

(No Model.)

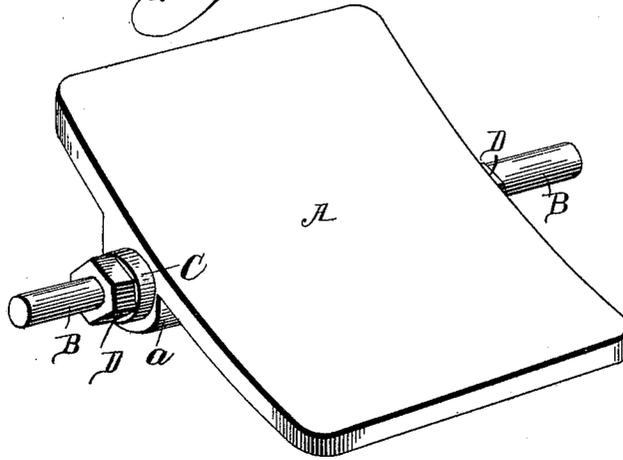
J. DUFRAINE.

TREADLE.

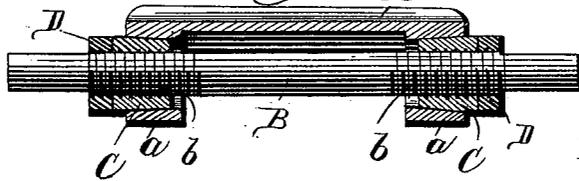
No. 394,470.

Patented Dec. 11, 1888.

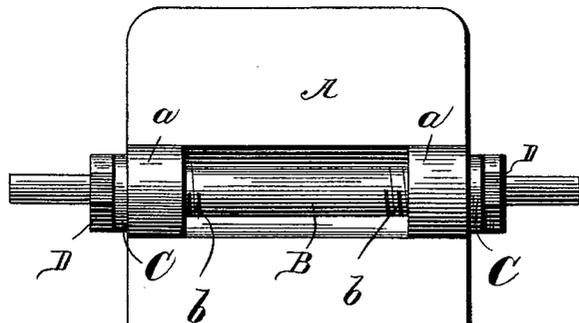
*Fig. 1.*



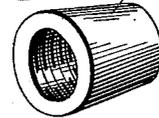
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses,

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By his Attorneys

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# UNITED STATES PATENT OFFICE.

JOSEPH DUFRAINE, OF BUCYRUS, OHIO.

## TREADLE.

**SPECIFICATION** forming part of Letters Patent No. 394,470, dated December 11, 1888.

Application filed July 14, 1888. Serial No. 279,934. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH DUFRAINE, a citizen of the United States, residing at Bucyrus, in the county of Crawford and State of Ohio, have invented a new and useful Improvement in Treadles, of which the following is a specification.

The invention relates to improvements in treadles.

The object of the present invention is to provide a treadle for sewing-machines and the like of great simplicity and cheapness, and that will permit ready adjustment of the parts to take up lost motion and prevent rattling.

The invention consists in the novel combination and arrangement of the parts herein-after fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a treadle constructed in accordance with this invention. Fig. 2 is a transverse sectional view. Fig. 3 is a reverse plan view. Fig. 4 is a detail view of one of the conical journals.

Referring to the drawings, A designates a treadle constructed of suitable metal and provided upon each side with a depending lug, *a*, through which passes a treadle-rod, B. The openings in the lugs *a* of the treadle A are conical and are adapted for the reception of conical sleeves C, that may readily be advanced into the conical openings in the lugs *a* as the parts become worn, thereby enabling any lost motion to be taken up and preventing unnecessary lateral movement of the treadle A upon the treadle-rod B, and also avoiding any rattling or other noise occasioned by loose or badly-fitting parts, and also rocking of machines to which such treadles may be attached.

The treadle-rod is provided with threaded portions *b*, that are at each side of the treadle and have screwed upon them the sleeves C, which are bored out and internally threaded to fit them for the threaded portions of the treadle-rod B. By this construction the conical sleeves C may, after they have become worn

and unfit for use, be removed and replaced by new ones at a very small cost and without necessitating the employment of a new treadle-rod B or treadle A. This is a great desideratum and a great advantage over those constructions that have to be entirely removed when the parts become worn.

After the sleeves C have been screwed on the treadle-rod and into the bearings *a*, they are securely held in place by nuts D, which are screwed on the threaded portions *b* of the treadle-rod B against the conical sleeves C.

From the foregoing description and the accompanying drawings the construction, operation, and advantages of the invention will readily be seen; and it will of course be understood that I do not limit myself to the precise details of construction herein shown and described, as I may, without departing from the spirit of the invention, make any minor changes therein.

Having described my invention, I claim—

1. The combination of the treadle provided with lugs having conical openings therein, the treadle-rod having the threaded portions at each side of the treadle, and the internally-threaded conical sleeves adapted to be screwed upon the threaded portions of the treadle-rod and capable of being advanced into the bearings as the parts become worn, substantially as described.

2. The combination of the treadle provided with lugs having conical openings therein, the treadle-rod having the threaded portions at each side of the treadle, the internally-threaded conical sleeves adapted to be screwed upon the threaded portions of the treadle-rod and capable of being advanced into the bearings, and the nuts designed to be screwed up against the conical sleeves, whereby said sleeves are securely retained in place, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOSEPH DUFRAINE.

Witnesses:

L. C. FEIGHNER,  
A. M. DUNCAN.