

(No Model.)

A. F. BENTLEY.
RING-TRAVELER.

No. 481,131.

Patented Aug. 16, 1892.

Fig. 1.

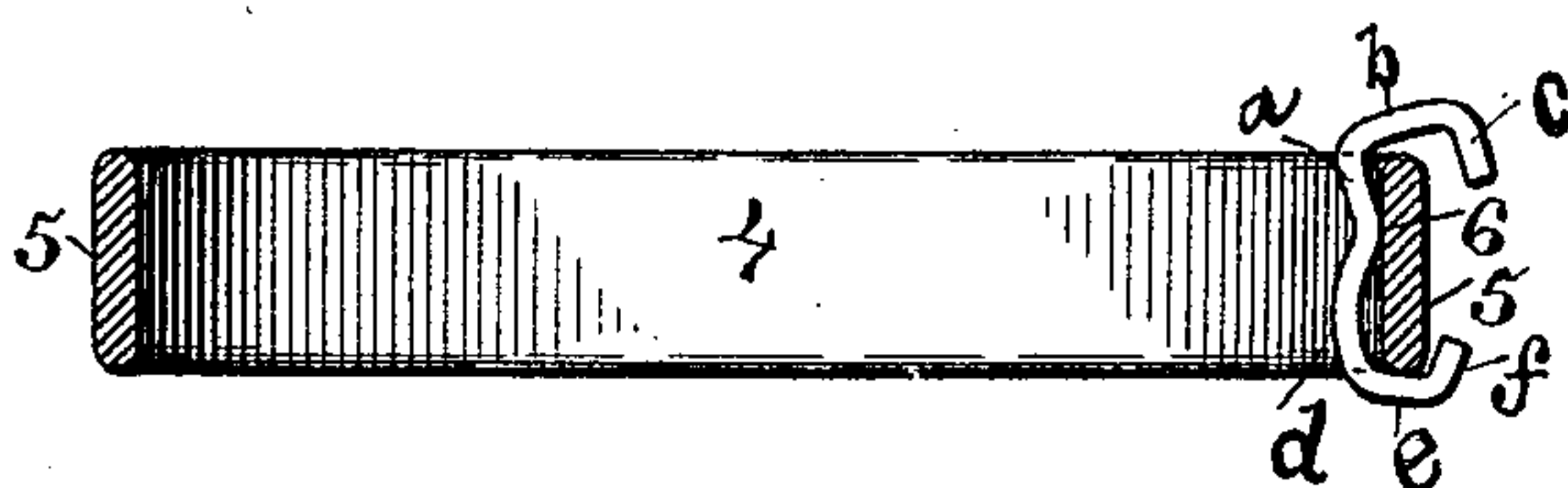
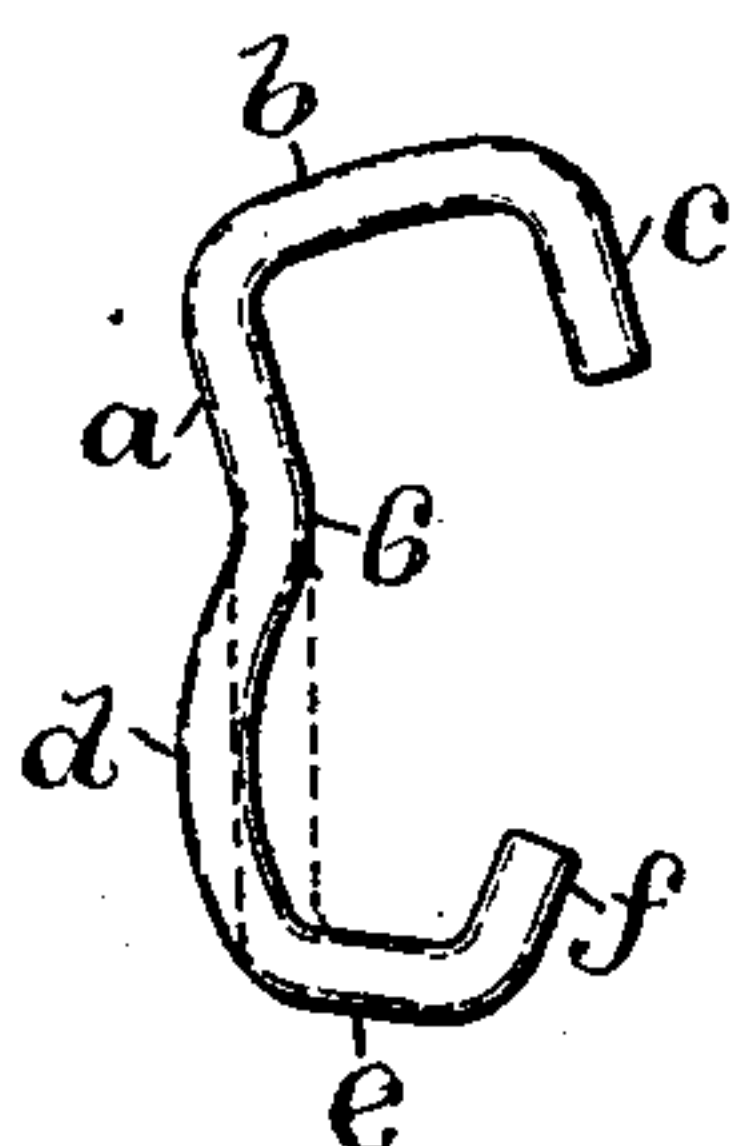


