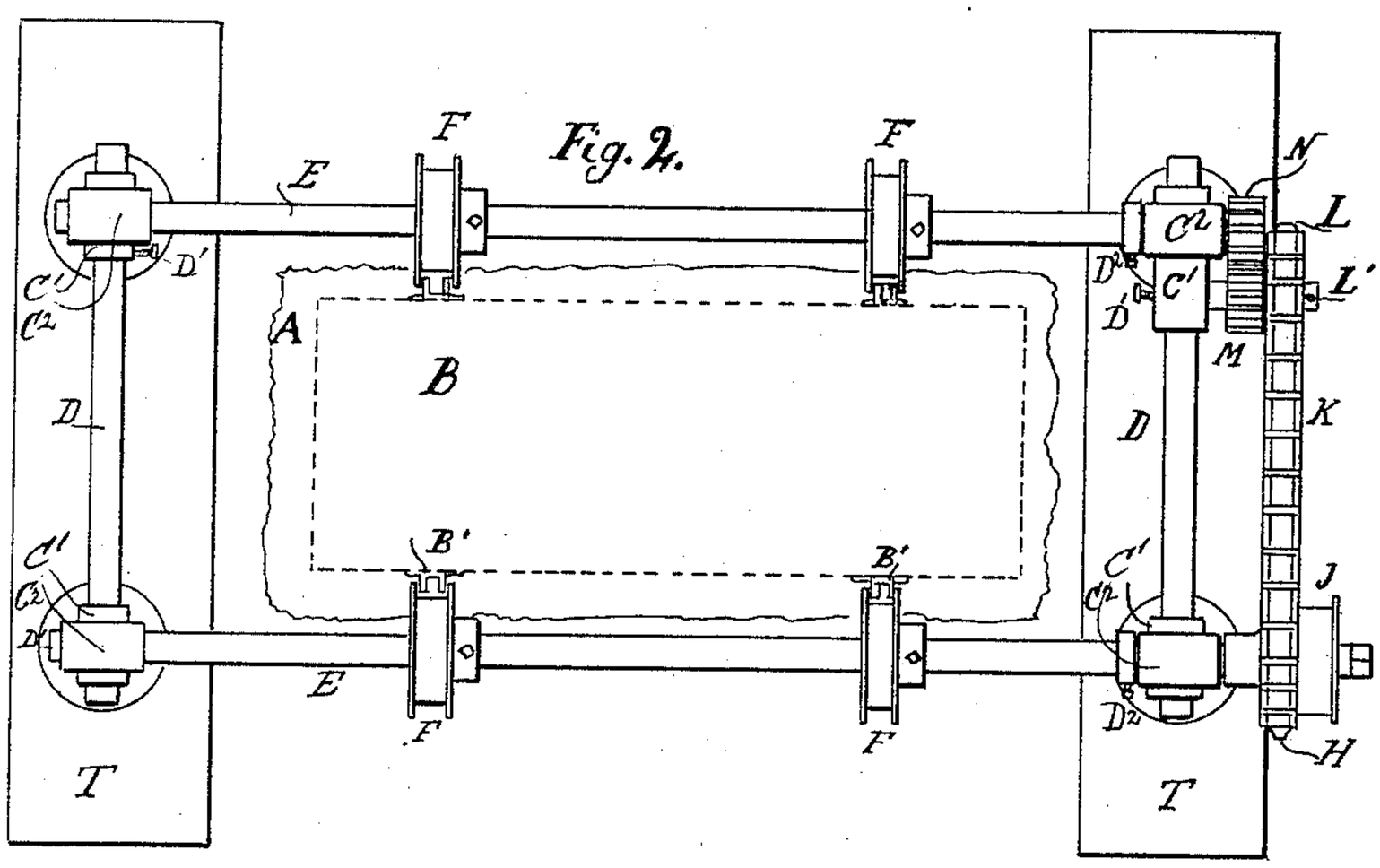

Fig. 3.

