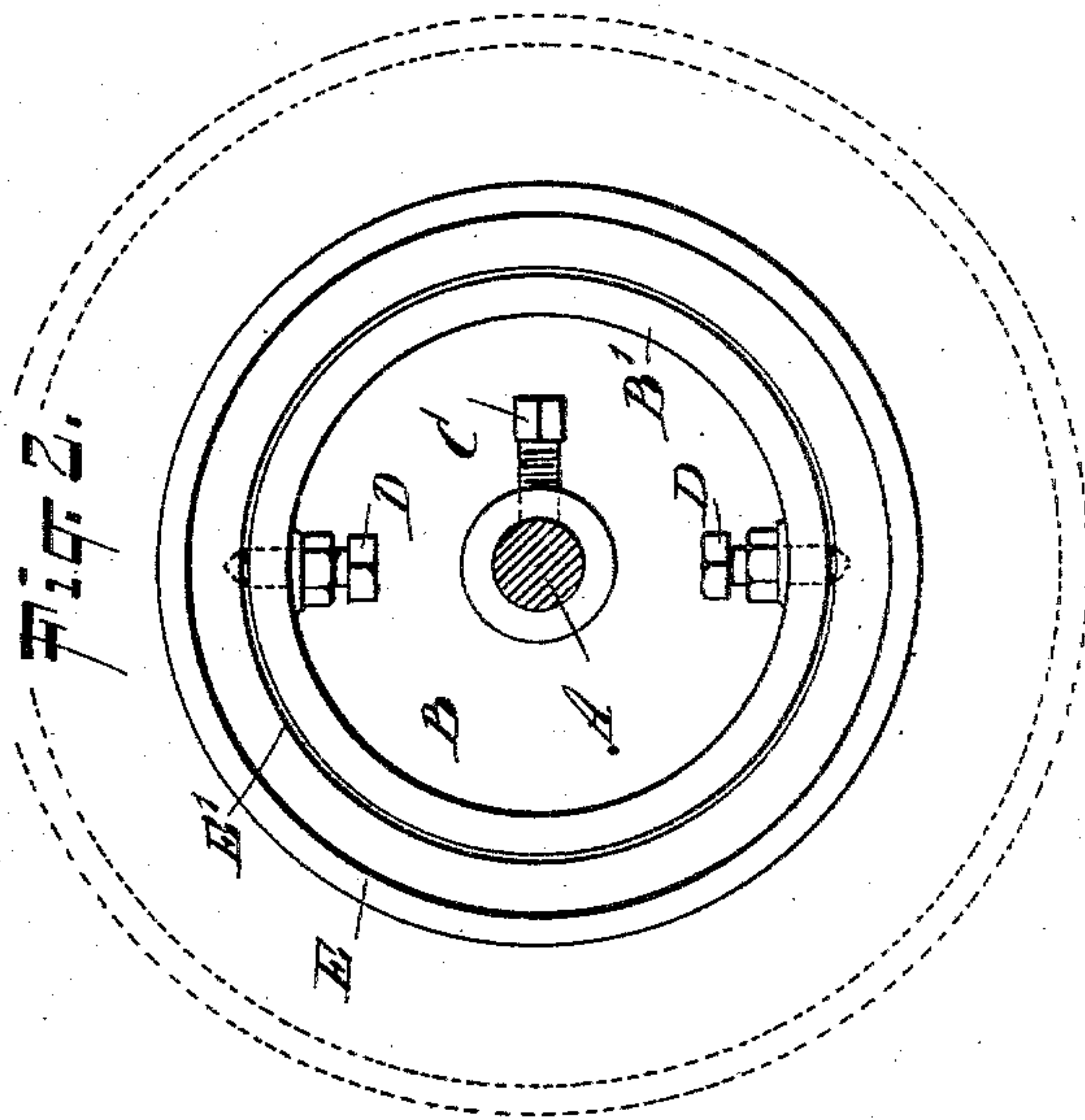
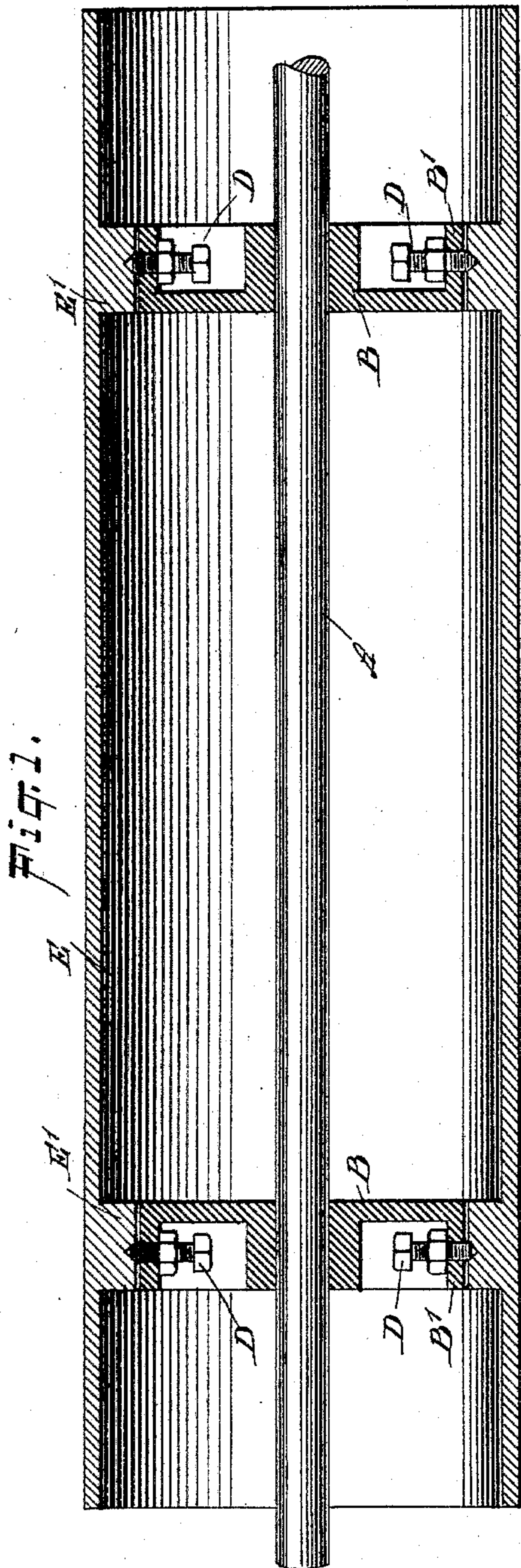


