(No Model.)

C. F. PEASE.

PEDAL.

No. 492,989. Patented Mar. 7, 1893.

Fig. 1.

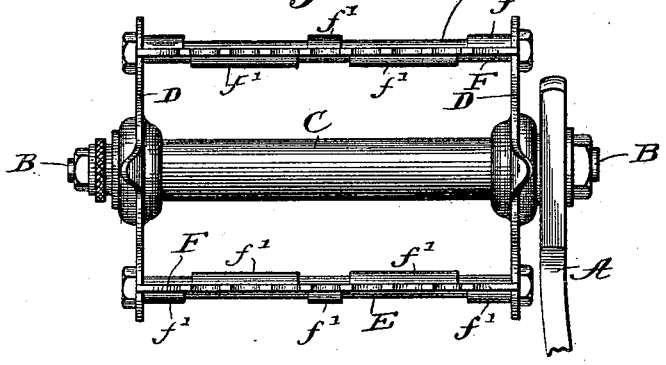


Fig. 2.

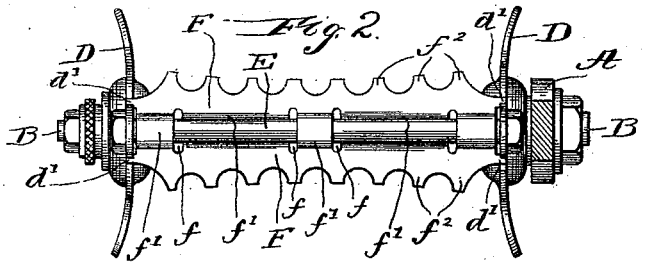


Fig. 3.

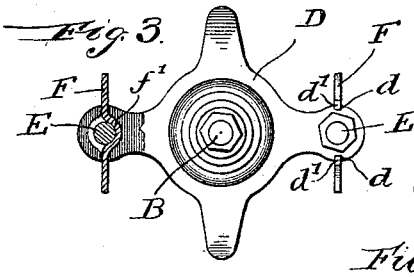


Fig. 4.

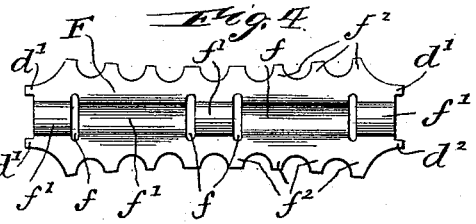
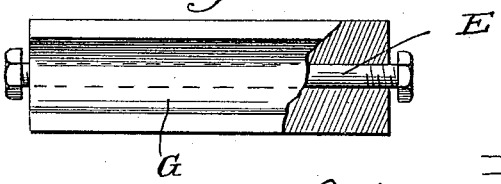


Fig. 5.



Witnesses:
Ambrose Rixon
Alice Lucas

Inventor:
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By Cyrus Kehr, Atty.

UNITED STATES PATENT OFFICE.

CHARLES F. PEASE, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE AMES & FROST COMPANY, OF SAME PLACE.

PEDAL.

SPECIFICATION forming part of Letters Patent No. 492,989, dated March 7, 1893.

Application filed October 22, 1892. Serial No. 449,602. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. PEASE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Pedals; and I do hereby 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 letters of reference marked thereon, which form a part of this specification.

My invention is intended to accomplish a two-fold object; first, the production of an extremely light, graceful, and simple "rat-trap" pedal; second, the production of a simple and economical pedal which is convertible from the rat-trap form to the rubber block form and vice versa.

In the accompanying drawings, Figure 1 is a top view of my improved pedal. Fig. 2 is a side view of the same. Fig. 3 is a sectional end view. Fig. 4 is an elevation of one of the rat-trap plates detached from the pedal. Fig. 5 is a sectional elevation of one of the bolts and a rubber block located thereon in lieu of the rat-trap plate.

As is well known, the rat-trap pedal is used when it is desired to make a very firm engagement between the pedal and the foot. The so-called rat-trap plates are placed edgewise and have their edges provided with teeth or equivalent projections adapted to penetrate more or less into the shoe.

A, is the portion of the crank or arm to which the pedal is attached.

B, is the shaft upon which the pedal rotates.

C, is the cylindric sleeve or hub of the pedal.

D, D, are the end-pieces of the pedal. These are applied to the ends of the hub at right angles to the latter in the usual manner, the distance between being a little more than the width of the foot.

E, E, are bolts located one at each side of the hub, C, and parallel thereto and extended through the ends of the end-pieces, D. Above and below each bolt, E, each end-piece, D, has formed in its edge a notch, *d*.

F, F, are the rat-trap plates. The body of each of said plates is as long as the space between the end-pieces, D, D, and each end of each of said plates. F, is provided with a small projection, *d'*, extending into the notches, *d*. At points along the longitudinal axis of said plate, the latter has cut into it transverse slots, *f*, and the alternating portions of metal, *f'*, between said slots and between the outer-most of said slots and the ends of the plate, F, are bent to opposite sides of the longitudinal axis of the plate sufficiently to extend around opposite sides of the bolt, E, to which the plate is applied. The lateral bending of the metal along said longitudinal axis thus serves a two-fold purpose, namely, to secure the plate to the bolt, E, and to bring the edges of the plate directly into the plane of the bolt. The engagement of the projections, *d'*, in the notch, *d*, prevents the rotation of the plates, F, upon the bolts, E. Said plates, F, are provided with teeth, f^2. It will be observed that the plates, F, are of such form as to permit them to be made out of sheet metal by a single stroke of a die, and that the notch, *d*, may be formed in the end-piece, D, at the same time that the latter is stamped from sheet metal in a die, and that no further fitting or riveting is required in applying said plate, F, to the pedal. It will also be observed that the plates, F, may be readily removed by the removal of the bolts, E. When said plates have been so removed, the ordinary rubber pedal blocks, G, (Fig. 5,) may be applied to said bolts in lieu of said bolts, E. Thus it is easy to supply the market with either a desirable form of rat-trap or rubber pedal, or customers may be furnished with a pair of rat-trap plates and rubber blocks, G, and then said customers may use the pedal as a rat-trap pedal or as a rubber pedal.

I claim as my invention—

1. A pedal having a hub, C, end-pieces, D, D, bolts, E, E, plates, F, F, having toothed edges and slotted transversely along the longitudinal axis and having the metal between the slots so formed and between the outermost of said slots and the ends of said plates extending alternately to opposite sides of said bolts, and said plates, F, being suitably secured against rotation with reference to the pedal, substantially as described.

2. In a pedal, the combination of the hub, C, end-pieces, D, D, provided with notches, *d*, bolts, E, E, extending through said end-pieces parallel to said hub and at opposite sides to the latter, plates, F, having toothed edges and projections, *d'*, extending from said notch, *d*, and slotted transversely along the longitudinal axis, and the metal between the slots so formed and between the outer-most of said slots to the ends of said plates, F, extending alternately to opposite sides of said bolts, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 11th day of October, in the year 1892.

CHARLES F. PEASE.

Witnesses:
W. E. KING,
CYRUS KEHR.