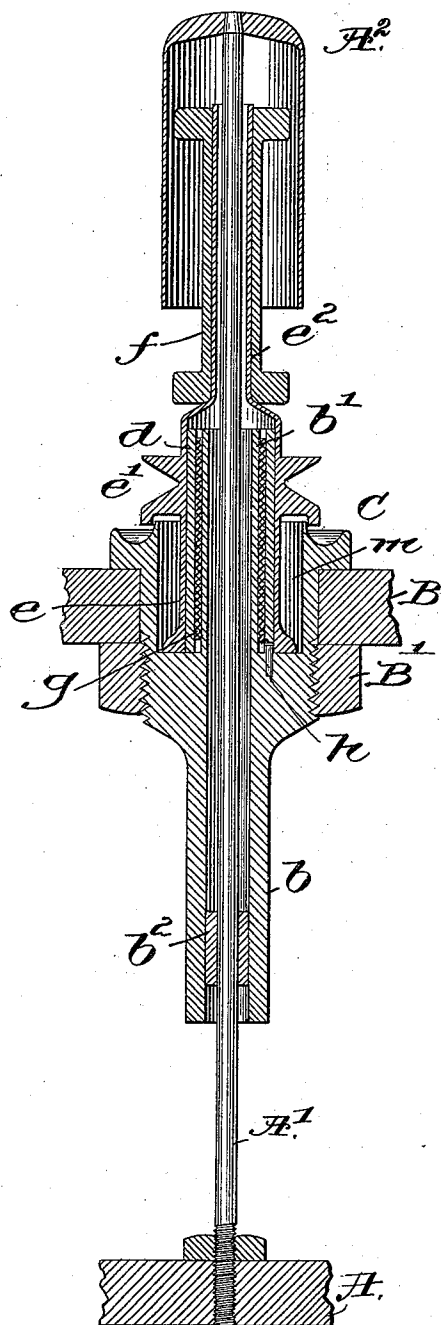


(No Model.)

N. HICKS.
CAP SPINNING FRAME.

No. 510,861.

Patented Dec. 12, 1893.



Witnesses.

Edward F. Allen.

Louis M. Howell

Inventor.

Nehemiah Hicks.

by Crosby & Gregory Attys.

UNITED STATES PATENT OFFICE.

NEHEMIAH HICKS, OF WILKINSONVILLE, ASSIGNOR TO GEORGE DRAPER & SONS, OF HOPEDALE, MASSACHUSETTS.

CAP SPINNING-FRAME.

SPECIFICATION forming part of Letters Patent No. 510,861, dated December 12, 1893.

Application filed July 17, 1893. Serial No. 480,700. (No model.)

To all whom it may concern:

Be it known that I, NEHEMIAH HICKS, of Wilkesville, county of Worcester, State of Massachusetts, have invented an Improvement in Cap Spinning-Frames, of which the following description, in connection with the accompanying drawing, is a specification, like letters on the drawing representing like parts.

The object of this invention is to improve and simplify the construction of that class of spinning frames employing a cap and bobbin, whereby greater speed and steadiness of motion are insured.

In accordance with my invention the bobbin carrying tube is provided with a sleeve whirl which has as its bearing a sleeve held preferably in a yielding manner in or with relation to a supporting case, said sleeve preferably running on the outer side of the bearing. The elastic cushion as shown in this present embodiment of my invention is seated on a tubular extension of the supporting case, the dead spindle carrying the cap being extended through the said extension loosely and preferably the looseness is sufficient to prevent contact between the extension and the dead spindle.

The drawing shows in vertical section a cap spindle and its co-operative parts embodying a desired form of my invention.

The rail A supposed to be fixed has erected upon it a spindle A' which at its upper end supports the cap A². These parts are and may be as usual. The rail B supposed to be movable in any usual manner by any known suitable devices, not necessary to be herein shown, has attached to it a peculiar supporting case C which is represented as having a shoulder to rest on the rail, the case being held in place by a suitable nut B'. The case has, as shown, a downward extension b, and an upward extension b'. The extension b receives a bearing b² which slides on the spindle, and the extension b', as herein shown, acts as a support for a bearing d on which revolves the shank e of a sleeve whirl e' connected to a tube e² on which is mounted ad-

hesively a suitable bobbin f. Preferably a cushion g will be placed between the sleeve whirl bearing and the extension b'. The bearing is shown as restrained from rotation with the sleeve whirl by a suitable pin or projection h.

The supporting case has a chamber m to receive oil so that the extension of the sleeve whirl may run in oil.

The tube e² and spindle should not touch.

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

1. The supporting case having an upward extension, a spindle extended through said support, a cap mounted on said spindle, and a bearing surrounding said extension, combined with a bobbin carrying tube having a sleeve whirl adapted to surround and be rotated about said bearing, substantially as described.

2. The supporting case having an upward extension, a spindle extended through said support, a cap mounted on said spindle, and a bearing surrounding said extension, combined with a bobbin carrying tube having a sleeve whirl adapted to surround and be rotated about said bearing, and a cushion placed between said bearing and extension, substantially as described.

3. The supporting case having an oil well; an upward extension above the bottom of said well; a spindle extended through said support and extension; a cap mounted on said spindle; and a bearing surrounding said extension, combined with a bobbin carrying tube having a sleeve whirl entering the said oil well and adapted to rotate about and on the said bearing, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

NEHEMIAH HICKS.

Witnesses:

B. W. RUSHWORTH,
H. C. PHILLIPS.