(No Model.)

J. COCKER.  
WARPING ROLLER.

No. 597,956.

Patented Jan. 25, 1898.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JOHN COCKER, OF PHILADELPHIA, PENNSYLVANIA.

## WARPING-ROLLER.

SPECIFICATION forming part of Letters Patent No. 597,956, dated January 25, 1898.

Application filed June 12, 1897. Serial No. 640,504. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN COCKER, of Philadelphia, (Frankford,) county of Philadelphia, and State of Pennsylvania, have invented a new and Improved Sectional Drum for Beam Warping-Machines, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved sectional drum for beam warping-machines arranged to permit of conveniently replacing a worn out or broken drum with a new one instead of procuring an entire new drum when renovating a machine.

The invention consists principally of a drum-shaft carrying one, two, or more rimmed webs, a drum-rim formed with internal bosses or flanges registering with the web-rims, and set-screws in the web-rims for adjusting and supporting the said drum-rim concentric to the shaft.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a longitudinal section of the improvement, and Fig. 2 is an end elevation of the same.

The warping-machine drum is provided with the usual shaft A, rotated by suitable gearing in unison with the other parts of the machine, as is well known, and on the said shaft are secured webs B, preferably two in number, and secured to the shaft by set-screws C, screwing in the hubs of the said webs. Each of the webs B is provided with a rim B', in which screw set-screws D, engaging with their outer ends the inner faces of registering bosses or internal flanges E', formed on the under side of the rim E for the drum, as is plainly illustrated in the drawings. Now it will be seen that by the arrangement described the

rim E can be readily adjusted so as to bring its peripheral surface concentric to the shaft A to insure a proper running of the drum-rim when the shaft A is rotated. It will further be seen that by the arrangement described the drum-rim E can be readily detached and removed from the other parts of the drum by unscrewing the set-screws D to permit removal of the rim E in case the said rim is worn out or otherwise injured and a new one is necessary. It will be seen that drum-rims of different diameters may be used and placed in position by the said set-screws D on the said webs for one and the same warping-machine, according to the work under treatment, it being understood that in such cases the bosses or internal flanges E' are made of greater or less thickness, according to the size or diameter of the drum-rim. (See dotted lines in Fig. 2.)

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A sectional drum for beam warping-machines, comprising a drum-shaft, webs secured on the said drum-shaft, a drum-rim formed with internal bosses registering with the web-rims, and set-screws held in the webs, and engaging the said bosses for adjusting and supporting the said drum-rim concentric to the said shaft, substantially as shown and described.

2. A sectional drum for beam warping-machines, comprising a driven shaft, webs secured on the said shaft and provided with rims, a drum-rim formed with internal bosses registering with the said web-rims, and set-screws screwing in the said web-rims and engaging the said bosses of the drum-rim, substantially as shown and described.

JOHN COCKER.

Witnesses:

JOHN SHALLCROSS,  
FRANCIS REILEY, Jr.