

J. D. HAYS.
SWING.

Patented May 8, 1888.

Fig. 1

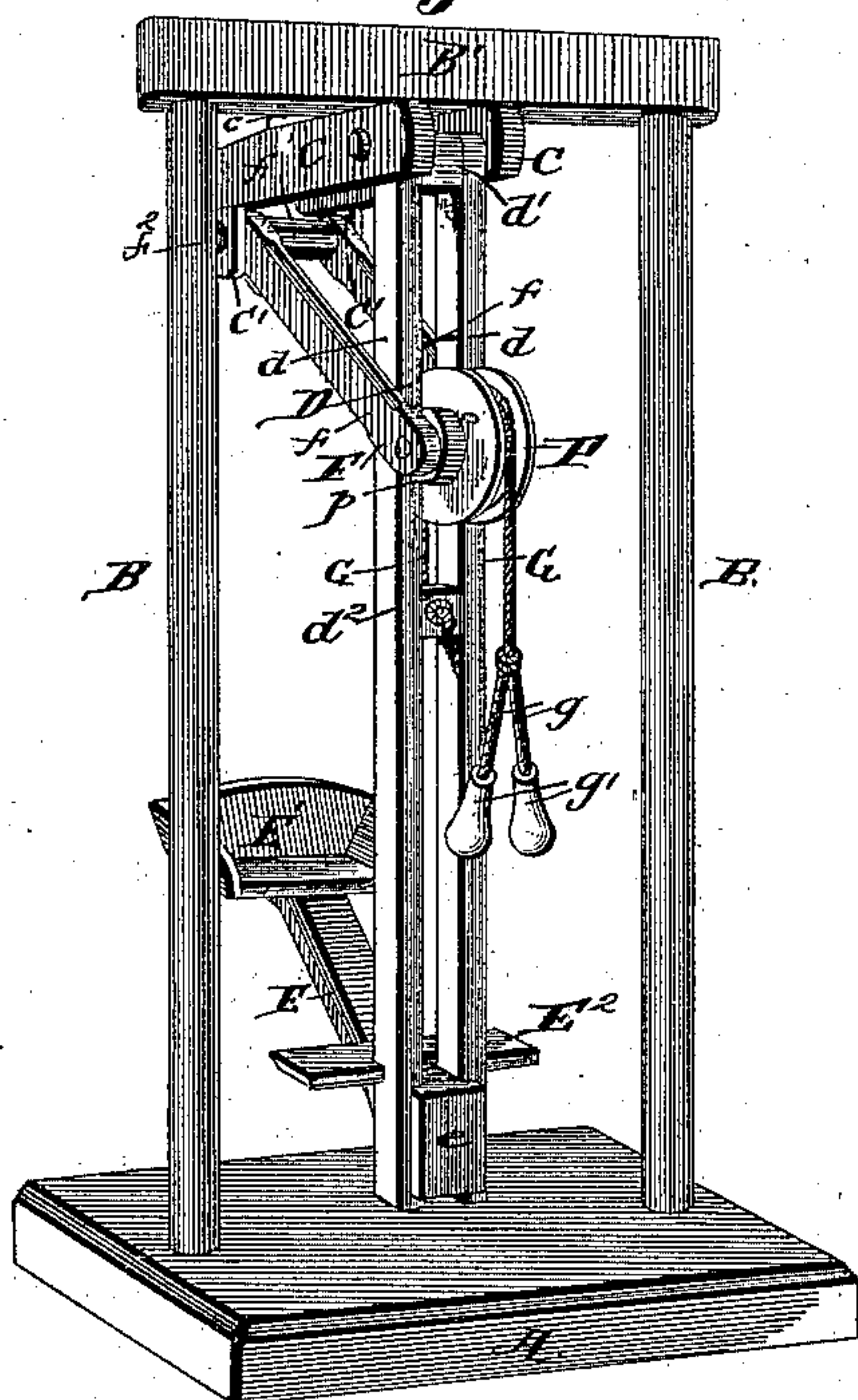


Fig. 2.

