No. 752,881. PATENTED FEB. 23, 1904.

F. J. BALL.

BAND BRAKE.

APPLICATION FILED NOV. 5, 1903.

NO MODEL.

Fig. 4.

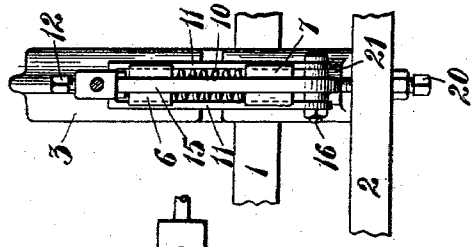


Fig. 2.

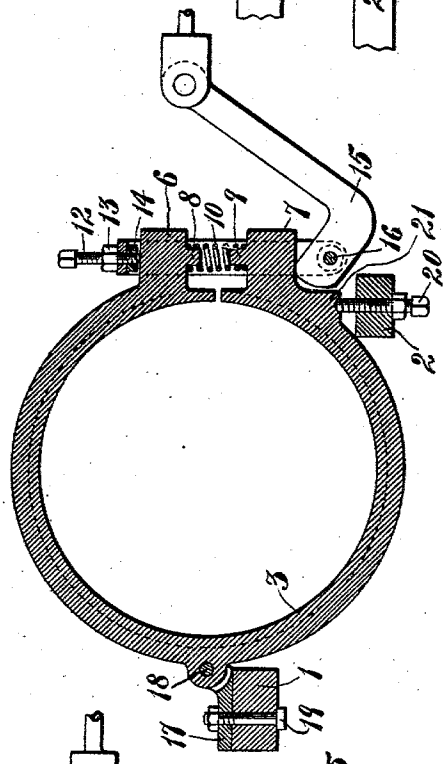


Fig. 3.

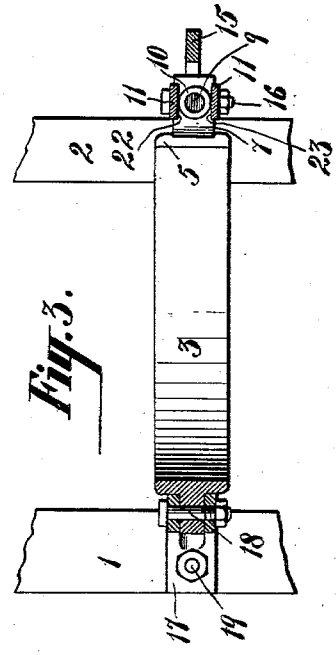
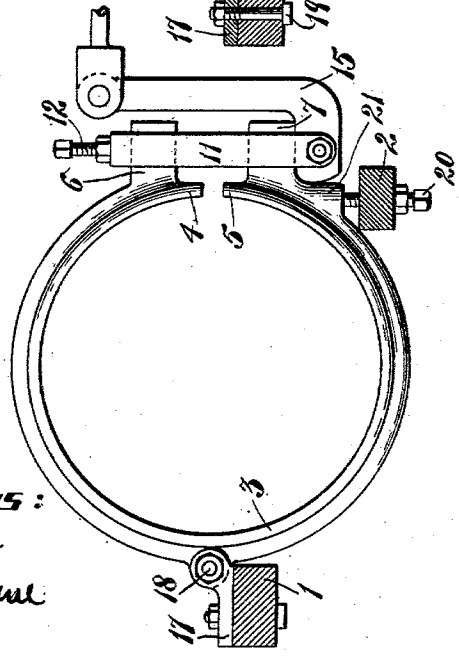


Fig. 1.



Witnesses:

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by attorneys

Brown & Seward

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 752,881. Patented February 23, 1904.

UNITED STATES PATENT OFFICE.

FREDERIC J. BALL, OF NEW YORK, N. Y.

BAND-BRAKE.

SPECIFICATION forming part of Letters Patent No. 752,881, dated February 23, 1904.

Application filed November 5, 1903. Serial No. 179,894. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC J. BALL, a citizen of the United States, and a resident of the borough of Brooklyn, in the city and State of New York, have invented a new and useful Improvement in Band-Brakes, of which the following is a specification.

