

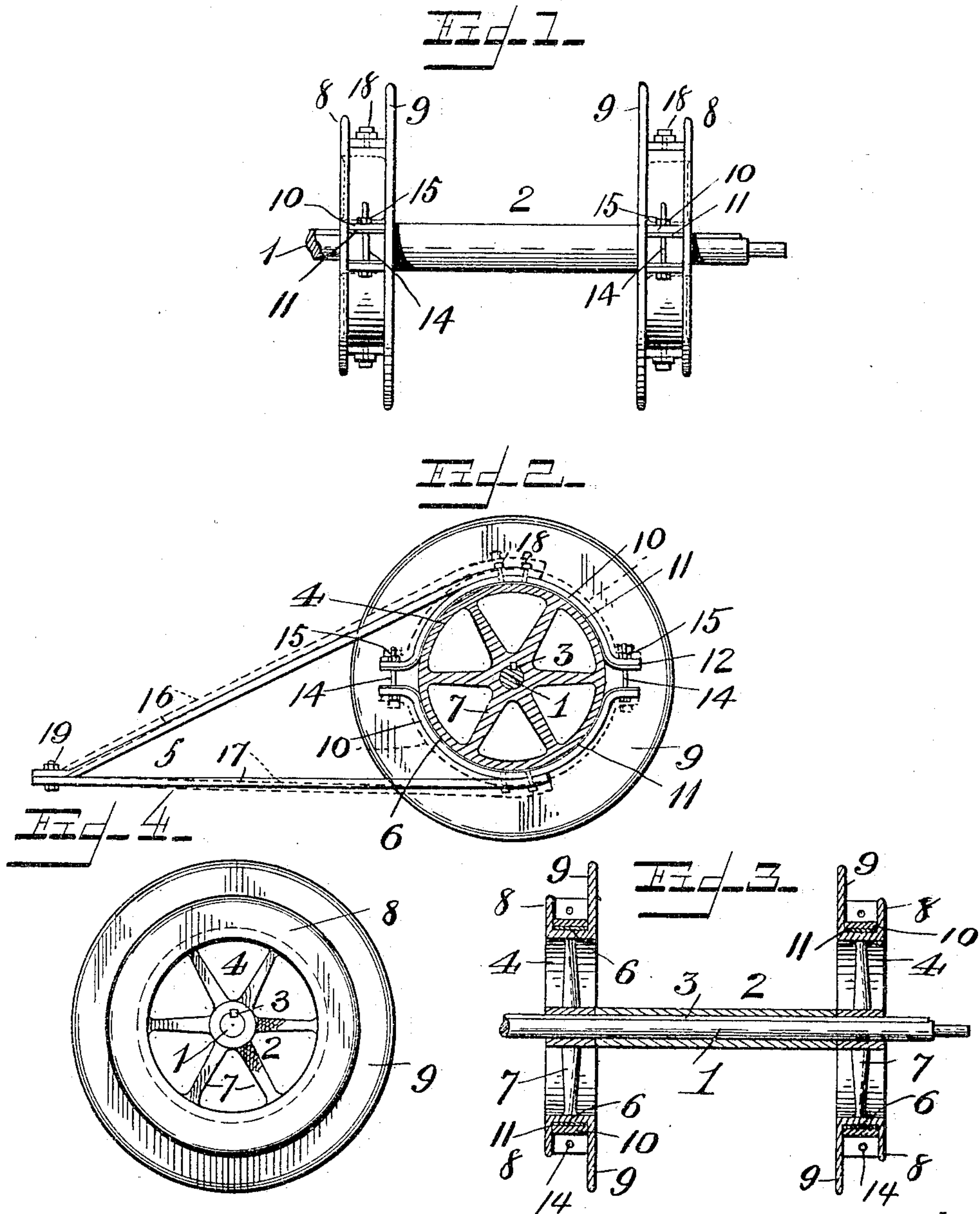
No. 766,086.

PATENTED JULY 26, 1904.

W. I. WHITEHURST.
FRICTION LET-OFF FOR LOOM BEAMS.

APPLICATION FILED NOV. 2, 1903.

