

H. CHILSON.

Friction Mechanism for Yarn Beams.

No. 139,236.

Patented May 27, 1873.

Fig. 1.

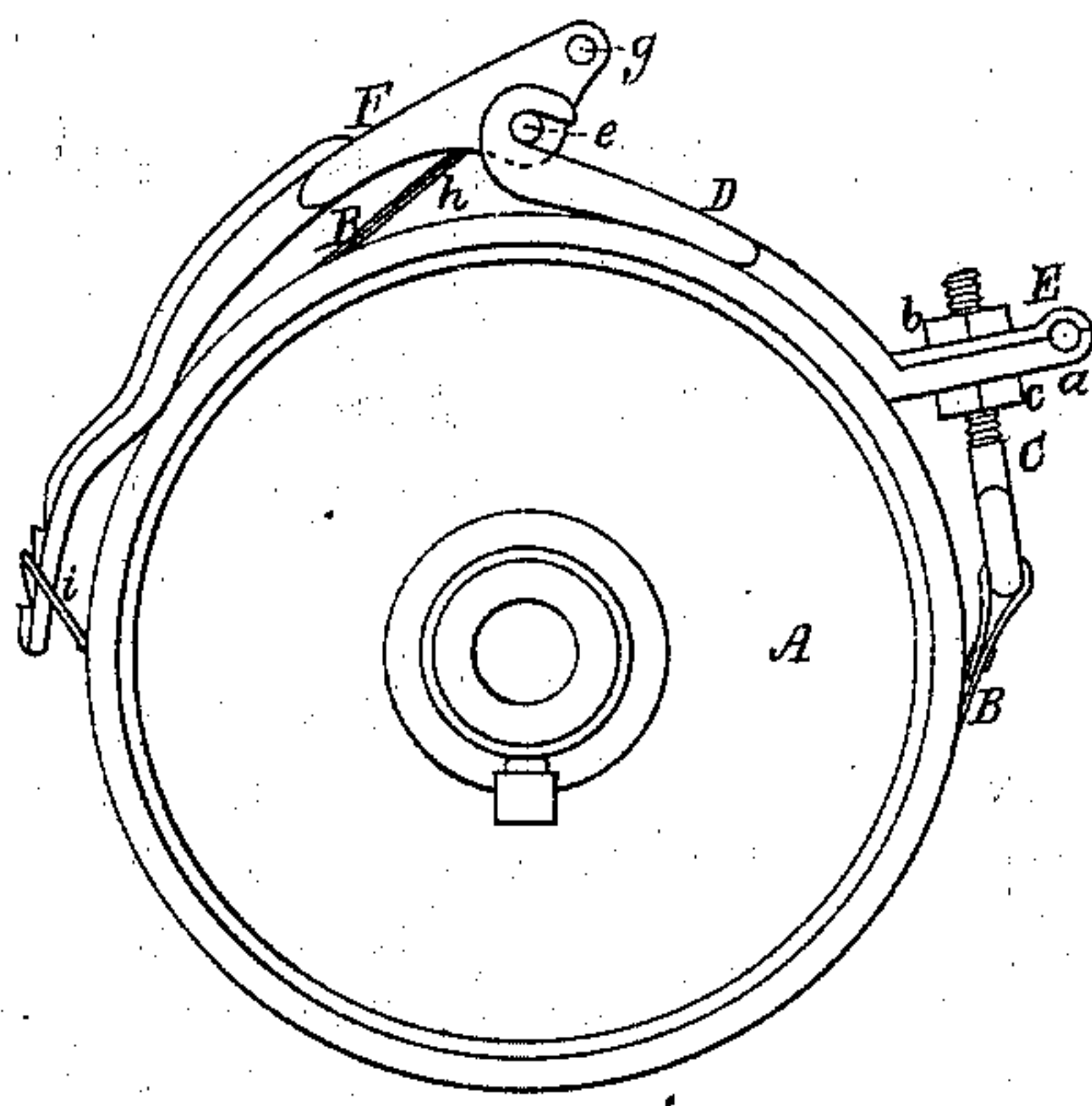


Fig. 2.

