

May 20, 1924.

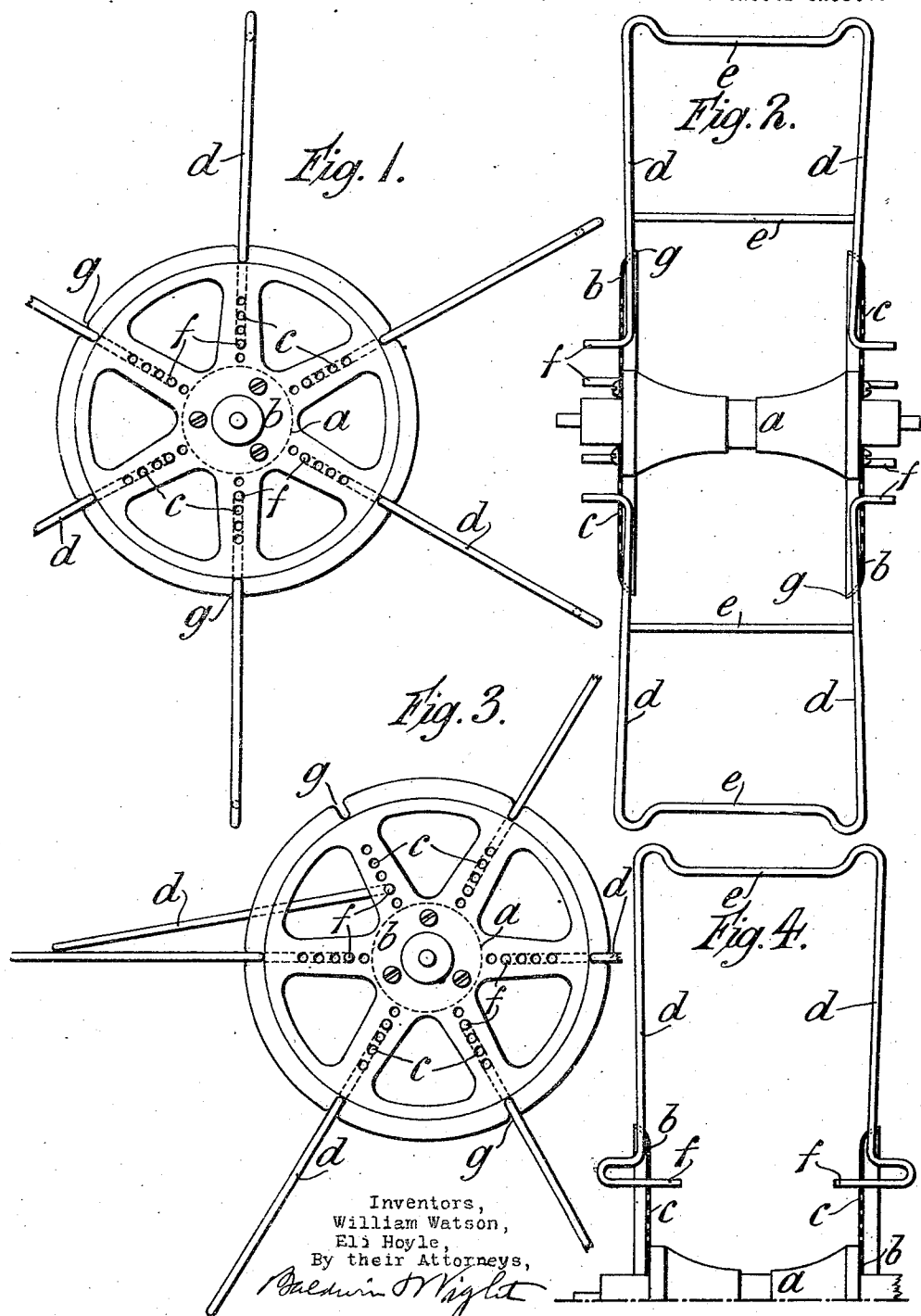
1,494,725

W. WATSON ET AL

HANK CARRIER

Filed Nov. 27, 1922

2 Sheets-Sheet 1



May 20, 1924.

