(No Model.)

J. A. KASPAR, Jr.

YARN REEL.

No. 405,560. Patented June 18, 1889.

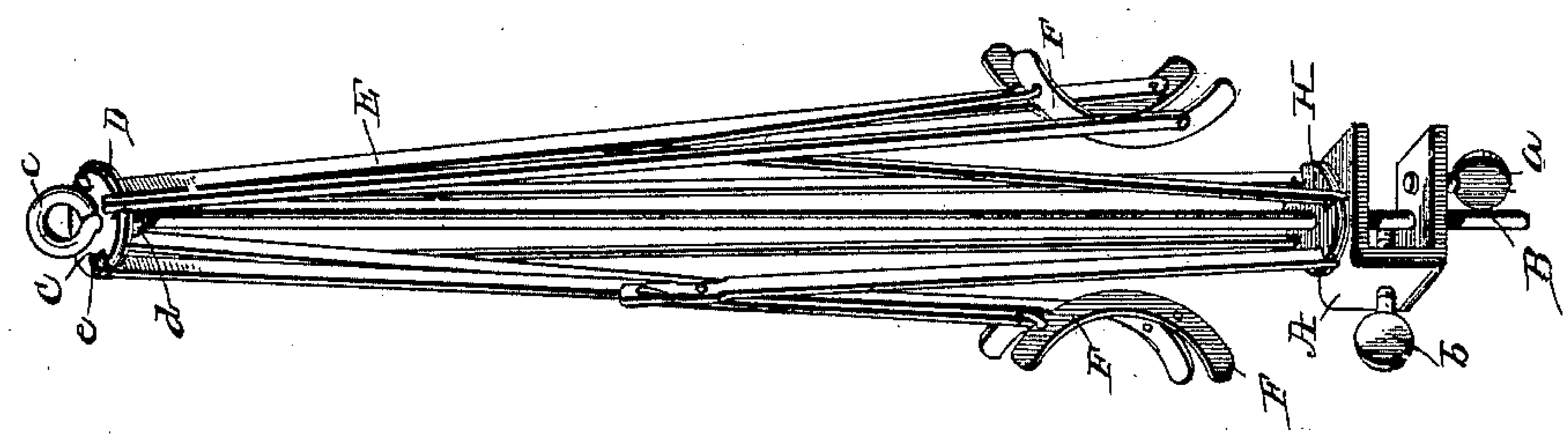

Fig. 2.

