

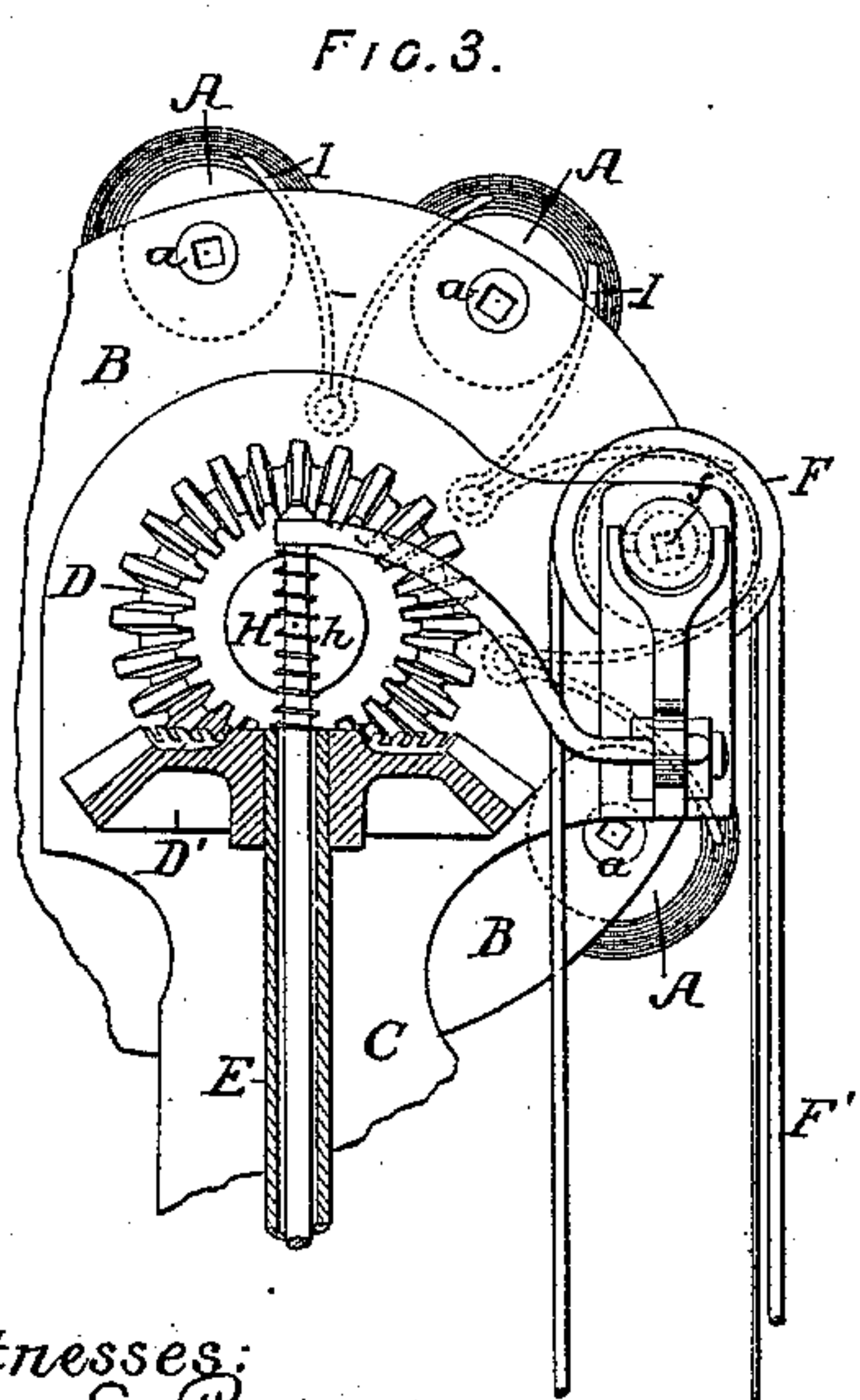
