

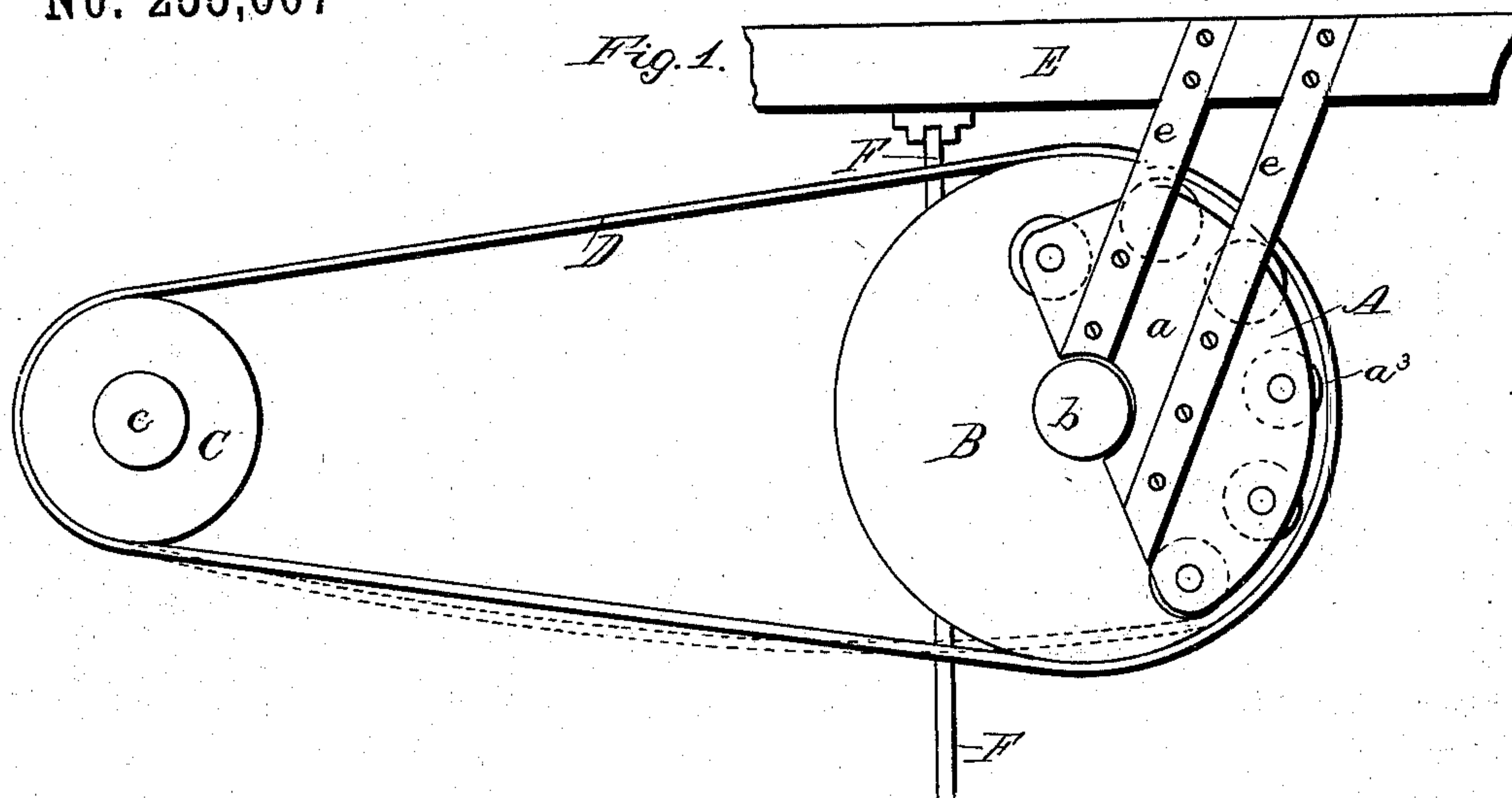
(No Model.)

