(No Model.)

C. McCARTY.

RING RAIL FOR SPINNING FRAMES.

No. 419,538. Patented Jan. 14, 1890.

Fig. 1.

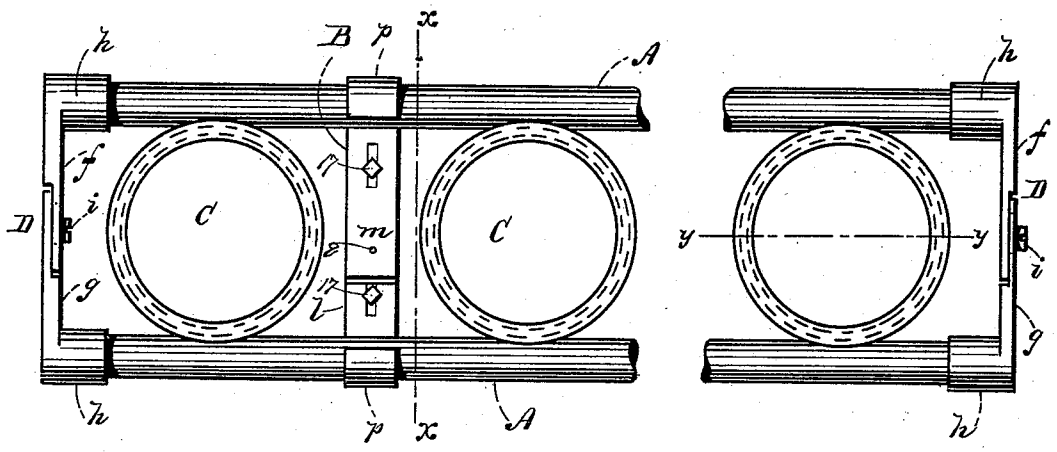


Fig. 3.

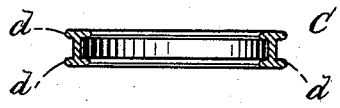


Fig. 2.

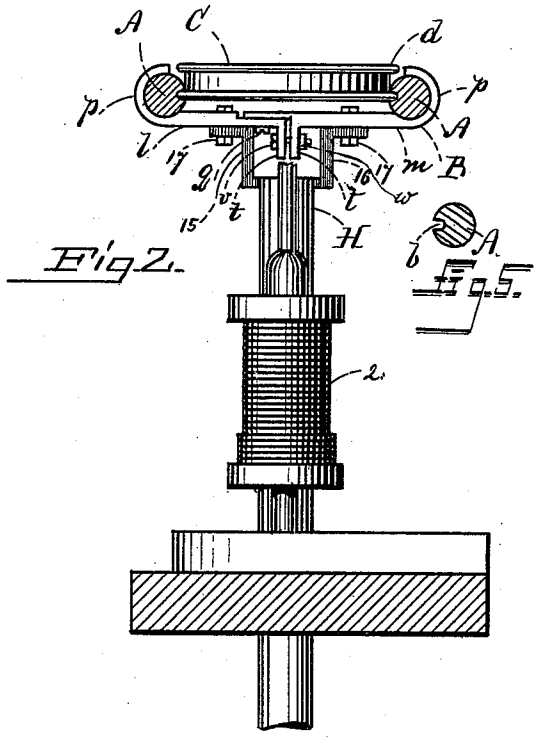
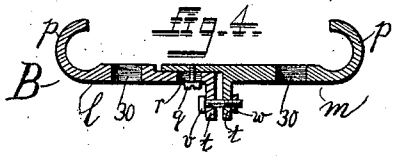


Fig. 5.

Fig. 4.



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UNITED STATES PATENT OFFICE.

CHARLES McCARTY, OF FALL RIVER, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND PATRICK P. MORRIS, OF SAME PLACE.

RING-RAIL FOR SPINNING-FRAMES.

SPECIFICATION forming part of Letters Patent No. 419,538, dated January 14, 1890.

Application filed September 2, 1889. Serial No. 322,704. (No model.)

To all whom it may concern:

Be it known that I, CHARLES MCCARTY, of Fall River, in the county of Bristol, State of Massachusetts, have invented a certain new and useful Improvement in Ring-Rails for Spinning-Frames, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view of my improved rail, showing the rings in position; Fig. 2, a sectional elevation on line *x x* in Fig. 1; Fig. 3, a transverse section of one of the rings; Fig. 4, a longitudinal section of one of the intermediate clamps, and Fig. 5 a cross-section of one of the side bars.