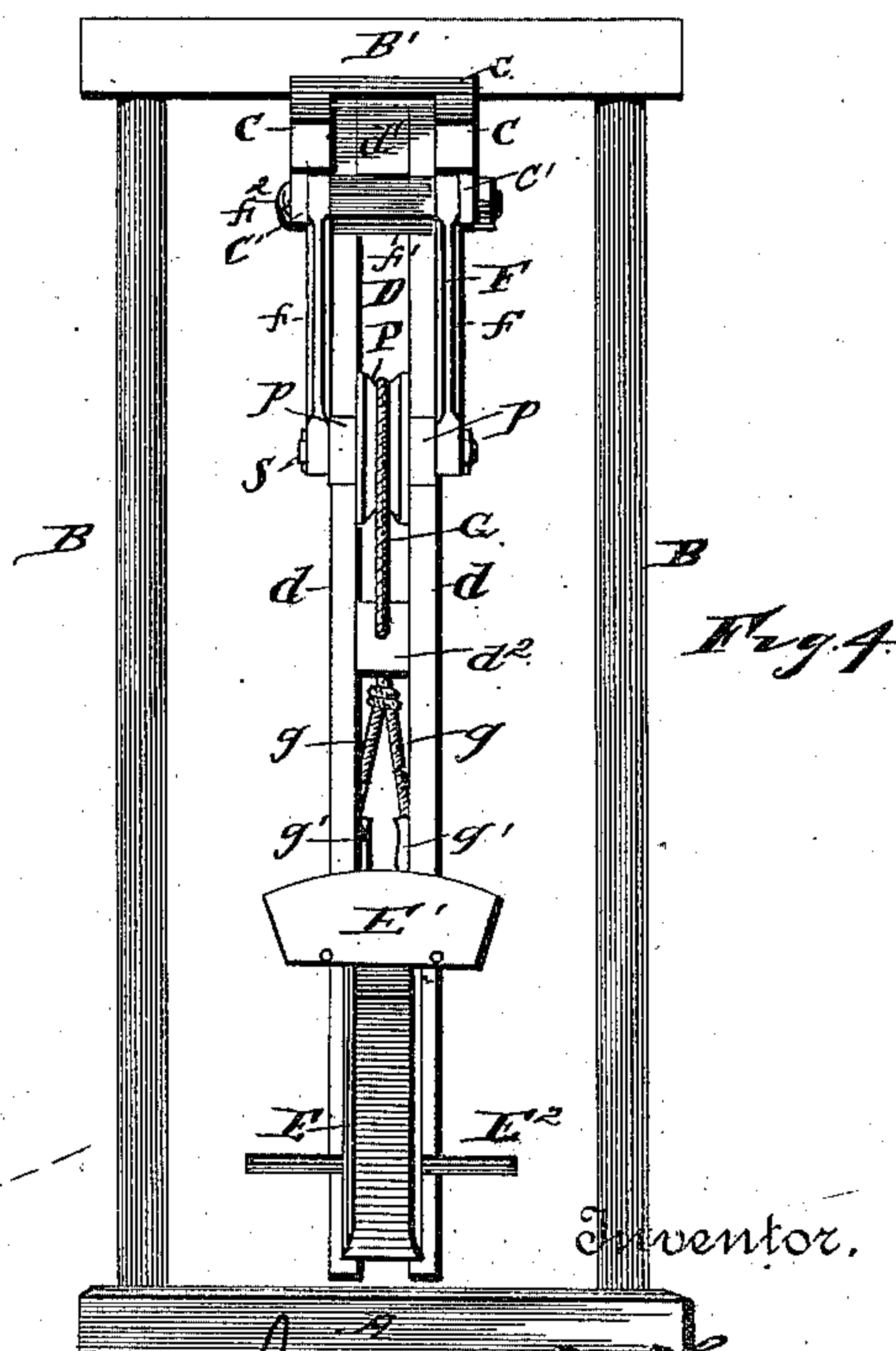
