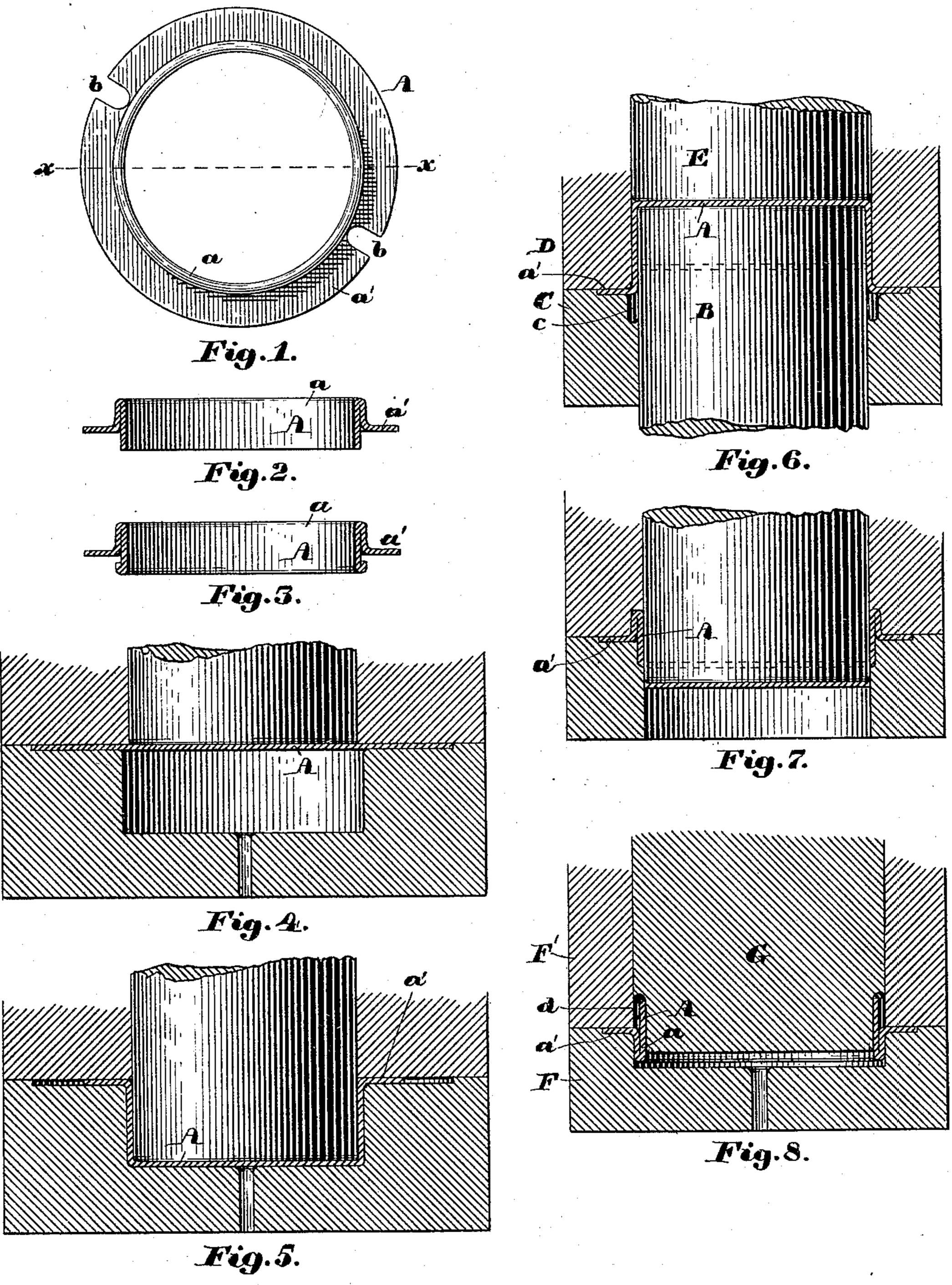
(No Model.)

## G. D. EDMANDS.

TRAVELER RING FOR SPINNING MACHINES, &c.

No. 368,821.

Patented Aug. 23, 1887.



Witnesses: E.g. Hills Walter E. Lombard. Inventor:
George D. Edmands,
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Attorney.

## United States Patent Office.

GEORGE D. EDMANDS, OF ROCKY HILL, CONNECTICUT.

