

(No Model.)

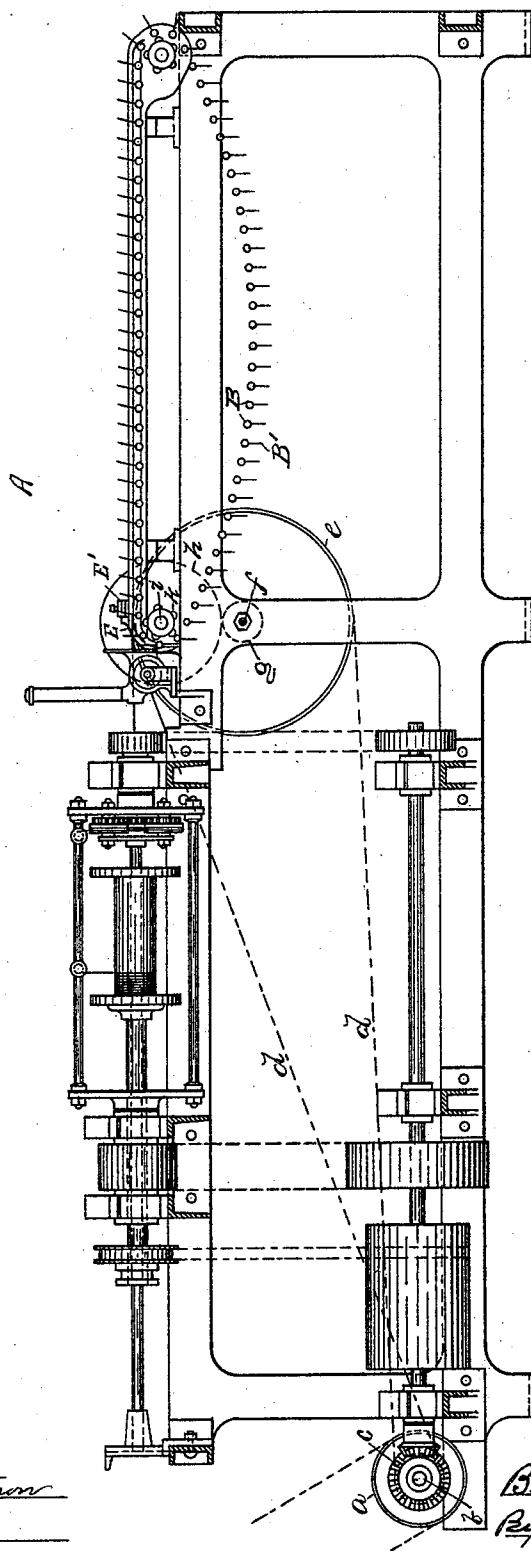
2 Sheets—Sheet 1.

B. BODELL.
SPINNING JENNY.

No. 527,587.

Patented Oct. 16, 1894.

Fig 1



Witnesses
Alfred B. Watson
Wm M. Drew

Inventor
Benjamin Bodell
By John F. Kern

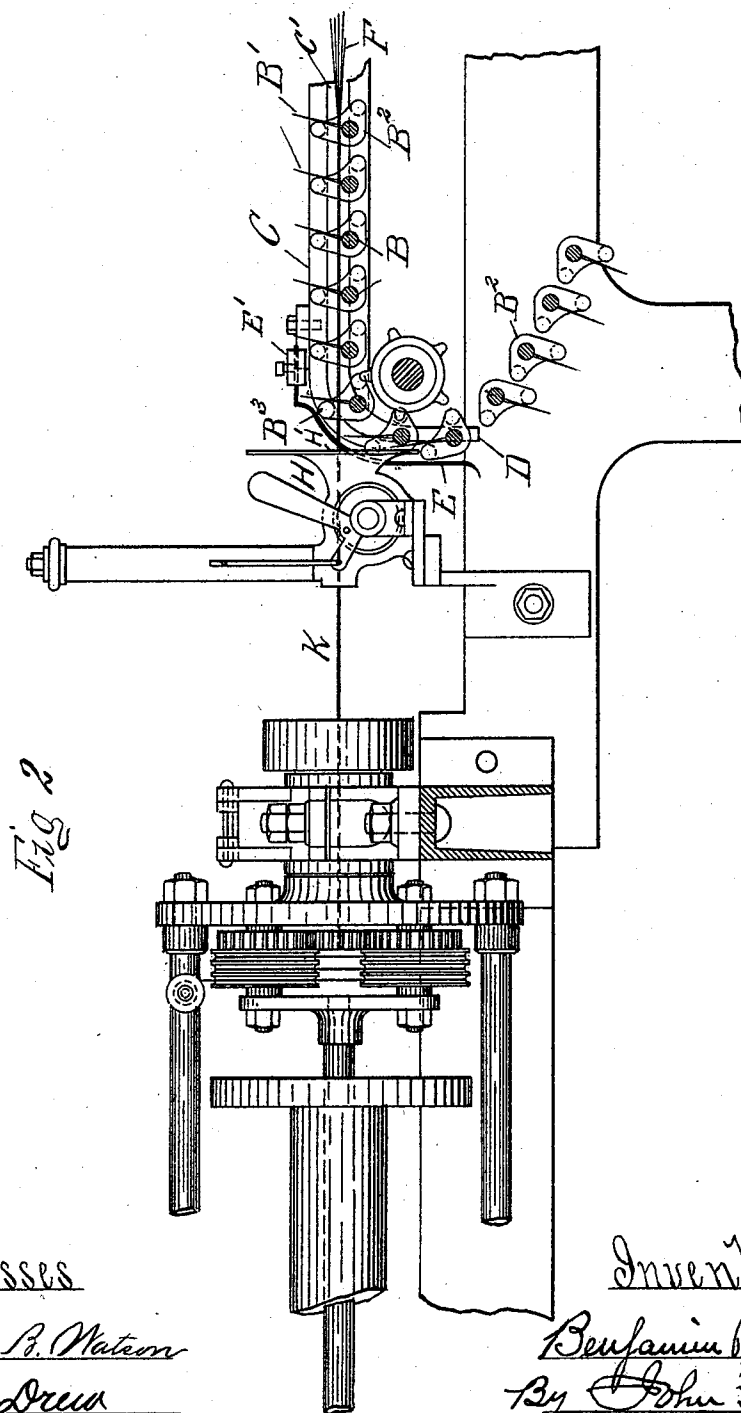
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UNITED STATES PATENT OFFICE.