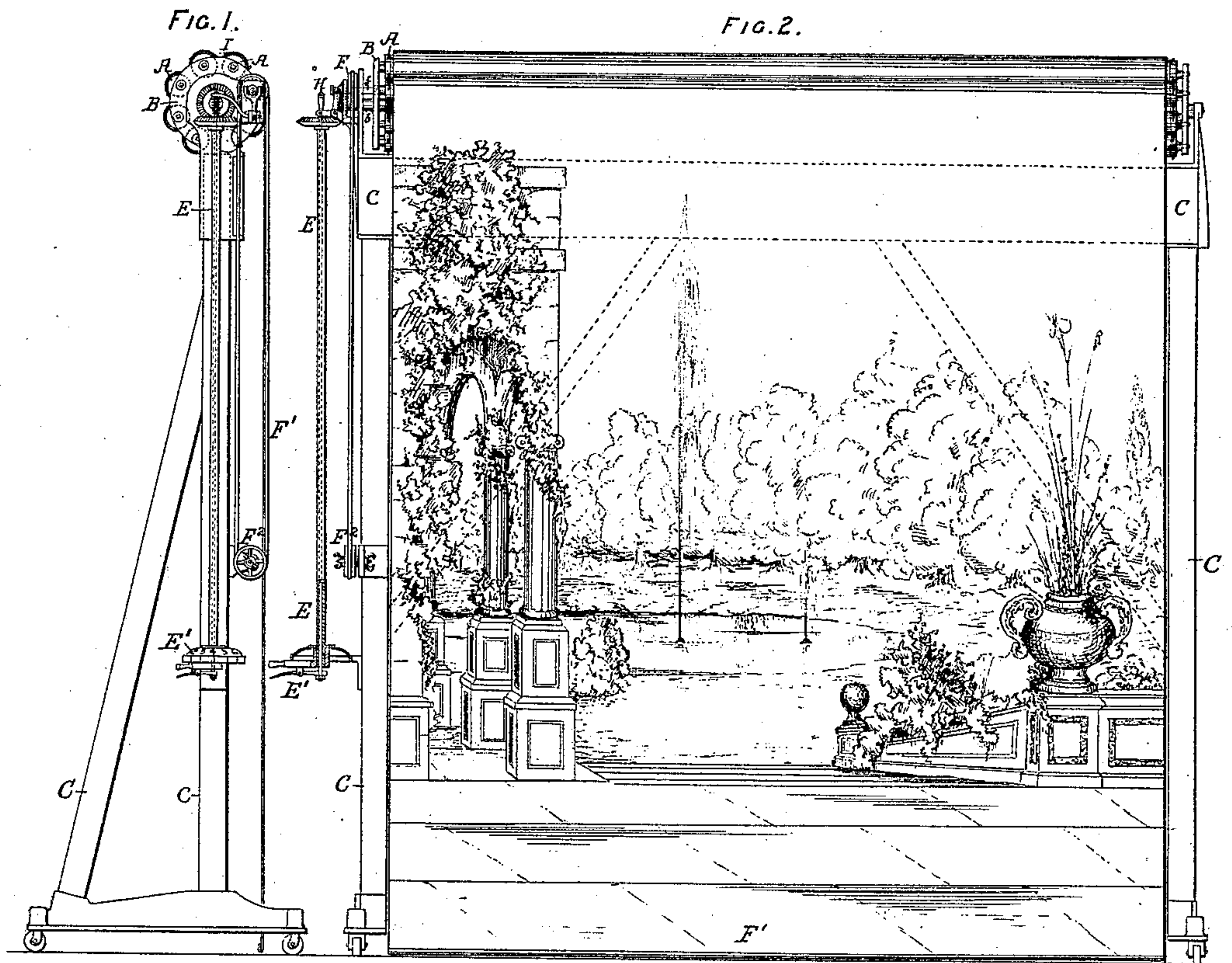
(No Model.)