NO MODEL.



Inventor

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Witnesses

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WALTER I. WHITEHURST, OF BALTIMORE, MARYLAND.

FRICTION LET-OFF FOR LOOM-BEAMS.

SPECIFICATION forming part of Letters Patent No. 766,086, dated July 26, 1904.

Application filed November 2, 1903. Serial No. 179,615. (No model.)

To all whom it may concern:

Be it known that I, WALTER I. WHITEHURST, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Friction Let-Offs for Loom-Beams; and I do 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 ap-
 10 pertains to make and use the same.

My invention relates to improvements in tension devices or friction let-offs for loom-beams.

The object of my invention is to provide a
 15 device of this character which will be simple in construction, durable in use, efficient in operation, and comparatively inexpensive of production.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangements of parts, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is an elevation of a loom-beam, showing the application of my invention thereto. Fig. 2 is a vertical section taken on the line 2 2 of Fig. 1. Fig. 3 is a horizontal section taken on the line
 30 3 3 of Fig. 2. Fig. 4 is an end elevation showing the shaft, the loom-beam keyed thereto, and one of the friction-wheels on the loom-beam.

Referring to the drawings by numeral, 1 denotes a shaft, and 2 a loom-beam keyed upon the same, as shown at 3. Said beam is formed at each of its ends with friction brake-wheels 4, with which my improved tension devices or friction let-offs 5 coact. Each of said wheels
 40 comprises a friction-rim 6, supported from the center of the beam by spokes 7, and said rim is formed with a right-angular flange 8 at its outer edge and a similar but larger flange 9 at its inner edge.

One of my improved friction let-off devices 5 is preferably provided at each end of the loom-beam to engage one of the brake-wheels 4. Each of said let-off devices comprises two semicircular brake straps or bands 10, adapted to lie between the flanges 8 and 9 and to en-
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gage the rim 6 at diametrically opposite faces or sides. Said brake-bands 10 are preferably of metal, as shown, having their inner or friction surface faced with any suitable material, as shown at 11, and having their adjacent bent
 55 ends 12 adjustably connected by a tension device, preferably in the form of a bolt 14, which is passed through registering apertures in said ends 12 and provided with an adjusting-nut 15 upon its screw-threaded end. It
 60 will be seen that by adjusting the nuts 15 the tension of the brake-bands upon the brake-wheel may be readily controlled. In order to support the brake-bands and to prevent them rotating with the loom-beam, attaching-braces
 65 16 and 17 are provided, each of said braces having one of its ends secured by screws or other fastening means 18 to the center of the outer side of one of the brake-bands. The
 70 opposite ends of the braces are secured together, as at 19, and suitably fixed to a stationary portion of the loom at any desired point. The braces being preferably of spring metal have a tendency to spring apart, and thus move the two brake-bands away from
 75 each other, as shown in dotted lines in Fig. 2.

From the foregoing description, taken in connection with the accompanying drawings, the operation and advantages of my invention will be readily understood by one skilled in
 80 the art to which it relates, and a further explanation is deemed unnecessary.

It will be understood that the device may also be used upon the take-up beam of a loom and that various changes in form, proportion,
 85 and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. A tension device for loom-beams comprising brake-bands adapted to coact with said beam, an adjusting device for drawing the ends
 95 of said straps together, and braces adapted to hold said bands stationary and to force the same apart, substantially as described.

2. A tension device for loom-beams comprising two semicircular brake-bands adapted
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to coact with the loom-beam, bolts adjustably connecting the ends of said bands, and spring-braces for connecting said braces to the loom, substantially as described.

- 5 3. A let-off for loom-beams comprising two semicircular brake-bands having their opposing faces lined and their adjacent bent ends apertured, adjusting screw-bolts in the apertures of said ends and adapted to move said
10 bands toward each other, and braces connect-

ed to each of said bands and to a stationary portion of the loom and adapted to move said bands apart, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses. 15

WALTER I. WHITEHURST.

Witnesses:

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