

(No Model.)

J. W. LESLIE.
TRAVERSE RING.

No. 479,714.

Patented July 26, 1892.

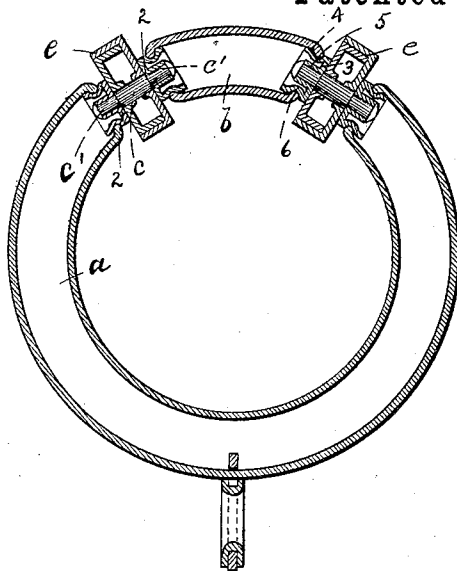


Fig. 1.



Fig. 4.

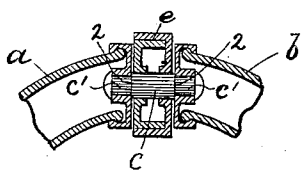


Fig. 2.

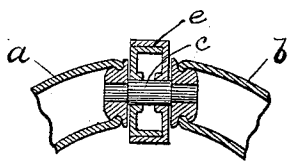


Fig. 3.

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TRAVERSE-RING.

SPECIFICATION forming part of Letters Patent No. 479,714, dated July 26, 1892.

Application filed March 2, 1892. Serial No. 423,460. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. LESLIE, of Everett, county of Middlesex, State of Massachusetts, have invented an Improvement in

5 Traverse-Rings, of which the following description, in connection with the accompanying drawings, is a specification, like letters and figures on the drawings representing like parts.

In another application, Serial No. 419,093, filed January 23, 1892, a traverse-ring is shown comprising two separate hollow parts, and friction-rolls located between the ends of said hollow parts, mounted on axles, the supports of which are contained in the hollow ends of

15 said parts. One of the hollow or tubular parts comprises more and the other less than a half-circle, and the supports for the axles of the friction-rolls contained in the hollow ends of the shorter part of the ring are joined

20 by a rod or bar which is therein shown as so constructed as to present a yoke, on the ends of which the axles are formed. The supports for the axles are therein shown as solid blocks, suitably shaped for the purposes intended.

This invention has for its object to reduce the cost of manufacturing the traverse-ring shown in said application.

In accordance with this invention the supports for the axles are made hollow, being struck up or formed from sheet-brass or some equivalent material, the outer rim or flange of each block having an external circumferential groove formed in it, which receives the

30 edges or ends of the hollow parts of the ring when said blocks are placed into the hollow ends of said parts and said edges are turned inwardly. Each block has a central hole through it, around which an annular flange is formed, projecting inwardly or in the same

40 direction as the outer rim or flange. These annular flanges present long and substantial bearings for the ends of the axles upon which the friction-rolls are mounted. The axles are

45 shouldered, so that when the supports are placed thereon they will not abut against and thereby frictionally resist rotation of the rolls. The supports for the axles, while preferably contained within the hollow ends of the parts

50 of the ring, may be placed upon and thereby

receive said ends, and in such event the external circumferential grooves in the outer rims or side walls of the supports will be omitted, and the edges of said rims will be turned down over flanges formed on the adjacent ends of the separate parts of the ring.

Figure 1 shows in vertical section a traverse-ring embodying this invention; Fig. 2, a sectional detail showing a modified form of support for the axle of the friction-roll; Fig. 3, a sectional detail of another modification to be referred to, and Fig. 4 an under side view of a portion of the ring to which the eye is attached.

The ring is composed of two hollow or tubular parts *a b*, the part *a* comprising about three-fourths and the part *b* considerably less than one-fourth of the complete ring.

Instead of employing a curved or bent rod or bar formed at the ends to present axles for the friction-rolls, the axles are herein made separate and represented at *c*. These axles *c* are shouldered near the ends, as at 2 2', to present reduced end portions *c'*. The supports—one for each end of the axle *c*—are made hollow, and may be struck up or formed of sheet-brass, they being made alike, or substantially so, and presenting the face or end 3 with an annular rim or flange 4 at the outer edge thereof, and a central hole in said face or end 3, around which is an annular flange or projection 5, said flanges 4 and 5 being concentric. The ends *c'* of the axle *c* enter the central holes in the supports and are made of suitable length to project through and be upset upon the interior of said supports, thereby connecting the supports to the axle in such a manner that they cannot easily be separated or detached therefrom. The faces or ends 3 of the supports abut against the shoulders 2 on the axle, and the friction-roll *e*, of any suitable construction, is placed on the axle between the supports, it being made of a suitable thickness to turn freely within the space provided for it. The annular projections or flanges 5 present long and substantial bearings for the ends of the axle. The rims or flanges 4 are provided each with an external circumferential groove 6, and the supports having been inserted in the hollow ends of

the parts of the ring the edges of said ends are turned inwardly or sunken into said grooves.

I have herein represented the ring as provided with two friction-rolls, which are adapted to bear upon the upper side of a curtain-pole; but I do not desire to limit my invention to the number of rolls employed.

Referring to Fig. 4 the hollow or struck-up supports for the axles are made similar to those shown in Fig. 1, but somewhat larger in diameter to fit over upon the adjacent ends of the parts of the rings instead of being inserted into the hollow ends of said parts, and to secure the said supports in place on the ends of said parts, the outer edges of the rims or flanges 4 are turned down over upon flanges formed on the ends of said parts. The form shown in Fig. 1 is deemed preferable, as it is somewhat cheaper to construct and more sightly in appearance.

In Fig. 3 I have represented the supports as solid, substantially as shown in the application referred to, but the axle *c* is shouldered, substantially as represented in Fig. 1, so that the friction-roll *e* may turn thereon freely or unrestrained. The ring will be provided with a suitable eye.

I claim—

1. A traverse-ring composed of the separate parts *a b*, axle *c*, shouldered at 2 2, a friction-roll on each axle, and supports for the

ends of the axle, comprising the end or face 3, with a central hole through it, an outer flange or rim 4, and an annular projection 5, located at and concentric with the hole, said supports being connected to the ends of the parts of the ring, substantially as described.

2. A traverse-ring formed to present adjacent end portions, the axle *c*, shouldered at 2 2, and friction-roll on said axle-supports for the ends of said axle, each comprising the end or face 3, with a central hole through it and adapted to abut against the shoulder 2, and also having an annular rim or flange 4 and a central annular projection 5, said supports being connected to the adjacent ends of the ring, substantially as described.

3. A traverse-ring composed of separate tubular parts *a b*, axle-supports secured to the adjacent ends of said parts, axles *c*, shouldered at 2 2, secured to said axle-supports, the shoulders 2 2 thereof abutting against the ends of said supports to prevent them approaching each other, and friction-rolls loosely mounted on said shouldered axles, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES W. LESLIE.

Witnesses:

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