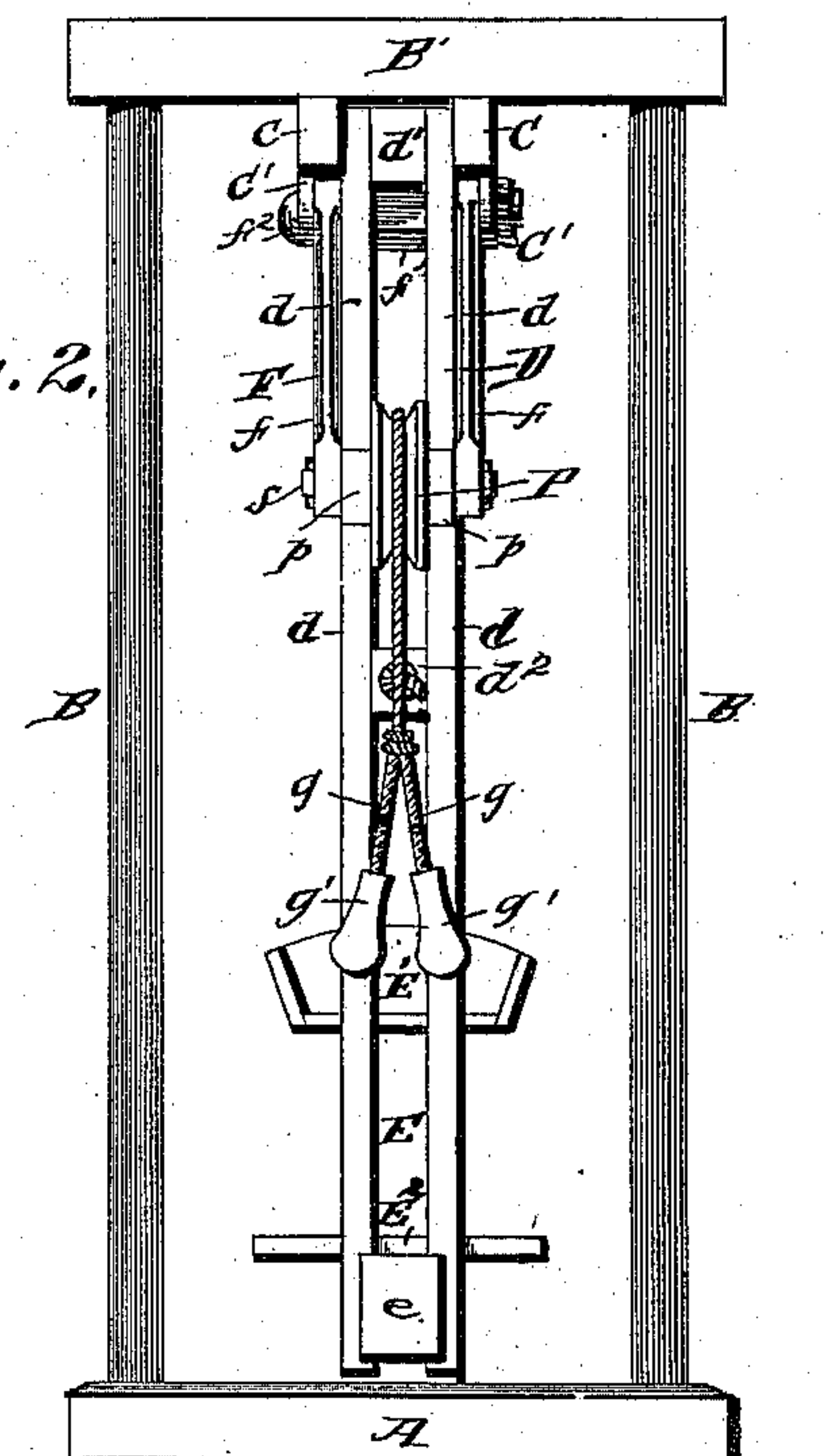