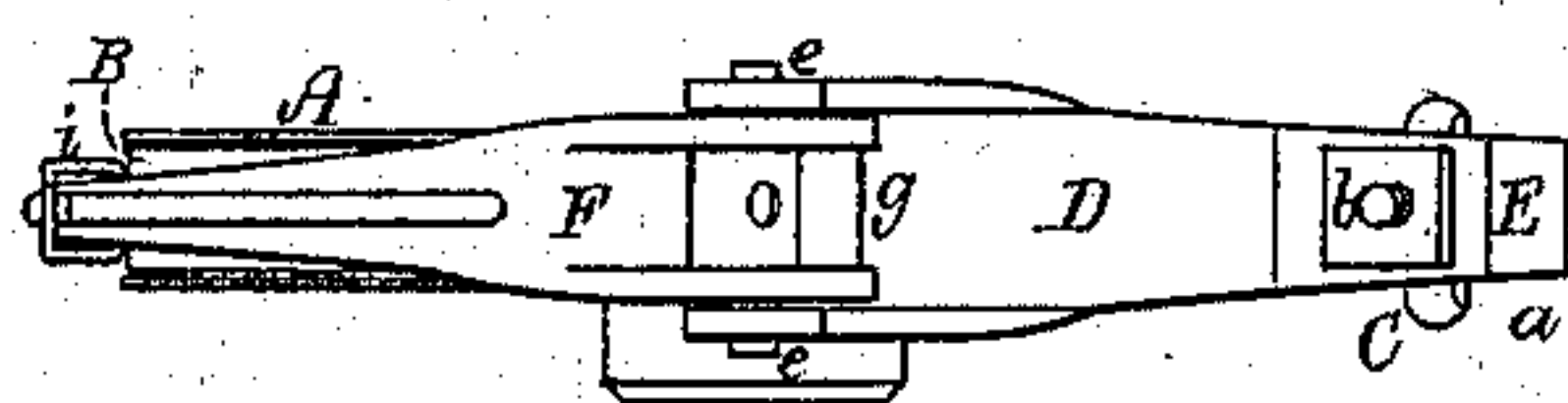
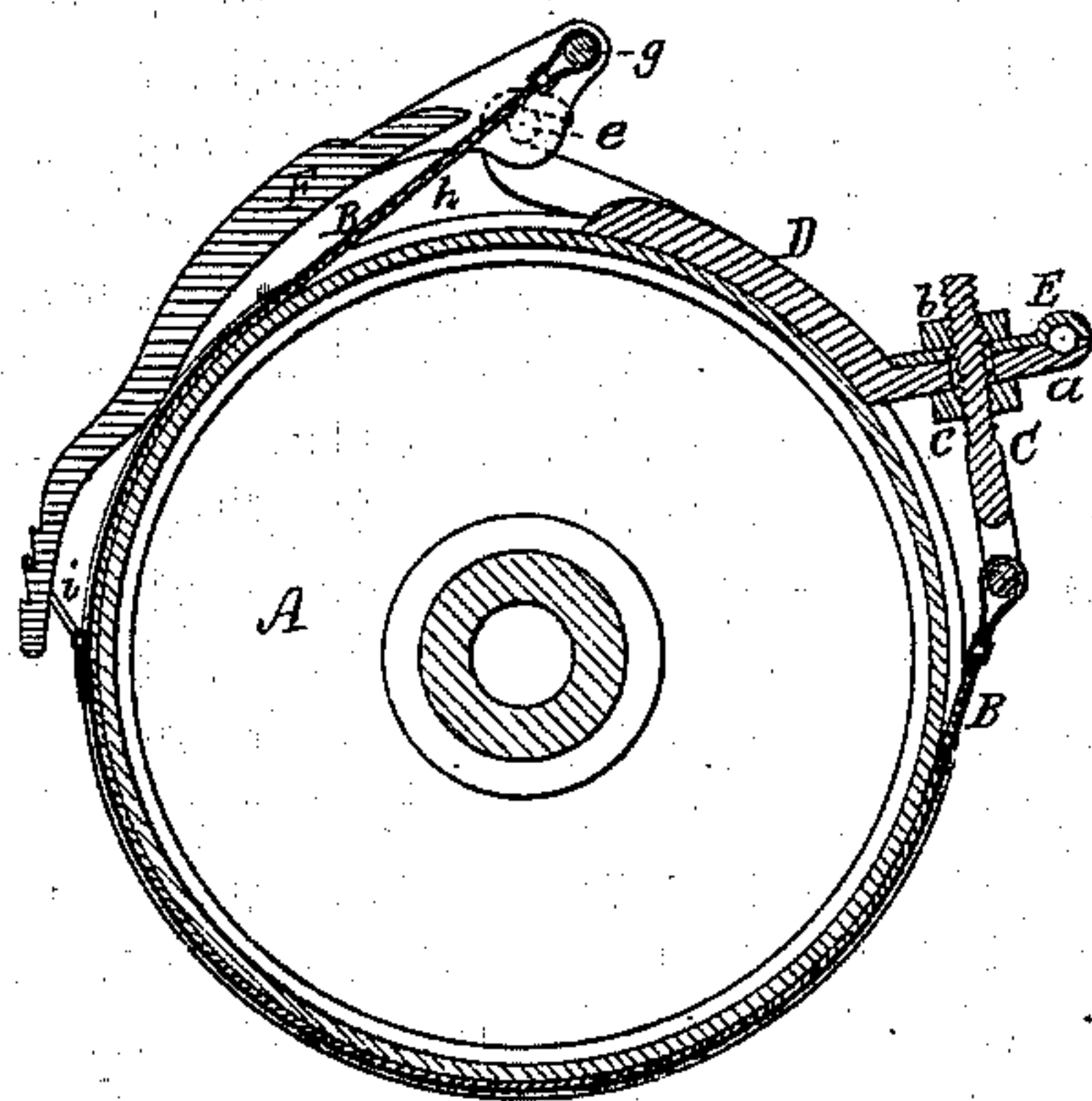


