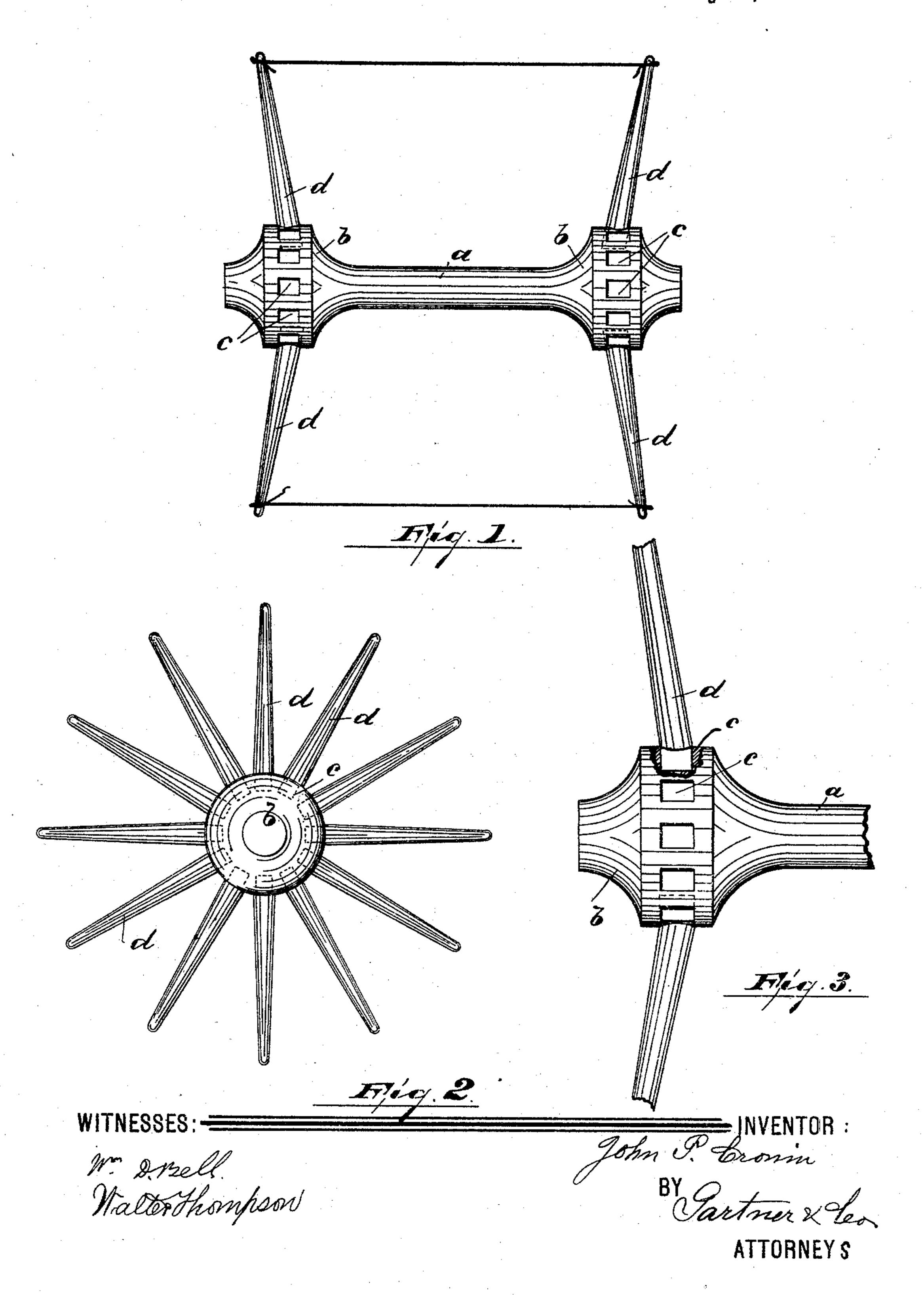
## J. P. CRONIN. SWIFT.

No. 497.016.

Patented May 9, 1893.



## United States Patent Office.

JOHN P. CRONIN, OF PATERSON, NEW JERSEY.

## SWIFT.

SPECIFICATION forming part of Letters Patent No. 497,016, dated May 9, 1893.

Application filed August 21, 1891. Serial No. 403, 274. (No model.)

To all whom it may concern:

Be it known that I, John P. Cronin, a citizen of the United States, residing at Paterson, county of Passaic, and State of New Jersey, have invented a certain new and useful Improvement in Swifts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a simple and cheap swift or reel for winding silk or other yarns, the arms of said swift extending at an angle to the hubs and being capable of adjustment in the sockets thereof, whereby the sagging or bagging of the silk or yarn between said arms is prevented and whereby the same swift may be used to wind different widths of the silk or yarn.

The invention consists in the new and improved swift, the number and arrangement of its adjustable arms and in the construction and arrangement of its various parts substantially as will hereinafter be more fully set forth and claimed.

In the drawings: Figure 1, is a front eleva-30 tion of a swift or reel embodying my improvement. Fig. 2 is an end view of the same, and Fig. 3 a detail view showing the arrangement and construction of the sockets in the hub and of the adjustable arms placed therein.

In said drawings a represents the shaft or axle of the swift, provided at or near its ends with the hubs b. These hubs b b are each provided with a series of sockets c shown in the drawings as rectangular in shape and adapted to receive the correspondingly shaped ends of the arms d of the swift. These arms d are bent at an angle to said hubs c for the purpose hereinafter described and are at least ten in number and their ends are connected by cords or rods upon which the silk or yarn is wound.

Heretofore swifts have been made having but six arms which were not bent outwardly

from the perpendicular line of the hubs, and swifts of more than six arms have also been 50 made in which the arms were arranged at right angles to the hubs. In all the swifts heretofore used, however, the sockets were circular in shape, and the width of the swift was in every case not capable of adjustment 55 to accommodate the width of silk or other yarn to be reeled. Where but six arms were used in the swift the silk was wound in a polygonal shape and not approximately cylindrical. As a consequence the skein was fre- 60 quently tangled and could not be unwound smoothly. By my present invention the use of at least ten arms insures an approximately cylindrical shape to the reeled skein.

The arms of the swift may be removed from 65 the sockets and reversed so that their ends project inward or outward according to the width of the skein to be reeled. In the form shown in the drawings wherein the bases of the arms and the sockets are rectangular in 70 cross-section there can be but two adjustments given to the arm as will be manifest. When the arms extend outward as shown in the drawings the swift may be used to reel wide skeins and when the arms are turned in 75 ward the swift may be used to reel the narrow skeins.

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

A swift for reeling silk and the like consisting of an axle, hubs placed at or near the ends thereof and having in their peripheries ten or more sockets of polygonal shape, and curved or bent arms having their bases shaped 85 to conform to the shape of said sockets and adapted to be received therein, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of 90 August, 1891.

JOHN P. CRONIN.

Witnesses:

ALFRED GARTNER, FRANCIS SEYMOUR.