## TRAVELER-RING FOR SPINNING-MACHINES, &c.

SPECIFICATION forming part of Letters Patent No. 368,821, dated August 23, 1887.

Application filed April 20, 1887. Serial No. 235,508. (No model.)

To all whom it may concern:

Be it known that I, GEORGE D. EDMANDS, of Rocky Hill, in the county of Hartford and State of Connecticut, have invented certain 5 new and useful Improvements in Traveler-Rings for Spinning and Twisting Machines, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to traveler-rings for spinning and twisting frames, and to that particular class of such rings, which are made from sheet metal; and it consists in certain novel features of construction which will be 15 readily understood by reference to the description of the drawings, and to the claims to be hereinafter given.

Figure 1 of the drawings is a plan of a ring portion of the traveler-raceway. Figs. 4, 5, 6, 7, and 8 are views illustrating the process of making my improved ring.

25 In the drawings, A is the ring, provided with a traveler-race in the form of a short cylinder, the wall of which is perpendicular to the plane of revolution of the traveler, and a portion, a, of which is composed of two 30 thicknesses of metal, formed by doubling the metal upon itself and provided with the flange a, projecting therefrom between the two ends of said cylindrical race, which serves as a holder for securing the ring in position on the 35 rail, said flange having formed therein the two open slots b b to receive the holdingscrews. (Not shown.)

In some cases I propose to turn a portion of the metal of the lower part of the race-40 way a upon itself to form a rounded and thicker lower edge thereto, as shown in Fig. 3, so as to present a better wearing surface to the action of the traveler.

In the manufacture of my ring I first cut a 45 circular disk of sheet metal, preferably a fine quality of soft steel, and by means of dies (shown in Fig. 4) form therefrom a cup, as shown in Fig. 5. The cup is then placed inverted upon a yielding support, B, with its so flange between the die C, provided with an-

nular space c and the clamping-ring D, and power is applied to the plunger E to move it, with the body of the cup and the support B, downward until that portion of the wall of the cup next to the flange is doubled upon 55 itself and fills the space c in the die C. The cup is then subjected to the action of dies to punch out the bottom, as shown in Fig. 7.

If it is desired to produce the ring shown in Fig. 2, nothing further is required except 60 to slightly round the inner corner of the lower edge of the vertical wall of the ring, cut the slots b b, and polish the ring, when it is ready for use. If, however, it is desired to produce the ring shown in Fig. 3, the ring, as it is 65 when the bottom has been punched out of the cup by the dies shown in Fig. 7, is placed in the die F, with its flange clamped by the ring embodying my invention. Fig. 2 is a section | F', with its doubled portion downward, and 20 on line x x on Fig. 1. Fig. 3 is a similar sec- $\frac{1}{3}$  is subjected to the action of the plunger G,  $\frac{1}{70}$ tion illustrating a modification of the lower | made of two diameters, the smaller of which fits the inner periphery of the ring to be acted upon, and having formed in the annular shoulder, at the junction of the smaller portion with the larger, a semicircular groove, 75  $\overline{d}$ , as shown in Fig. 8, the descent of said plunger causing the edge of the single portion of the cylinder to be doubled upon itself for a short distance, as shown in Fig. 3, the movement of said plunger being limited by 80 its lower end coming in contact with the bottom of the cavity in said die F. This makes a very excellent ring at comparatively small cost, and one that is peculiarly adapted for use on twister-frames, and that requires no 85 separate holder.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A spinning or twister ring having a traveler-race in the form of a short cylinder, 90 the wall of which is perpendicular to the plane of revolution of the traveler, and having a portion of said race composed of two thicknesses of metal and provided with a supporting or holding flange projecting therefrom 95 between the two ends of said cylindrical race, the whole being formed from a single piece of sheet metal, substantially as described.

2. A spinning or twister ring made from a single piece of sheet metal and having a cy- 100

lindrical traveler-race, a portion of each end of which is composed of two thicknesses of metal doubled upon itself and provided with a slotted holding-flange projecting therefrom 5 between the two ends of said race. In testimony whereof I have signed my name

to this specification, in the presence of two

subscribing witnesses, on this 30th day of March, A. D. 1887.

GEORGE D. EDMANDS.

Witnesses:

N. C. Lombard, WALTER E. LOMBARD.