My invention relates to an improvement in band-brakes, and has for its object to provide a brake which is particularly applicable for heavy use, such as that which is required of a brake used in connection with the transmission-gear of automobiles.

A further object is to provide certain improvements in the construction of the brake whereby a very powerful braking effect is obtained upon the drum or pulley in connection with which the brake is used.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 represents the brake in side elevation, showing the means for mounting the brake, the brake being shown in its released position. Fig. 2 is a vertical section through the same with the brake shown in its closed position. Fig. 3 is a horizontal section through the brake, and Fig. 4 is a front view of the same.

The frame-sections to which the band-brake is attached are denoted by 1 and 2.

The brake comprises a split ring 3 and means for drawing the ends 4 and 5 of the ring toward each other and forcing them away from each other, as follows: The ring is provided at its ends 4 and 5 with forwardly-extended lugs 6 and 7. The inner faces of these lugs are provided with teats 8 and 9, which serve to retain an expansion-spring 10 in position between the lugs 6 and 7, tending to force the ends 4 and 5 of the split ring apart to release the brake. A loop 11 embraces the lugs 6 and 7 and is adjustably engaged with the outer face of the lug 6 by means of a set-screw 12 and lock-nuts 13 14. A cam-lever 15 is hinged at 16 to the loop 11 in position to engage the outer face of the lug 7, so that when the lever is rocked in one direction it will positively force the ends 4 and 5 of the split ring toward each other to contract the ring and set the brake. The long arm of the lever 15 may be provided with any suitable means for rocking the lever. The spring 10 serves to assist the natural spring in the ring tending to return the brake to its normal released position. The loop 11 is retained upon the lugs 6 and 7 by providing the sides of the lugs with channels 22 23, which serve as guides for the sides of the loop.

The ring 3 is hinged to the frame-section 1 at the back of the ring by providing a strap 17, hinged at 18 to the ring, secured to the frame-section by one or more bolts or other means 19. The ring is adjusted for centering it with respect to the drum or pulley to be engaged (not shown herein) as follows: A set-screw 20 is carried by the frame-section 2, the inner end of which screw bears against a shoulder 21, carried by the ring adjacent to its split end.

The brake constructed as hereinbefore set forth may be made very powerful and suitable for the heavy work for which it is intended.

It is evident that changes might be resorted to in the form, construction, and arrangement of the several parts without departing from the spirit and scope of my invention. Hence I do not wish to limit myself strictly to the structure herein set forth; but

What I claim is—

1. A band-brake comprising a continuous split ring having lugs at its ends, a loop adjustably engaged with one of the lugs and a cam-lever hinged to the loop in position to engage the other lug for drawing the ends toward each other to contract the ring.

2. A band-brake comprising a continuous split ring having lugs at its ends, a loop adjustably engaged with one of the lugs, a cam-lever hinged to the loop in position to engage the other lug for drawing the ends toward each other to contract the ring and a spring interposed between the lugs tending to force the ends apart.

3. Two frame-sections and a band-brake carried thereby comprising a split ring hinged intermediate its ends to one frame-section, means for adjusting the ring with respect to the other frame-section and means for posi-

tively drawing the ends of the ring toward each other to contract the ring.

4. A band-brake comprising a continuous split ring having lugs at its ends, a loop engaging one of the lugs, a cam-lever engaging the other lug for drawing the ends toward each other to contract the ring and guides on the lugs for retaining the loop in position thereon.

5. A band-brake comprising a continuous split ring having lugs at its ends, said lugs being provided with guides on their sides, a loop embracing the lugs and engaged by the said guides for retaining the loop in position on the lugs, the said loop engaging one of the lugs and a cam-lever hinged to the loop in position to engage the other lug for drawing the ends toward each other to contract the ring.

6. A band-brake comprising a continuous split ring having lugs at its ends, a loose loop embracing the lugs, a device carried by the loop for adjusting one end of the loop with respect to its adjacent lug and a cam-lever hinged to the other end of the loop in position to engage its adjacent lug for drawing the ends of the ring toward each other to contract the same.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 28th day of October, 1903.

FREDERIC J. BALL.

Witnesses:
FREDK. HAYNES,
C. S. SUNDGREN.