

(No Model.)

T. HALL & J. NEWTON.
CAP SPINNING FRAME.

No. 284,549.

Patented Sept. 4, 1883.

Fig. 1.

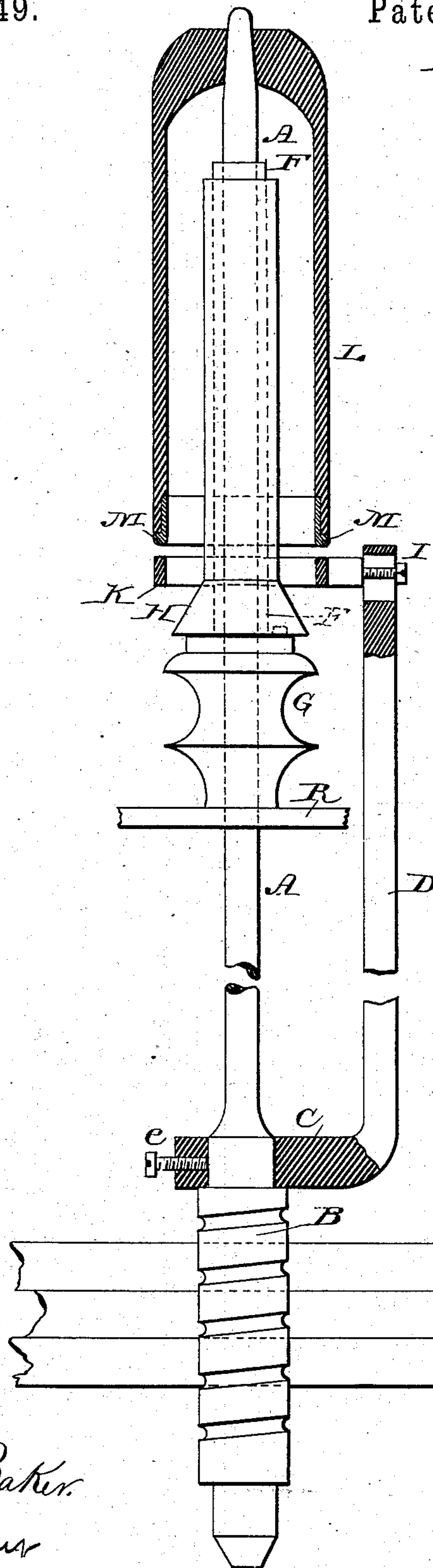
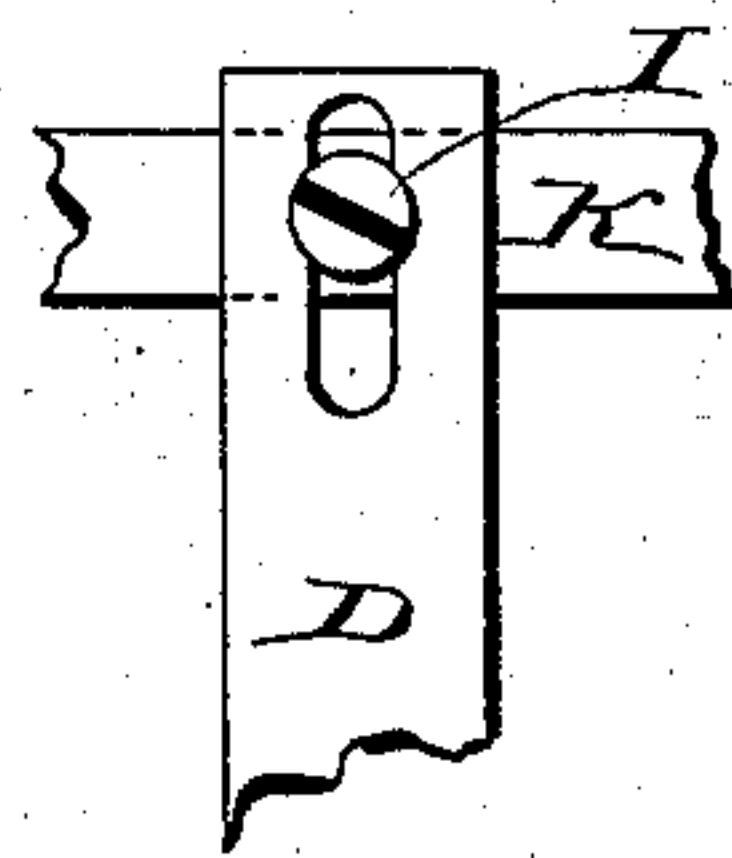


Fig. 2.



