S. CURTIS.

Casters.

No. 143,334. Patented September 30, 1873.

Fig. 1.

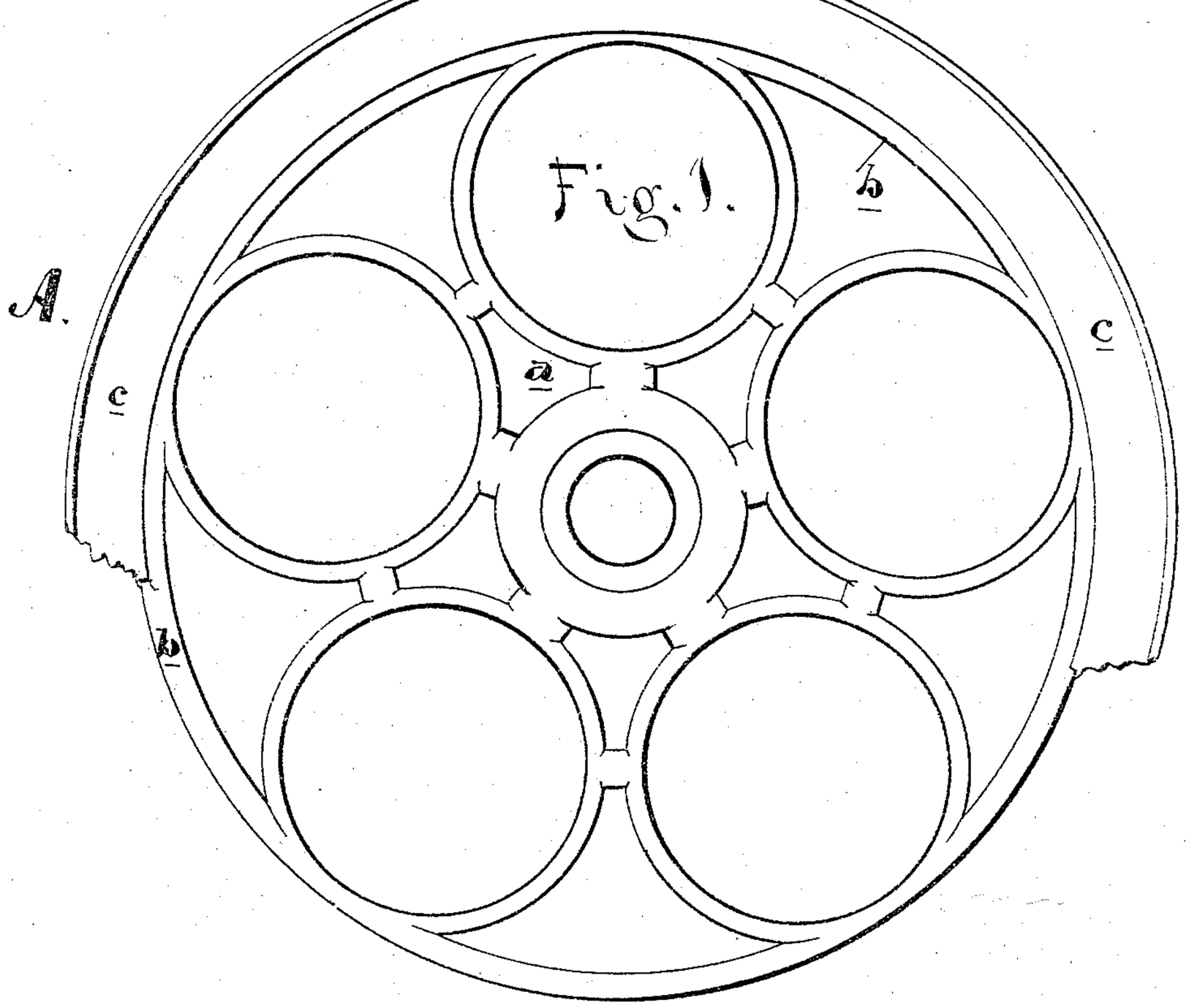

Fig. 3

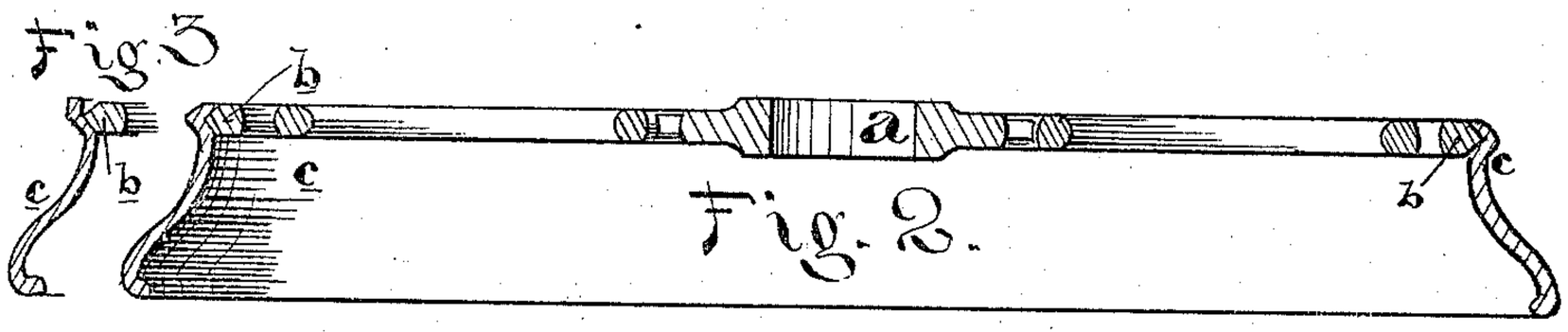

Fig. 2.