BENJAMIN BODELL, OF AUBURN, NEW YORK.

SPINNING-JENNY.

SPECIFICATION forming part of Letters Patent No. 527,587, dated October 16, 1894.

Application filed February 8, 1894. Serial No. 499,431. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN BODELL, of Auburn, in the county of Cayuga, in the State of New York, have invented a new and useful Improvement in Spinning-Jennies, of which the following is a specification.

The object of my invention, which relates to that class of spinning jennies in which gill bars are linked together in an endless chain, is to provide a guide that will regulate and control the motion of said endless chain as the gill bars approach the mouth of the nipper and compel the gill bars to drop in such a manner when they leave the hemp, that the gill pins in the gill bars are at right angles with the hemp at the bell mouth of nipper.

The gill bars being so guided when leaving the hemp at the mouth of the nipper that the gill pins remain in a vertical position, it is obvious that the nipper can be set closer to the gill bars than if the gill bars and gill pins, as is usual in turning, described an arc, and it is equally apparent that I am enabled by the use of my improvement to work a short fiber like sisal and spin as well as with a much longer fiber known as manila.

I am aware that in this class of spinning jennies various devices have been used for the purpose of guiding and regulating the passage of the chain of gill pins from the hemp when it has been conducted to the nipper; but in all cases, as far as I am aware a rigid guide is employed whereas my device consists of a spring guide. It differs from other guiding devices in that it permits the chain of gill pins to drop perpendicularly when leaving the hemp while in the rigid guides the chain is carried down an incline.

Another object of my invention is, to avoid breakage in the sliver, as the nipper bell being set close to the gill bars in my improvement there is not space enough between them to allow the hemp to drop and follow around the chain.

In the accompanying drawings, which form a part of this specification, and in which like letters of reference designate the same parts, in both of the figures—Figure 1 is a side elevation, partly in section of a spinning jenny showing an endless chain of gill bars, the bell mouthed nipper and my improved spring guide with gill bars passing in close proxim-

ity to the mouth of the nipper, the gill pins being in a vertical position as they leave the hemp. Fig. 2 is a side elevation, partly in section, of a portion of a spinning jenny having an enlarged detailed view of my improvement.

In the drawings —A— represents a spinning jenny; —B—, an endless chain of gill bars having the gill pins —B'—. On the gill bars are toes B² provided with projections —B³—.

—C— represents the chain rail having a projection —C'— which forms a slide on which the projections —B³— move. On the end of the chain rail is cast the horn —D—.

—E— represents the spring guide secured to the chain rail by the bracket —E'—.

—F— represents the sliver being carried to the bell mouth —H'— of the nipper —H— and —K— represents the spun cord.

In Fig. 1, —a— is the main driving pulley secured to a shaft —b—. On said shaft is secured the pulley —c—, belt —d— connecting it with the pulley —e— on stud —f—. The spur pinion —g— secured on pulley —e—, gears into the spur wheel —h— on the shaft —i— on which sprocket wheels —k— are secured which drive an endless chain or belt of gill bars —B—.

The operation of the device is as follows:— Power being communicated as shown in Fig. 1 sprocket wheels —k— engage and drive the endless chain of gill-bars —B—, projections —B³— of the toes —B² being caused to move along the slides —C'— of the chain rail —C—. The gill pins B' secured to the gill bars —B— while passing along the chain rail assume an almost perpendicular position, the sliver F— being carried along by them to the nipper —H—. As the gill bars approach the mouth of the nipper the projections —B³— on the toes —B²— secured to the gill bars —B—, move along the slide —C'— on the chain rail —C— until the bend or horn —D— is reached. As the toes and bars descend the bars turn in the link chain and the projections —B³— on the toes come in contact with the spring guides —E— which prevent the toes and bars from turning (the link chain only turning) and compel said toes and bars to drop vertically between said springs —E— and horn —D— the gill pins —B'— thus remaining in a per-

pendicular position as they pass the bell mouth of the nipper —H— and until they come to the bottom of the horn.

With this description of my invention, what
5 I claim is—

In a spinning jenny an endless chain of gill bars carrying gill pins, means for driving said chain, chain rails provided with slides, toes carried by said gill bars and adapted to move
10 along said slides, a spring guide at the end

of said rail, projections carried by said toes and adapted to engage said spring guide whereby the said gill pins are perpendicularly withdrawn from the plane of the chain rail, substantially as described.

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Witnesses:

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