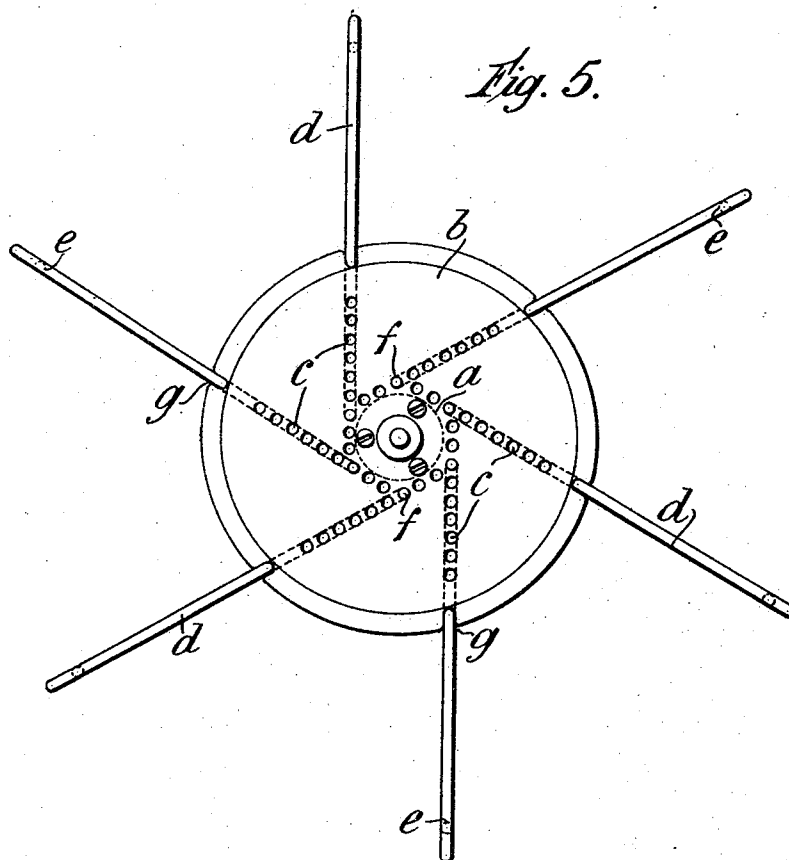
W. WATSON ET AL

1,494,725

HANK CARRIER

Filed Nov. 27, 1922

2 Sheets-Sheet 2



Inventors,
William Watson
Eli Hoyle,

By their Attorneys,

Baldwin Wright

UNITED STATES PATENT OFFICE.

WILLIAM WATSON AND ELI HOYLE, OF BRADFORD, ENGLAND, ASSIGNORS TO LISTER & CO. LIMITED, OF BRADFORD, ENGLAND.

HANK CARRIER.

Application filed November 27, 1922. Serial No. 603,529.

To all whom it may concern:

Be it known that we, WILLIAM WATSON, a subject of the King of Great Britain, residing at Heaton Rise, Bradford, England, and ELI HOYLE, a subject of the King of Great Britain, residing at 31 Haslingden Drive, Bradford, England, have invented a new and useful Improvement in Hank Carriers, of which the following is a specification.

This invention relates to hank carriers or swifts upon which yarn or the like is carried when being wound or unwound into or from hanks or skeins. A swift comprises a number of supports or arms extending outwards from an axle or spindle.

The object of this invention is to provide a simple form of swift in which one of the supports can be readily moved to enable a hank to be placed upon it or removed from it and can also be readily expanded or contracted to take hanks of different sizes.

Our invention is illustrated by the accompanying drawings, in which Figure 1 is a side elevation, Figure 2 a section, Figure 3 a side elevation showing one of the supports collapsed, and Figure 4 is a view similar to Figure 2 showing a modified form. Figure 5 is a side elevation showing a further modification.

In the drawings, *a* is an axle to each side of which is secured a plate or disk *b* having in it a number of radial sets of holes *c*. The two plates are fixed to the axle in like positions so that the sets of holes in the one plate are opposite those in the other. Each support is formed of a length of wire which is bent so that it has two parallel sides *d, d*, connected by a cross piece *e*, whilst at the end of each side is a short piece *f* at right angles to the side. Thus by pinching the two sides *d, d*, together the two short pieces *f, f*, can readily be inserted into two holes *c, c*, in the plates and the support can therefore pivot about its two short pieces *f, f*. The rim or periphery of each plate is flanged inwards and has in it slots *g, g*, in line with the sets of holes so that the sides *d, d*, of the support will lie in these slots and thus the support will be firmly secured to the plates.

When it is desired to place a hank upon the swift or to remove a hank from the swift the two sides *d, d*, of one of the supports are pinched towards one another so as to bring the sides of the support out of the slots *g, g*, whereupon it can be turned down, as seen in Figure 3, thus reducing the perimeter of the swift. Further the perimeter of the swift can be adjusted to suit hanks of different sizes by taking one or more of the supports out of one pair of holes *c, c*, and inserting it in another.

If desired the short pieces of a support may be turned inwards instead of outwards, as shown in Figure 4, in which case the plates should be flanged outwardly instead of inwardly. A support will then be adjusted by expanding it instead of pinching it.

In the modified form shown in Figure 5 the rows of holes *c* are not arranged radially.

What we claim is:—

1. In a hank carrier, the combination of an axle, two plates secured thereto and a number of supports carried by the plates, one of such supports being so pivotally mounted in the plates that the distance of its pivots from the axis of the axle can be varied.

2. In a hank carrier, the combination of an axle, two plates secured thereto, each having in it a number of sets of holes, the holes of each set being at different distances from the axis of the carrier, a number of supports, each fitting into one hole in each plate, and means for normally retaining the supports in fixed positions relatively to the plates.

3. In a hank carrier, the combination of an axle, two plates secured thereto, each plate having in it a number of radial holes and an intumed slotted edge and a number of supports each fitting into a hole in each plate and lying in a slot in each plate.

In testimony that we claim the foregoing as our invention we have signed our names this 10th day of November 1922.

WILLIAM WATSON.
ELI HOYLE.