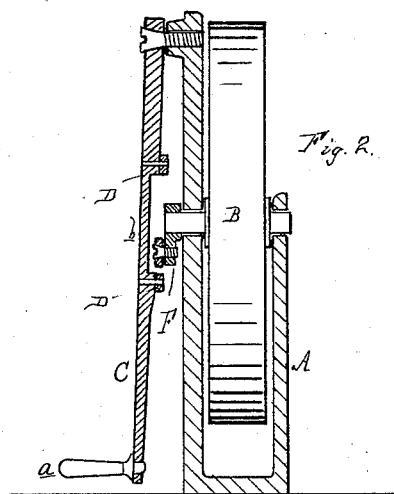
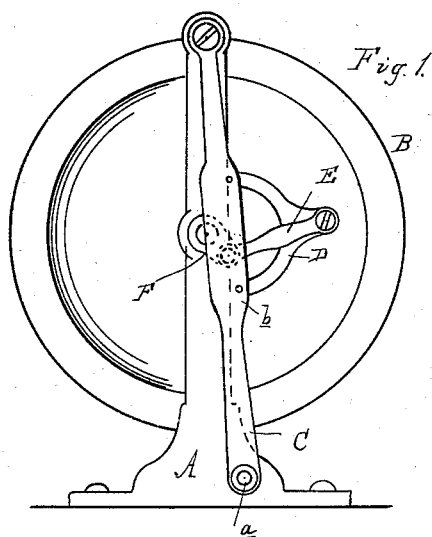


(No Model.)

C. J. OLIN.  
PENDULUM FOOT POWER.

No. 305,217.

Patented Sept. 16, 1884.



Attest:

*J. Paul Mayer*  
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Inventor.  
Charles J. Olin.

By his Atty.

*Thos. J. Sprague*

# UNITED STATES PATENT OFFICE.

CHARLES J. OLIN, OF PIQUA, OHIO.

## PENDULUM FOOT-POWER.

SPECIFICATION forming part of Letters Patent No. 305,217, dated September 16, 1884.

Application filed March 5, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES J. OLIN, of Piqua, in the county of Miami and State of Ohio, have invented new and useful Improvements in Pendulum Foot-Powers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

10 This invention relates to certain new and useful improvements in the construction of pendulum foot-powers, especially designed for the use of jewelers and other workers of light materials.

15 This invention consists in the peculiar construction and combination of the various parts, as more fully hereinafter described.

Figure 1 is a perspective view of my improved foot-power. Fig. 2 is a cross-section through the pivotal connection of the pitman with the balance-wheel.

In the accompanying drawings, which form a part of this specification, A represents a proper standard, bifurcated at its lower end, and B is the fly-wheel, properly journaled between the two parts of the standard, one portion of which projects vertically to a point at or near the upper side of the wheel. To the upper part of this part of the standard is pivotally secured the pendulum C by means of a conical bearing—such as is shown in Fig. 2—which consists of a bolt with a conical body between the head and threaded portion. The threaded portion of the bolt engages with a proper female thread in the head of the standard, while the conical portion of the bolt engages with a similarly-shaped hole in the top of the pendulum, the head resting against the outside thereof. This particular shape of the bolt and its engagements allow the wear thereon to be taken up by slightly tightening the bolt, so there will be no lost motion. The lower part of the pendulum is provided with a foot-rest or treadle, *a*. It is also provided with a flattened enlargement, *b*, to prevent the clothing of the operator from being soiled. An arm, D, is rigidly secured at one end to the inner face of the flattened part of the pendulum, the free end of which is pivotally secured to the pitman E, the opposite end of which is pivotally secured to the crank F of the fly-wheel. These pivotal points of connections are all made, like that above de-

scribed, by means of bolts with heads, the body being conical shaped between the head, and the threaded portion of such bolts engaging with the parts, as hereinbefore described. 55

I am aware that pendulum foot-powers or treadles have been in use; but I am not aware that any have been so used involving the details of construction which I have described, and which my experience in the use of such implements has found very beneficial in preventing lost motion, by so constructing the device that such lost motion can be instantly taken up, and providing the flattened shield of the pendulum, so that the same is not only strengthened, but affords protection against the soiling of the garments of the operator. 60 65

What I claim as my invention is—

1. A pendulum foot-power wherein the pendulum is provided with a flattened shield near the center of its length, and pivotally connected to the standard, and provided with a rigid arm or arms secured to the inner face of said pendulum, such arms being pivotally connected with a pitman and said pitman pivotally connected to the crank of the fly-wheel by means of conical bolts, substantially as and for the purposes specified. 70 75 80

2. A pendulum foot-power or treadle consisting of a double standard and fly-wheel suitably journaled in said standard, a pendulum provided with an arm or arms rigidly secured thereto and connecting with the pitman, which latter connects with the crank of the fly-wheel, the parts being constructed, arranged, and operating substantially as and for the purposes set forth. 85

3. A pendulum foot-power or treadle consisting of the bifurcated standard A, fly-wheel B, suitably journaled between the two parts of said standard, the pendulum C, pivotally secured to the vertical extension of said standard by means of a conical bearing, and provided with the bifurcated arm D, having the ends of the fork rigidly secured thereto and its free end pivotally connected to the pitman E, which latter connects with the crank of the fly-wheel, substantially as and for the purposes described. 90 95 100

CHARLES J. OLIN.

Witnesses:

WALTER D. JONES,  
GEO. E. LEE.