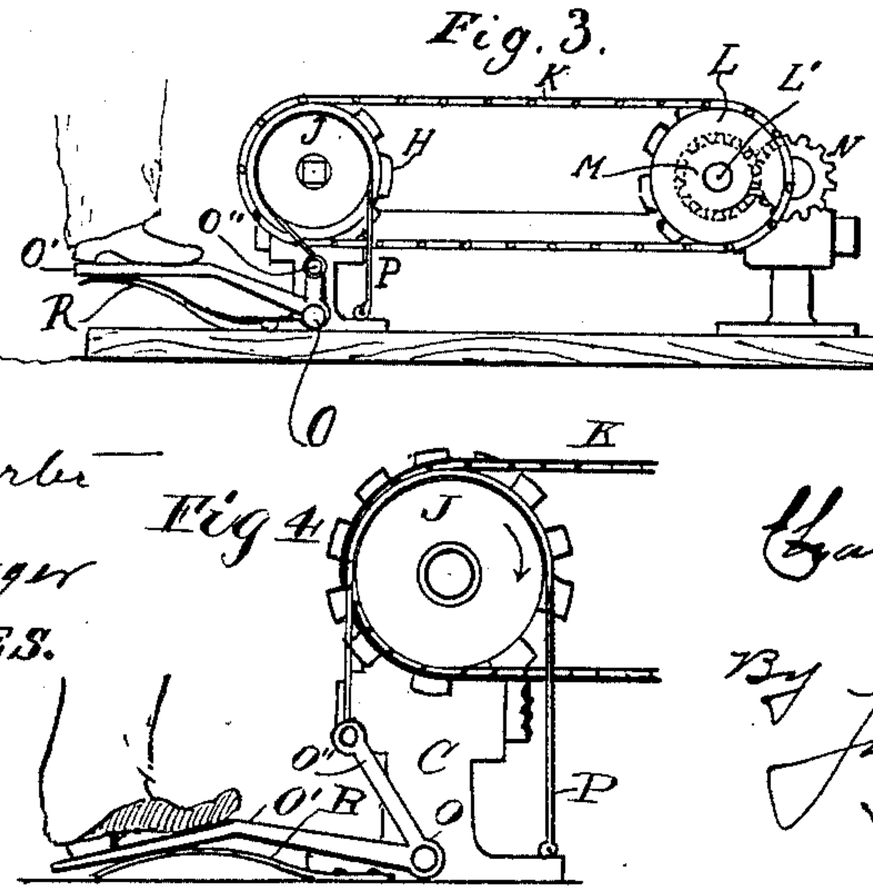

Fig 4.

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WITNESSES.

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UNITED STATES PATENT OFFICE.

CHARLES E. WINDOM, OF STERLING, ILLINOIS.

CASKET-LOWERING DEVICE.

SPECIFICATION forming part of Letters Patent No. 433,113, dated July 29, 1890.

Application filed March 7, 1890. Serial No. 342,995. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. WINDOM, a citizen of the United States, residing at Sterling, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Casket-Lowering Devices; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention has reference to casket-lowering devices; and the object of my invention is to provide a certain, unobtrusive, and silently-working mechanism, by the use of which the rough box containing the casket can be quietly and evenly lowered into the grave.

The objective point in my invention is to provide a mechanical appliance which, in the first instance, supports the rough box at the top of the grave in which the casket can be placed before lowering, and which will permit the rough box and its contained casket to pass quietly and slowly of their own gravity to the bottom of the grave, any acceleration or momentum in such movement being obviated by a friction-brake, as hereinafter described.

In the drawings, Figure 1 is a partial side elevation of my invention, the side of the rough box being indicated by dotted lines. Fig. 2 is a partial plan of the same, the grave being indicated by broken full lines and the top of the rough box by dotted lines. Fig. 3 is an end elevation. Fig. 4 is a detail view of the brake mechanism.

A, Fig. 2, represents an open grave.

B is a rough box closed and containing the casket preparatory to being lowered.