Fig. 3.



Witnesses.

S. W. Piper.

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UNITED STATES PATENT OFFICE.

HELM CHILSON, OF WARE, MASSACHUSETTS.

IMPROVEMENT IN FRICTION MECHANISMS FOR YARN-BEAMS.

Specification forming part of Letters Patent No. **139,236**, dated May 27, 1873; application filed April 30, 1873.

To all whom it may concern:

Be it known that I, HELM CHILSON, of Ware, of the county of Hampshire and State of Massachusetts, have invented a new and useful Loom Yarn-Beam Friction Apparatus, and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawing, of which—

Fig. 1 is a side elevation; Fig. 2, a top view, and Fig. 3, a longitudinal section of it as applied to the friction-head or wheel of a yarn-beam.

It consists mainly of a brake, a band, and a lever, constructed, combined, and arranged together and with the friction-wheel, substantially in manner as hereinafter described, and as represented in the drawing.

In such drawing, A denotes the yarn-beam head or friction-wheel, it being grooved on and around its periphery to receive the friction-band B, which extends partially around such periphery, and at one end is attached to a screw, C, or may be connected directly with the brake D. This screw extends through a projection or part, *a*, of the said friction-brake D, and a clamp-jaw, E, arranged thereon; the said parts *a* and E being formed as shown, and are for clamping or connecting the brake to a staple or other proper device projecting from the loom-frame. Two nuts, *b c*, arranged on the screw, one below and the other above the said parts *a* E, serve not only to force toward each other the said parts, but as a means of adjusting the friction-band to the wheel and the lever F. The brake which bears against the periphery of the wheel is furcated and hooks upon ears or fulcrums *ee*, projecting in opposite

directions from a lever, F, arranged and formed as represented. This lever is also forked at its upper part, and has a pin, *g*, extending from one to the other of the prongs of the fork, the upper end of the friction-band being fixed to such pin.

The band B I usually make of steel, with a lining, *h*, of leather or other suitable material fixed to it on its inner side. A metallic loop, *i*, pivoted to the band serves, when slipped over the longer arm of the lever, to hold down such arm.

By raising upward the said arm of the lever the pressure of the friction-brake and band upon the wheel may be suddenly relieved, so as to admit of the ready forward or backward movement of the yarn-beam, the advantage of which will be apparent to weavers. It also affords a means of regulating the amount of friction, or of increasing or diminishing it, on the wheel, as circumstances may require.

I claim as my invention as follows, viz:

1. The combination of the brake D, the lever F, and the friction-band B, arranged as set forth.

2. The combination of the screw C and nuts *b c*, the brake D, the lever F, and the friction-band B, arranged as represented.

3. The combination of the clamp-jaw *a* E, the screw C, the nuts *b c*, the brake D, the friction-band B, and the lever F, all being arranged and applied together substantially in manner, and to operate with the yarn-beam head or wheel A of a loom, as stated.

HELM CHILSON.

Witnesses:

R. H. EDDY,
J. R. SNOW.