Fig. 4.

Witnesses

Geo. Hooper.
Kensington.

Inventor,

James D. Hays.
by C. Proctor & Co. Attorneys.

UNITED STATES PATENT OFFICE.

JAMES D. HAYS, OF MOUNT MORRIS, ILLINOIS.

SWING.

SPECIFICATION forming part of Letters Patent No. 382,303, dated May 8, 1888.

Application filed September 12, 1887. Serial No. 249,482. (No model.)

To all whom it may concern:

Be it known that I, JAMES D. HAYS, a citizen of the United States, residing at Mount Morris, in the county of Ogle and State of Illinois, have invented a new and useful Improvement in Swings, of which the following is a specification.

My invention relates to an improvement in swings; and it consists in the construction and arrangement of the parts thereof, which will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, Figure 1 is a perspective view of my improved swing. Fig. 2 is a front elevation thereof. Fig. 3 is a side elevation. Fig. 4 is a rear elevation.

A indicates the base-rest, having side standards, B B, connected at their upper ends by a cross-beam, B'. To the central portion of the under side of the cross-beam B' two arms, C C, are secured, having a top weather-strip, c, in the rear of the cross-beam, and rear depending arms, C', mortised therein, as shown. In the forward portion of the arms C, immediately under the beam B', the upper end of an open swinging lever, D, is pivotally mounted. This lever D consists, essentially, of two strips, d, united at their upper ends by means of a tie-block, d', at or about midway of their length by an apertured block, d², and at their lower ends by the weighted extension e of the arm E, projecting rearwardly therefrom, and upon which the seat E' is secured. Upon the top surface of the weighted extension e a foot board or rest, E², is secured adjacent to and fitting around the rear portions of the strips d.

Between the depending arms C' the one end of a hanger, F, is pivoted, which consists of two bars, f, having a bearing-block, f', mounted between their upper ends, through which the pivot-pin f² of the said hanger passes. Between the opposite ends of the said hanger a spindle, S, is secured, in the central portion of which a grooved pulley, P, is loosely mounted, and immovably secured to each side of the pulley P are disks p. The pulley P is mounted between the strips d above the block d², and is projected thereinto from the front sides of said strips. The bars of the hanger

F are of such a length that the pulley P will always be retained in the space between the strips d, and have an upward and downward sliding movement, the disks p bearing against the front sides of the said strips d. A cord or rope, G, is secured at its one end in the apertured block d², and passing through to the rear thereof is then thrown over the grooved pulley P, the ends g thereof projecting downward in front of the swinging frame D. Secured to the ends g are two hand-grips, g', which are grasped by the person swinging.

When the rope G is pulled downward, the frame D is forced backward, as shown in dotted lines, Fig. 3, and the return is accomplished through the weight of the person in the seat, and the tendency of the frame D to return to its position of rest. The continuous force exerted on the rope G and the attained impetus of the swing entire will produce the desirable swaying motion, which, it will be noticed, is dependent solely upon the muscular action of the person operating the swing.

The advantage of my improved swing is the use of muscular action by the person operating the same to cause a swinging of the device. This tends to strengthen and invigorate the muscles and at the same time produce healthful enjoyment.

Having thus described my invention, what I claim is—

1. The combination of the supporting-frame, the swinging frame D, hung therein and composed of parallel bars d united together, the swinging hanger F, the pulley P, carried by said hanger and having the disks p bearing on the bars d, the seat carried by the frame D, and the rope secured to said frame and passing around the pulley P, as set forth.

2. The combination of the supporting-frame, the swinging frame D, hung therein and composed of parallel bars d united together, the swinging hanger F, the pulley P, carried by said hanger and having the disks p bearing on the bars d, the seat carried by the frame D, and the rope secured to the frame D, passing around the pulley P, and provided with one or more grips, g', as set forth.

3. The combination of the supporting-frame, the open swinging frame D, having the central apertured block d², the hanger F, the pulley

P, carried by said hanger and having the disks
p, the cord G, secured to the frame D, passing
over the pulley P, and having the ends g, pro-
vided with the grips g', the arm E, having the
5 weighted extension e, the seat E', and the foot-
rest E'', substantially as described.

In testimony that I claim the foregoing as my

own I have hereto affixed my signature in pres-
ence of two witnesses.

JAMES D. HAYS.

Witnesses:

B. RINE,

R. W. TIME.