WITNESSES

Chas. H. Baker.
Jas. L. Talbot

INVENTORS:

Jas. Newton,
Thos. Hall,
H. F. Curtis
Attorney

UNITED STATES PATENT OFFICE.

THOMAS HALL AND JAMES NEWTON, OF LAWRENCE, MASSACHUSETTS,
ASSIGNORS TO SAID HALL.

CAP SPINNING FRAME.

SPECIFICATION forming part of Letters Patent No. 284,549, dated September 4, 1883.

Application filed November 4, 1882. (No model.)

To all whom it may concern:

Be it known that we, THOMAS HALL and JAMES NEWTON, citizens of the United States, residing at Lawrence, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Cap Spinning and Twisting, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain improvements in cap spinning frames; and it has for its objects to render the parts between which the yarn passes on its way to the bobbin more durable than heretofore, and to produce a more uniform and smoother yarn. These objects we accomplish by the means illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of our invention, partly in section; and Fig. 2 is a detail of the upper end of the standard D, showing the manner of adjusting the ring K.

The letter A indicates the spindle, having a screw, B, at its lower end, by means of which it may be adjustably secured to the spindle-rail of the spinning-machine. To the said spindle is secured the collar C of a vertical standard, D, the said collar setting over the spindle, and having a clamping-screw, E, by means of which it may be secured in position.

30 The letter F indicates the sleeve, which consists of a hollow tube having the usual whirl, G, at its lower end, which rests upon the lifter-rail R, so that the vertical reciprocating motion of the rail will be communicated to the sleeve and bobbin in the usual manner. The said sleeve is arranged to rotate upon the spindle in the ordinary manner, and is adapted to carry the usual bobbin, H, upon which the yarn is wound. The upper end of the standard D is slotted, as indicated, and has adjustably secured to it, by means of the clamping-screw I, a ring, K, which encircles the bobbin, sleeve, and spindle.

45 The letter L indicates the cap, which is secured to the upper end of the spindle in the

ordinary manner. The lower end of the cap has secured to it, by brazing or any other suitable manner, a hard steel ring, M, and the adjustable ring K, before mentioned, is also hardened. The yarn passes, as it is spun and delivered to the bobbin H, which is located upon the sleeve, as usual, between the adjacent edges of the cap and the encircling ring K, and this ring may be adjusted so as to give any desired tension to the yarn by setting it vertically either higher or lower upon the standard, where it may be retained by the clamping-screw, so as to bring it nearer to or farther from the collar M. The cap L is made with its sides or inner and outer walls parallel, continuing so past the junction of the hardened ring M, so that the cap, joint, and ring present a regular unbroken surface, both inside and out, and in practice the ring is really a regular continuation of the cap. Thus old or cracked metal caps may have steel rings secured to their edges, so as to prevent any further cracking or breaking.

Having thus set forth our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination, with the spindle, of the vertical slotted standard and the adjustable hardened steel ring secured to its upper end, and devices for holding said standard and its ring in their adjusted positions, as and for the purpose specified.

2. The combination, with the spindle and cap having a steel-faced lower edge or ring, of the sleeve and whirl, the slotted standard and adjustable hardened ring, and devices for holding the said standard and ring in their adjusted position, as and for the purpose specified.

In testimony whereof we affix our signatures in presence of two witnesses.

THOMAS HALL.
JAMES NEWTON.

Witnesses:

JOHN S. GILE,
BENJ. C. AMES.