Modification.

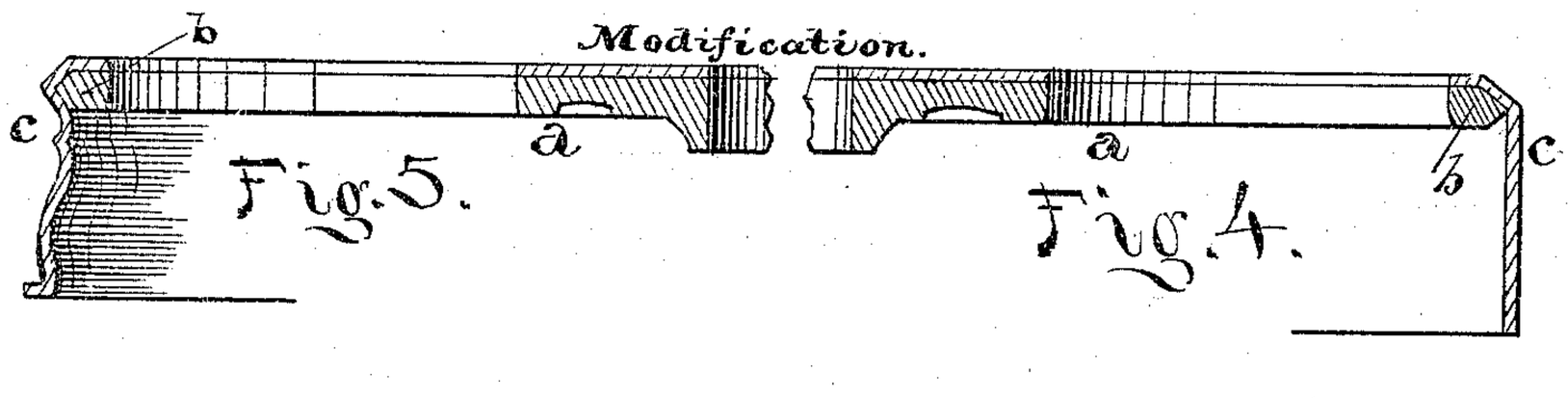

Fig. 5.

Fig. 4.

Attest

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STEPHEN CURTIS, OF NEW YORK, N. Y.

IMPROVEMENT IN CASTERS.

Specification forming part of Letters Patent No. **143,334**, dated September 30, 1873; application filed September 4, 1873.

To all whom it may concern:

Be it known that I, STEPHEN CURTIS, of New York, in the county of New York and State of New York, have invented a new and useful Improvement in Casters; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a sectional plan view of one of my caster-frames. Fig. 2 is a central sectional elevation of the same. Fig. 3 is a similar section, showing the position of the band-edge before the center is secured in place. Figs. 4 and 5 represent a modification of the method of manufacture.

This invention relates to an improved method of manufacturing the bottle-frame, whereby the same is greatly strengthened and reduced in cost; and it consists of a center constructed separate from the band, and with a continuous rim extending outward sufficiently far all around to meet said band and be secured thereto; and it also consists in uniting said center and band without solder.

Heretofore the bottle-rings have been cast without any rim, and they therefore only touch the band at those points which are most distant from the center of the frame, and therefore from one bottle-ring to another the band receives no support from the center, and is easily crushed in or indented.

I am aware that bottle-frames have been made with the band extended in a single plate to the center standard; but when so made the ordinary center frame is also employed, and is soldered to said plate on its lower side.

Heretofore, also, the cast center has always been united to the band by solder, which operation, on account of its delicacy, requires great skill, and is therefore costly.

By means of the continuous rim, which is the subject of this invention, the band is supported and strengthened, and may be united to said center without the use of solder, the edge of the band being compressed or turned down over the edge of said rim, and this operation, being entirely mechanical, may be performed with great facility, and without the exercise of great skill on the part of the operative.

That others may fully understand my improvement, I will particularly describe it.

A represents a bottle-frame constructed with a center, *a*, having a continuous rim, *b*, extending from one bottle-ring to another, and so on all around, meeting and being secured to the band *c*, so as to strengthen and support the same against crushing or indentation.

It is evident that it is immaterial, so far as the strengthening of the band is concerned, whether the rim *b* and band *c* are soldered together or otherwise united, and I therefore do not, in this part of my invention, confine myself to any particular method of securing said parts together; but, for reasons of economy above stated, I prefer to dispense with solder and unite said center and band by compressing or turning down the metal of the band over the edge of the center, as shown in Figs. 2 and 5. This operation may be performed by methods well understood.

By this method the variety of forms, either ornamental or useful, is not circumscribed, while the cost of production is greatly reduced without any reduction in quality of goods.

Having described my invention, what I claim as new is—

1. The center *a*, constructed with a continuous rim, *b*, and separate from the band *c*, substantially as and for the purpose set forth.

2. As a new article of manufacture, a bottle-frame for casters constructed with center and band in separate parts, united without solder by turning the edge of one over the edge of the other, substantially as set forth.

STEPHEN CURTIS.

Witnesses:
EDWIN H. ROWLEY,
HENRY STIX.