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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TO THE AMERICAN RING TRAVELER COMPANY, OF PROVIDENCE,
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RING-TRAVELER.

SPECIFICATION forming part of Letters Patent No. 481,131, dated August 16, 1892.

Application filed March 23, 1892. Serial No. 426,058. (No model.)

To all whom it may concern:

Be it known that I, ALBERT F. BENTLEY, of New Bedford, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Ring-Travelers; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to an improvement in ring-travelers used in ring spinning and twisting machines; and it consists in the peculiar and novel construction of the ring-traveler, as will be more fully set forth hereinafter.

Figure 1 is a sectional view of a spinning-ring provided with my improved traveler. Fig. 2 is an enlarged view of the traveler.

In the drawings, 4 designates a spinning-ring, and 5 a vertical cross-section of the same. The traveler is bent up in the usual manner, of suitable wire formed of any desired material, and consists of the upper hook having the parts *a*, *b*, and *c* and the lower hook having the parts *d*, *e*, and *f*. The part *d* in my improved traveler is bent outward between the union with the part *a* and the part *e*, so as to form a hump or rounded point on the inner side of the traveler nearly midway between the upper and lower hook, which in use forms a rounded point of contact on the inner surface of the ring, which allows the traveler to rock on this point and adjust itself to the varying strain of the yarn, while in travelers as heretofore made the part *d*, from the inter-

section of parts *d* and *a* to the intersection or union of the part *d* with *e*, was straight, as is indicated in broken lines in Fig. 2.

When a ring-traveler is in use, it travels around the ring at a high speed, making from six to twelve thousand turns in a minute. The centrifugal force holds the traveler against the inside of the ring. In the old construction the straight line between the parts *a* and *e* is in contact with the ring and causes a great deal of friction—so much, in fact, that at high speed the thread passed under the upper hook frequently breaks on account of the excessive draft. By my improvement the bent part *d* does not come in contact with the inner side of the ring. Only the rounded surface of the bend 6, forming the hump, comes in contact with the inside of the ring. The friction is very much diminished and a more durable ring-traveler may be used for the same number than can be used with the old construction of traveler, owing to the diminution of the friction and consequent draft.

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

A ring-traveler having hooks *a b c* and *d e f*, and the connecting-piece bent inward to form a single bearing-piece 6, which contacts with the ring to reduce the friction, as and for the purpose described.

ALBERT F. BENTLEY.

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