E. C. DURAND.

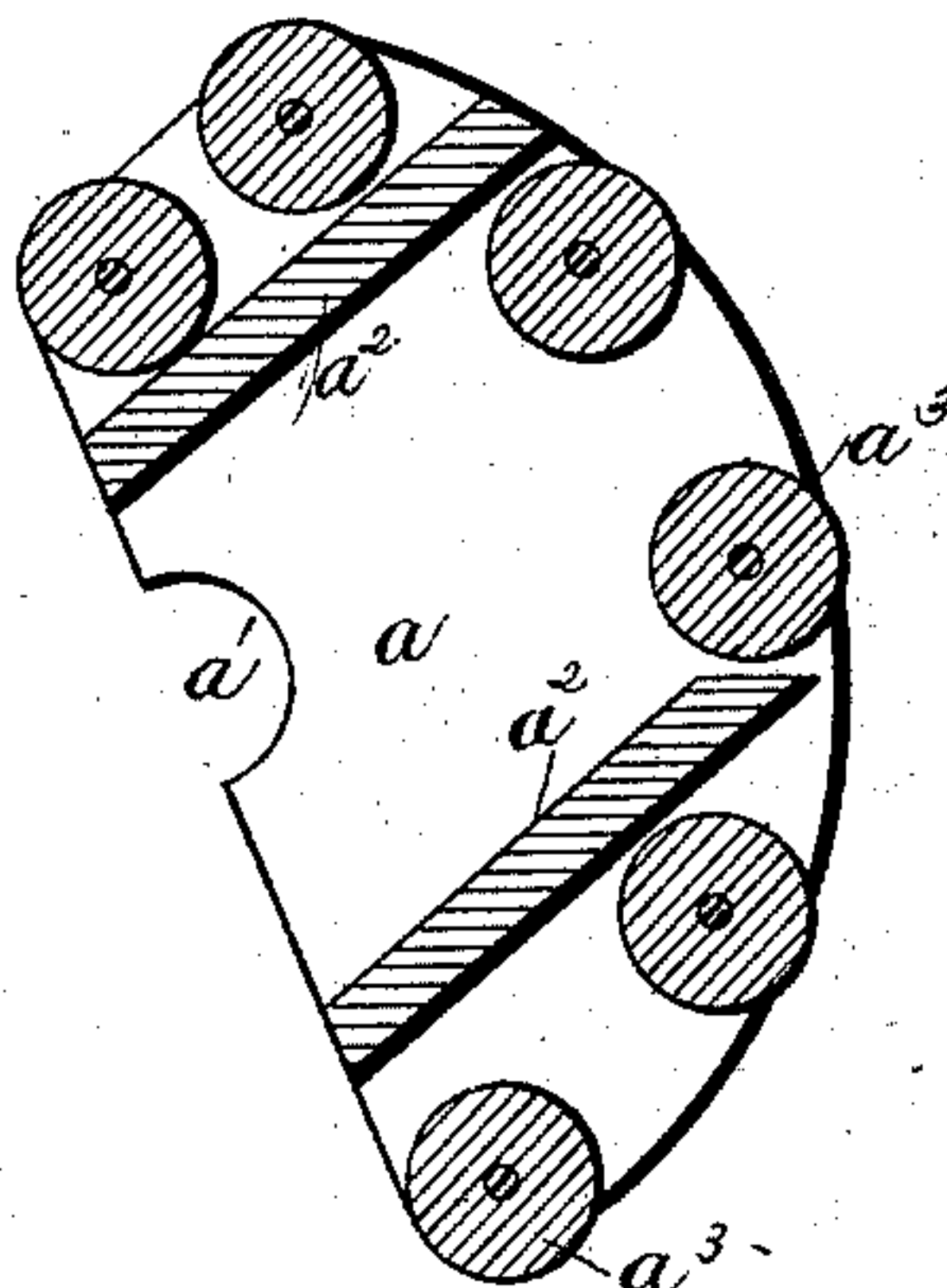
BELT SHIFTER.