G. W. MORGAN.

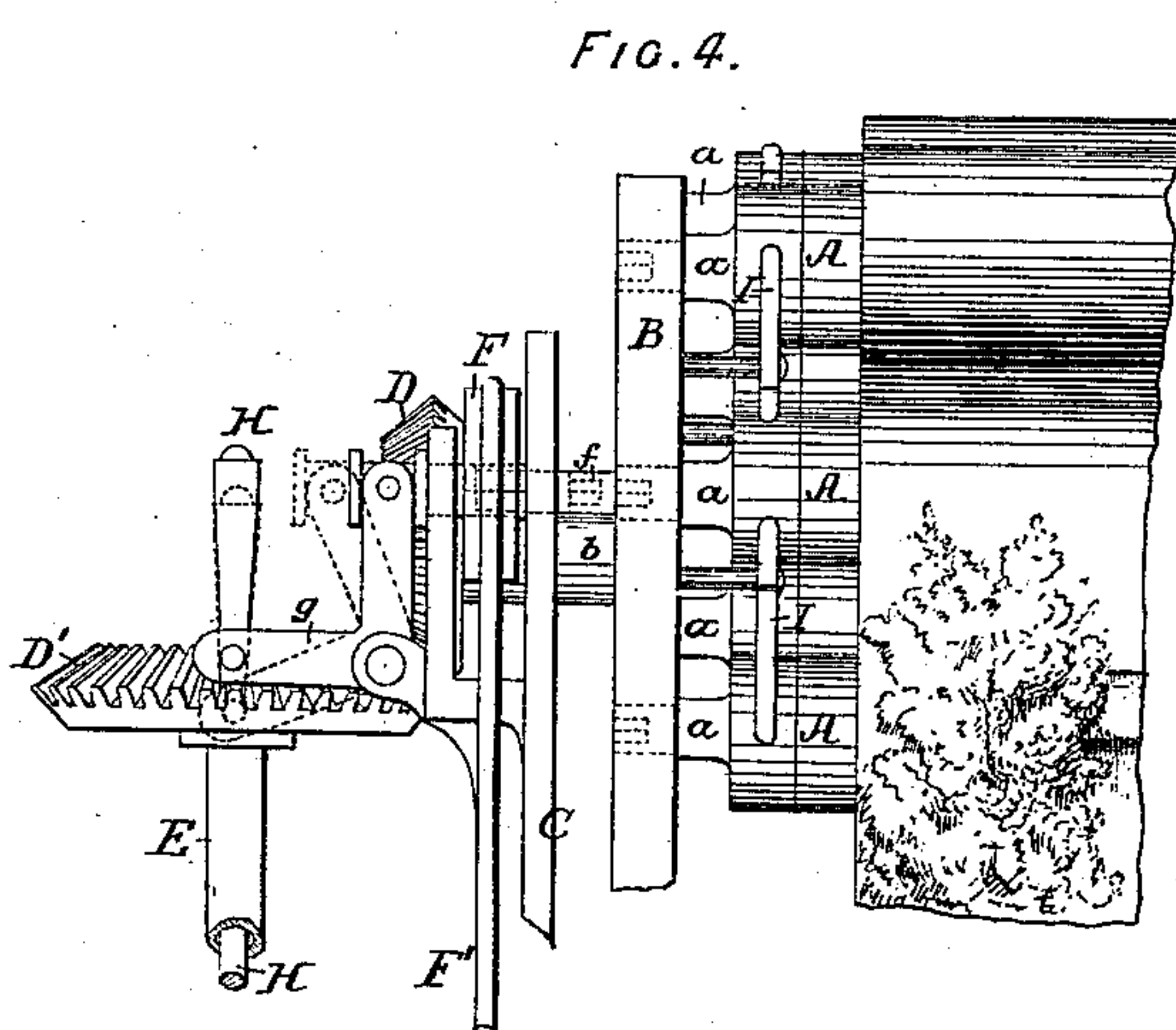
MULTIPLEX PHOTOGRAPHIC BACKGROUND.

No. 362,390.

Patented May 3, 1887.



Witnesses:
John E. Parker
David S. Williams.



Inventor:
George W. Morgan
by his Attorneys
Howe & Samp

UNITED STATES PATENT OFFICE.

GEORGE W. MORGAN, OF ABERDEEN, COUNTY OF ABERDEEN, SCOTLAND.

MULTIPLEX PHOTOGRAPHIC BACKGROUND.

SPECIFICATION forming part of Letters Patent No. 362,390, dated May 3, 1887.

Application filed April 15, 1885. Serial No. 162,337. (No model.) Patented in England June 4, 1881, No. 8,566, and in France October 10, 1884, No. 164,719.

To all whom it may concern:

Be it known that I, GEORGE WILSON MORGAN, residing in the city and county of Aberdeen, Scotland, and a subject of the Queen of Great Britain and Ireland, have invented certain Improved Multiplex Photographic Backgrounds, (for which I have obtained a patent in England, No. 8,566, dated June 4, 1884, and in France, No. 164,719, dated October 10, 1884,) of which the following is a specification.

