

# Espacenet my patents list on 08-04-2015 09:27

21 items in my patents list Displaying selected publications

Publication	Title	Page
GB146750 (A)	Improvements in fishing reels	2

# PATENT SPECIFICATION



Application Date : Sept. 18, 1919. No. 22,944/19. 146,750

Complete Left : Feb. 16, 1920. Complete Accepted : July 15, 1920.

## PROVISIONAL SPECIFICATION.

### Improvements in Fishing Reels.

We, FRANK BAKER AND SONS LIMITED, Manufacturers, and MARTIN FRANK BAKER, Director, both of 27, 28 and 29, St. Paul's Square, Birmingham, do

5 hereby declare the nature of this invention to be as follows:-

This invention relates to brakes for fishing reels and of that type comprising a substantially U-shaped spring housed

- 10 within the hollow spindle of the cage of the reel and provided at its extremities with shoes or friction members adapted to be forced through slots or openings in the said spindle so as to engage with the
- 15 inner walls of the drum spindle, and thus exert a drag upon the drum, or completely prevent the rotation of the latter, as desired, the shoes or friction members being more or less forced through the
- 20 slots or openings in the cage spindle by means of a taper-plug which is adapted to be screwed more or less into the end of the latter so as to engage with and force apart the arms of the spring.
- $\mathbf{25}$ Previously the shoes or friction members have comprised metal blocks suitably secured to the extremities of the arms of the spring, but according to the present invention it is proposed to form the shoes
- 30 or friction members by bending or curling back the extremities of the spring arms, thus ensuring a more elastic or flexible drag or braking effect being obtained than where solid blocks are 35 employed.

Thus, in carrying out the invention, the improved brake is formed from a metal strip which is bent up at about the middle into an elongated U-formation,

40 constituting a pair of spring arms. The

extremities of these arms are curled outwards, the said arms being bent back at a short distance from the said extremities, so as to form outwardly extending shoes or friction members. The U-shaped 50 spring is contained within the hollow spindle of the cage of the reel, the outwardly extending shoes or friction members being adapted to extend through longitudinal slots cut in the walls of the 55 cage spindle so that they may be engaged with the inside walls of the drum spindle and exert a drag or braking effect on the drum, or entirely prevent its rotation. The shoes or friction members normally 60 lie flush with or slightly below the outer walls of the cage spindle. They are adapted, however, to be extended beyond the said walls, so as to engage with the inner walls of the drum spindle by means 65 of a conical or taper ended screw-plug which is adapted to be screwed more or less into the end of the cage spindle so that its conical end forces apart the spring arms, consequently forcing the 70 friction members more or less through the slots in the cage spindle.

Owing to the friction members being formed by curling or bending over the ends of the spring arms, as above 75 described, a more flexible or elastic drag or braking effect may be obtained, than where the friction members consist of solid blocks.

Dated this 17th day of September, 1919. 80 H. N. SKERRETT, A.I.Mech.E., A.I.A.E.,

Chartered Patent Agent,

24, Temple Row, Birmingham, Agent for Applicants.

85

#### COMPLETE SPECIFICATION.

#### Improvements in Fishing Reels.

We, FRANK BAKER AND SONS LIMITED, and MARTIN FRANK BAKER, Director,

45 both of 27, 28, and 29, St. Paul's Square, [Price 1/-]

Birmingham, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly

described and ascertained in and by the following statement:---

This invention relates to brakes for fishing reels and of that type comprising 5 a pair of spring arms housed within the hollow spindle of the cage of the reel, and provided at its extremities with shoes or

- friction members adapted to be forced through slots or openings in the said 10 spindle so as to engage with the inner
- walls of the drum spindle, and thus exert a drag upon the drum, the shoes or friction members being preferably more or less forced through the slots or openings 15 in the cage spindle by means of a taper-
- 15 in the cage spindle by means of a taperplug which is adapted to be screwed into the end of the latter so as to engage with and force apart the arms of the spring. Previously the brake shoes or friction
- 20 members have comprised metal blocks suitably secured to the extremities of the arms of the spring, but according to the present invention it is proposed to form a shoe or friction member upon one or each of
- 55 the spring arms by bending or curling back the extremity of the said arm or arms, thus ensuring a more elastic or flexible drag or braking effect being obtained than where solid blocks are 30 employed.
  - Figure 1 of the accompanying drawings represents a cross-section through a fishing reel, having a brake constructed in accordance with this invention.
- 35 Figure 2 is a section on the line x Figure 1.

Figure 3 shows elevational views of the cage spindle and brake operating screw before being assembled.

40 Figure 4 represents several views of the brake member.

The same reference numerals indicate corresponding parts in each of the figures.

- Referring to the drawings, the 45 improved brake is formed from a metal strip which is bent up at about the middle into an elongated U-formation, constituting a pair of spring arms 1. The extremities of these arms 1 are curled 50 outwards, the said arms being bent back at a short distance from the said
  - extremities, so as to form outwardly extending shoes or friction members 2.

The U-shaped spring is contained within the hollow spindle 3 of the cage of the 55reel, the outwardly extending shoes or friction mmbers 2 being adapted to extend through longitudinal slots or openings 4 cut in the walls of the said cage spindle 3 so that they may be engaged 60 with the inside walls of the drum spindle 5 and exert a drag or braking effect on the drum 6. The shoes or friction members 2 normally lie flush with or slightly below the outer walls of the cage 65 spindle 3. They are adapted, however, to be extended beyond the said walls, so as to engage with the inner walls of the drum spindle 5, by means of a conical or taper ended screw-plug 7 which is 70 adapted to be screwed more or less into the end of the cage spindle 3 so that its conical end forces apart the spring arms 1, consequently forcing the brake shoes 2 more or less through the slots 4 in the 10 said cage spindle.

Owing to the brake shoes 2 being formed by curling or bending over the ends of the spring arms 1, as above described, a more flexible or elastic drag or braking effect may be obtained, than where the friction members consist of solid blocks.

Having now particularly described and ascertained the nature of our said invention, and in what manner the same is to be performed, we declare that what we claim is:—

1. In fishing reels of the type herein referred to; forming the brake member from a single strip of metal which is bent 90 up into a pair of spring arms, the end of one or both of the said arms being curled back to form a shoe or friction member, substantially as described.

2. In fishing reels of the type herein 95 referred to; the improved construction of brake member, substantially as herein described and set forth by the accompanying drawings.

Dated this 14th day of February, 1920. 100

- H. N. SKERRETT, A.I.Mech.E.,
- Chartered Patent Agent,
- 24, Temple Row, Birmingham, Agent for Applicants.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.- 1920.