No. 255,607

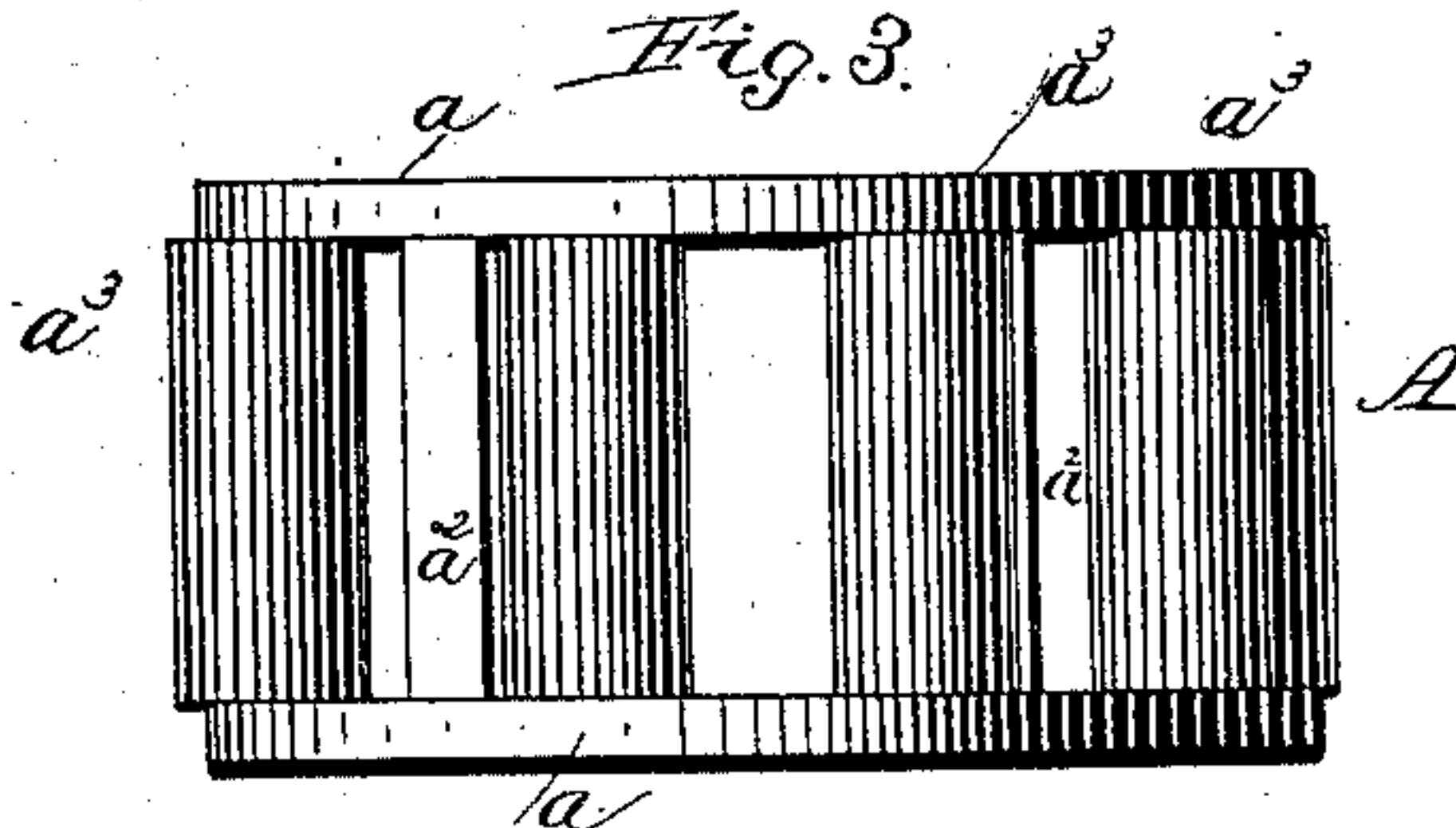
Patented Mar. 28, 1882.



*Fig. 2.*



*Fig. 3.*



Witnesses:

J. W. Garner  
H. J. Asgood

Inventor:

Edwin C. Durand,  
by Howard A. Thom.  
Attorney.

# UNITED STATES PATENT OFFICE.

EDWIN C. DURAND, OF GREENWICH, OHIO.

## BELT-SHIFTER.

SPECIFICATION forming part of Letters Patent No. 255,607, dated March 28, 1882.

Application filed February 14, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN C. DURAND, a citizen of the United States, residing at Greenwich, in the county of Huron and State of Ohio, have invented certain new and useful Improvements in Belt-Shifters, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to belt-shifters; and it consists in the construction and arrangement of its several parts, as will be hereinafter fully set forth, and pointed out in the claims.

In the drawings, Figure 1 is a side elevation of the shifter applied, and Fig. 2 is a vertical longitudinal section, and Fig. 3 is a top plan view.

A is the shifter. It consists of the side pieces, *a a*, formed as shown, and having cut in their straight edges the semicircular recesses *a' a'*, through which passes the pulley-shaft. They are secured together by the strips *a<sup>2</sup> a<sup>2</sup>*, as shown. Journaled between the outer portions of the strips and projecting above their edges are rollers *a<sup>3</sup>*.

B and C are working-pulleys on the shafts *b c*, and are connected by the belt D, as shown.

E is one of the ceiling-joists. The semicircular recesses *a'* are placed over the shaft *b*

and the pulley made secure in position by the braces *e e*, attached to it and to the joist E. The rollers *a<sup>3</sup> a<sup>3</sup>* will be on a level with the periphery of the pulley B.

F is the shifting-bar, and by it the belt D is thrown from the pulley B onto the shifter.

In operation, when it is desired to shift the pulley F, as the edges of the belt slip over onto the shifter its rollers *a<sup>3</sup>* will revolve on the belt and will prevent all "burning" or breaking of the leather. The braces *e e* will prevent the belt from slipping off the shifter.

What I claim is—

1. The shifter A, consisting of the side pieces, *a a*, formed as shown, secured together by the strips *a<sup>2</sup> a<sup>2</sup>*, and having journaled between them the pulleys *a<sup>3</sup>*, and adapted to be secured to the joist E by the braces *e e*, substantially as shown and described.

2. The shifter A and its pulleys *a<sup>3</sup>*, in combination with the pulley B and shifting-bar F, all arranged to operate as set forth.

In testimony whereof I hereby affix my signature in presence of two witnesses.

EDWIN C. DURAND.

Witnesses:

FRANK CARR,  
JNO. B. SMITH.