My invention consists of a mechanical contrivance for storing and using photographic backgrounds that will afford the utmost facility to the operator and place a large quantity of different backgrounds at his disposal for use in the shortest time.

Hitherto photographic backgrounds have been used either stretched on frames or hung from the roof of the studio on rollers, the drawback in the former case being the amount of time wasted where a number of changes were required, and in the latter case, the backgrounds being hung from the roof, one behind or in front of the other, those in front throw a shadow on part of those behind, and the rollers being fixtures, they cannot be moved in any way to suit the light at the will of the operator.

In my invention any number of those rollers (each containing a photographic background) from two to twelve, or more, as it may be found most desirable or convenient, are fixed in a case capable of partial rotation. The case containing the rollers, as above mentioned, is attached to the top of a movable frame at a convenient height from the ground. As a background contained in the case is required, the case is made to revolve until the desired background comes to the front, when it can, by a simple mechanical attachment, be lowered to the studio-floor, and, when desired, drawn up again by the same mechanical arrangement. The case may then be again turned and any of the other scenes contained in it brought to the front, as the operator may desire.

In the accompanying drawings, Figure 1 is a side elevation, and Fig. 2 is a front elevation, of my improved multiplex photographic background. Fig. 3 is a sectional elevation, on an enlarged scale, of part of the rotating case and operating mechanism; and Fig. 4 is a side view of the same.

The backgrounds are painted, as usual, upon

canvas or similar material, and are each rolled up on a roller, A, having spindles or journals *a* fitted into end disks or frames forming part of the rotating case B. The case B is carried by a central spindle, *b*, carried by the framework C, and on one end of the spindle *b* is fitted a bevel-pinion, D, gearing into a bevel-pinion, D', on a vertical hollow spindle, E, whose lower end is fitted with a hand-lever, E', whereby the spindle E may be partially rotated to convey through the gearing D D' a corresponding extent of rotation to the case B. A square socket or recess is formed in the spindle *a* of each roller A, and into one of these recesses at a time fits a sliding spindle, *f*, on which is a pulley, F, driven by a belt, F', from a hand-wheel, F².

The spindle *f*, which is free to slide horizontally in the frame C, is controlled by the forked ends of a bell-crank lever, *g*, operated by an arm on a central spindle, H, passing down within the hollow spindle E and fitted with a hand-lever at the lower end, whereby the bell-crank can be actuated against the power of a spring, *h*, to withdraw the spindle *f* from its socket in the roller-spindle *a*. While spindle *f* is then withdrawn, the operator may turn the hand-lever E' to rotate the case B and bring a fresh roller A opposite the spindle *f*, which is then freed, so that it enters the socket in the spindle *a*. By turning the hand-wheel F² the roller A is rotated to lower or raise the scene or background which is rolled upon it. It will thus be seen that the spindle performs the twofold function of a locking-bolt to retain the drum and a spindle to turn each roller. Springs I are fitted to bear against each roller to retain them in any position desired.

The frame C has casters attached to the feet, and can be moved to any part of a studio to suit the light and with as much ease as an ordinary single frame. The backgrounds, when not in use, are out of the way and leave the studio almost clear of obstruction.

What I claim is—

1. The combination of the frame and a rotary holder with rollers journaled in the holder and each carrying a background and a locking-spindle to retain the holder in the position to which it has been moved.

2. The combination of the frame and a ro-

tary holder with rollers journaled in the holder and each carrying a background and a sliding spindle in the frame adapted to engage with the journal of any roller and carrying a pulley, as and for the purpose specified.

5 3. The combination of the frame and a rotary holder with rollers journaled in the holder and each carrying a background, a vertical spindle geared to the holder, and a locking-spindle to retain the holder in the position to which it has been moved, substantially as specified.

10 4. The combination of the frame, rotary

holder, and background-rollers journaled in the holder with a vertical hollow spindle, E, 15 geared to the holder and having a handle, E', a sliding spindle, f, bell-crank g, spindle H, and operating hand-lever, all substantially as described.

In testimony whereof I have signed my name 20 to this specification in the presence of two subscribing witnesses.

G. W. MORGAN.

Witnesses:

JOHN CAMERON,

C. J. G. MILNE.