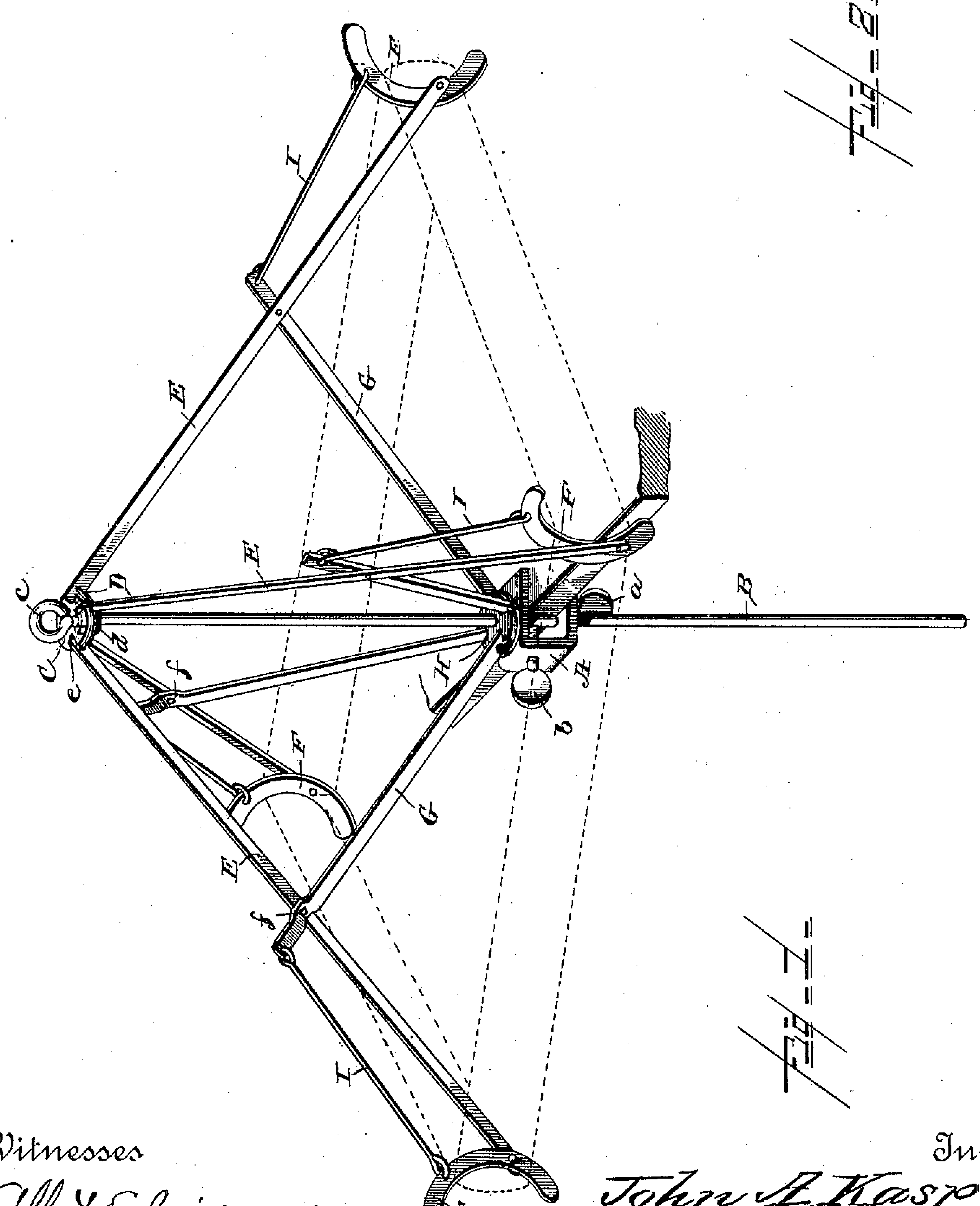

Fig. 1.

Witnesses
Albert Speiden.
E. H. Bond.

Inventor
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By his Attorney
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UNITED STATES PATENT OFFICE.

JOHN A. KASPAR, JR., OF POMEROY, OHIO.

YARN-REEL.

SPECIFICATION forming part of Letters Patent No. 405,560, dated June 18, 1889.

Application filed March 23, 1889. Serial No. 304,493. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. KASPAR, Jr., a citizen of the United States, residing at Pomeroy, in the county of Meigs and State of Ohio, have invented certain new and useful Improvements in Yarn-Reels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

This invention relates to certain new and useful improvements in yarn-reels, and it has for its object to provide a device of this character which shall be cheap and simple in its construction and which may be readily adjusted to accommodate skeins of differing sizes and yet have the skein near the table or other object to which the reel is attached.

The invention consists in the peculiar combinations and the novel construction, arrangement, and adaptation of parts, all as more fully hereinafter described, shown in the drawings, and then particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of my improved reel shown distended and attached to a table or other support. Fig. 2 is a perspective view of the reel detached and closed up.

Referring now to the details of the drawings by letter, A designates a three-sided piece of metal or other suitable material, the two parallel sides of which are adapted to embrace a table-leaf or other suitable support to which it is desired to attach the reel, as shown in Fig. 1, the same being held thereto by means of the thumb-screw *a*. The other side of the piece A has therethrough a screw-threaded opening, which is engaged by the thumb-screw *b*, which is designed to engage the vertical shaft of the reel in a manner and for a purpose hereinafter more fully explained. The two parallel horizontal sides of the piece A are formed with coincident holes, through which slides loosely the vertical rod or shaft B, the upper end of which is formed into an eye *c*, serving as a convenient means of suspending the reel when not in use and as a stop to prevent the upward displacement of the round block or disk C, which is loosely sleeved on said shaft and is prevented from downward movement by the nut or collar *d* fast on said shaft. This disk C is provided with a circumferential groove, in which is seated the wire D, which serves to hold the upper ends of the arms E together and to said disk, the ends of said arms being provided with holes through which the said wire loosely passes, so as to allow the arms to readily turn on the wire as a pivot, and the said upper ends of the arms being seated in the vertical slots *e* in said disk. The lower ends of said arms are pivotally attached to the semicircular yarn-holders or arms F at a point slightly below the center of said holders, and at a point below the center of their length the said arms E are pivotally secured to the arms G, near the upper ends thereof, the lower ends of said arms G being in turn pivotally connected to the sliding disk H on the vertical shaft B in a similar manner to the attachment of the upper bends of the arms E to the disk C. The arms G, at the points of their attachment to the arms E, are provided with the bends *f*, as shown, so as to throw their extended ends away from said arms E to avoid friction between the parts, and the extended ends of said arms G are pivotally connected to the semicircular yarn-holders F by means of the rods or links I, the connection of said rods or links with the holders being above the center thereof, as shown.

By the peculiar construction and connection of the parts the rods I at all times keep parallel with the arms E and the holders all move in unison.

The parts may be distended to suit any required size of skein by simply loosening the thumb-screw *b* and moving the shaft or rod B up or down, as the case may require, and when the holders assume such a position as will hold the skein it is desired to wind, the parts may be readily retained in such position by the tightening of said thumb-screw.

What I claim as new is—

1. The combination, with the vertical shaft, of the arms E, pivotally secured to the upper end thereof, the holders pivotally secured to the lower ends of said arms, the arms G, pivoted to the said arms and connected with the holders and also pivotally connected to a disk sliding on said shaft, substantially as shown and described.

2. The combination, with the vertical shaft and the arms E, pivotally connected to the upper end thereof, of the sliding disk on said shaft, the arms G, pivotally connected at one end to said disk, the holders pivotally secured to the lower ends of the arms E, below their center, and the rods pivotally connecting the upper ends of the arms G with the said holders above their center, substantially as shown and described.

3. The combination, with the vertical shaft and the arms E, pivotally connected with the upper end thereof, of the sliding disk on the shaft, the holders pivotally connected with the lower ends of the arms E, the arms G, pivotally connected at one end with the said disk and near the other end pivotally connected with the arms E and formed at their connection with said arms with the bends *f*, and the rods pivotally connecting the extended ends of the arms G with the holders, substantially as shown and described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN A. KASPAR, JR.

Witnesses:

LEWIS PAINE,

L. H. LEE.