C C are short vertical posts seated in pairs at each end of the grave A. A cross-brace D is loosely journaled in suitable side extensions C′ on each pair of posts C, being held adjustably therein by set-screws D′, whereby the interval between each pair of posts C can be readily increased or diminished to adjust the mechanism to different-sized graves. Longitudinal shafts E E are journaled at each end, respectively, in suitable side extensions C^2 on a corner-post C, and can also be made adjustable in the said extensions by means of set-screws D^2, so as to be adapted to graves of different lengths. The cross-braces D and shafts E, together with the four posts C, constitute a rectangular frame inclosing, when in use, the grave. Upon each of the rotary shafts E are keyed two lowering-pulleys F, to each of which is attached the inner end of a strap G. The outer or loose end of the strap G is provided with a metallic cross-head G′, adapted to readily engage and disengage the hooks B′, fastened to the side of the casket B at or near the bottom of the latter. The pulleys F have a deeply-grooved periphery, capable of containing the belt G when wound thereon, and said pulleys are adjustably seated on shafts E by means of set-screws F′, so as to be capable of being shifted endwise. On the end of one of the shafts E is rigidly seated a sprocket-wheel H, integral with which there is a friction brake-pulley J. A sprocket-chain K extends from the sprocket-wheel H to a corresponding spocket-wheel L, seated on a short horizontal post L′, attached to the adjacent portion of the cross-brace D or to some suitable projection of the adjacent post C. On the inner face of the sprocket-wheel L and integral therewith is a small pinion M, which engages with a corresponding pinion N, rigidly seated on the end of the other shaft E. By the interconnection just stated it is obvious that both shafts E must move with the same velocity, and their axial rotations must be in different directions, whereby the adjacent or inner faces of the opposing pulleys F will always move in the same direction. It is important that the straps G be lowered and raised from the inner side of the pulleys F, so that said straps may be kept out of contact with the margin of the grave, and thus prevent them from precipitating clods or dirt upon the descending casket.

It is intended that the weight of the rough box, casket, and body shall be sufficient to operate the machine and lower themselves, and there remains only the application of mechanism to prevent the descent of the rough box and contents into the grave with too great velocity. To prevent this I provide

a bell-brank lever O, pivoted horizontally at its angle to one of the posts C, and thereby adapted to oscillate in a vertical plane, and provided with a substantially horizental pedal O′ and vertical arm O″. A brake-strap P, metallic or otherwise, is attached at one end to the base of the post C and passed upward and nearly entirely around the brake-pulley J, and pivotally attached at its other end to the upper end of the vertical arm O″ of the lever O. A spring R is suitably attached at its inner end to the posts C under the treadle O′, so as to press upward against the outer portion of the latter. The effect of the upward pressure of the outer end of the spring R under the pedal O′ is to throw the arm O″ inward, and thus tighten the friction-strap P. The spring R has sufficient action and strength in this regard to lock the machine against any movement with sufficient rigidity to sustain any possible weight upon the lowering-belts G. When the casket is placed in the rough box at the mouth or top of the grave and the latter rests upon the belts G and is ready for descent, the undertaker or person in charge places his foot on the pedal O′ and exerts a downward pressure against the spring R, sufficient to permit the gravity of the rough box and contents to operate the machine and to allow the rotation of the shafts E to be effected by the weight of the rough box and contents, and thereby the latter to automatically lower itself into the grave. Other devices might be substituted for the lever O′, for instance, a crank upon one of the shafts E; but at such times the least demonstration is the best, and the device I have described is the least obtrusive and the mode of operation better comports with the quality and solemnity of the occasion. After the rough box and contents have been lowered a slight rocking of the belts G will cause the lower ends of the latter to disengage themselves from the hooks B′, and at the proper time, by the application of a removable crank to the end S of one of the shafts E, the latter can be rotated in an opposite direction, so as to wind the belts G on the pulleys F. The posts C can be leveled by placing under each pair of them the cross-planks T or otherwise, and the connection of the shafts E with posts C may be removable for convenience in handling the machine.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

The combination of two parallel interconnected rotating shafts E E, provided, respectively with pulleys F, lowering-belts G, adapted to be wound and unwound upon said pulleys, friction brake-pulley J, rigidly seated on one of the shafts E, brake-strap P, adapted to bind upon the periphery of pulley J, the spring R, adapted to normally hold said strap taut on said brake-pulley, and the pedal-lever O, adapted to intermit the action of said spring, substantially as shown, and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES E. WINDOM.

Witnesses:

JOHN G. MANAHAN,

FRANZ BÜRGER.