Like letters and figures of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to an adjustable rail for holding rings in a spinning-frame; and it consists in certain novel features, as hereinafter fully set forth and claimed, the object being to produce a simpler, cheaper, and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the side bars of the rail, B the clamps considered as a whole, and C the rings.

The side bars A are round rods, each provided with a longitudinal groove *b*, as shown in the detail view in Fig. 5.

The rings C are formed with flanges *d*, which are adapted to enter the bar-grooves *b*.

The bars A are secured together at their ends by adjustable cross-bars or clamps D, said cross-bars being formed in two sections *f g*. The sections are each provided with a socket *h* to receive the end of a bar A, and they have their opposite ends secured together by a binding-screw *i*, which passes through a slot in said sections, whereby they may be adjusted longitudinally.

The clamps B consist of two sections *l* and *m*, each having a hook-shaped end *p*, adapted to receive a side bar A. The inner ends of the sections overlap and are secured together by a screw *q*, which passes through a longitudinal slot *r* in one section and into the opposite section. A downwardly-projecting lug *t* is formed on the under side of each clamp-section, and a threaded bolt *v* passes through said lugs. A nut *w* is turned onto said bolt, whereby said sections may be adjusted longitudinally.

The supporting-rods H of the rail are forked at their upper ends, forming arms 15 and 16, which are respectively secured to the clamp-sections *l* and *m* by bolts 17, said bolts passing through slots 30 in the clamp, whereby the whole rail may readily be laterally adjusted on the supporting-rods.

In the use of my improvement a flange *d* of each of the rings C is disposed in the grooves *b* of the side bars A, and the clamps B D are adjusted by means of the bolts *v* and binding-screws *i*, respectively, so that said bars bind tightly against the rings and secure them in position. The screws *q* prevent the clamp-sections from separating vertically. The rail is then secured to the supporting-rods H, and adjusted thereon by the bolts 17, the spindle 20 of the bobbin 21 projecting through said rings in the usual manner. It will readily be seen that the rail may be adjusted laterally on the supporting-rods as desired. The rings may also be inverted or their position easily changed by loosening the bolts *v* of the clamps and freeing the side bars without taking the rail apart, as is frequently necessary in rails of ordinary construction.

Having thus explained my invention, what I claim is—

1. A ring-rail for a spinning-frame, comprising side bars, each provided with a longitudinal groove for receiving flanged rings, and clamps for holding said bars in engagement with the rings, substantially as described.

2. The combination of the side bars provided with longitudinal grooves for supporting flanged rings, clamps for connecting said bars, each comprising two slotted sections, means for longitudinally adjusting said sec-

tions upon each other, a supporting-rod provided with arms on which said clamp-sections rest, and fasteners passing through said arms and through the slots of the clamp-sections.

3. The combination of the bars A, each provided with a groove *b*, the adjustable clamps B, each composed of two sections longitudinally adjustable on each other, and means for securing them in adjustment, and rings C, substantially as described.

4. The combination of side bars, each having a longitudinal groove, end clamps, each comprising two sections and means for adjusting them longitudinally upon each other, said sections being provided with sockets for receiving the ends of said rails, and intermediate clamps for connecting said rails between said end clamps, each of said intermediate clamps comprising two sections and means for adjusting said sections longitudinally of each other.

5. The combination of side bars grooved to receive the rings, socketed clamps connecting the ends of said bars, intermediate clamps connecting said bars, each comprising two sections and means for adjusting them longitudinally upon each other, and forked supporting-rods having their arms secured to said intermediate clamps by screws or bolts passing through slots in said clamp-sections, substantially as described.

6. The combination of side bars having grooves for the ring-flanges and clamps connecting said bars, each of said clamps being constructed in two sections provided with hooks for engaging the bars, and with lugs, and a screw-bolt connecting said lugs, whereby the sections may be adjusted longitudinally of each other.

7. The combination of side bars having longitudinal grooves, sectional clamps provided with sockets for receiving the ends of said bars, sectional intermediate clamps for the bars, the sections of the clamps being adjustably secured together by screws or bolts, and rail-supporting rods adjustably secured to said intermediate clamp-sections by bolts passing through slots therein, substantially as described.

8. A ring-rail having longitudinally-grooved side bars connected by adjustable clamps, each clamp comprising two overlapping sections provided with lugs, and a bolt passing through said lugs, substantially as described.

9. The combination of the bars A, provided with the grooves *b*, the clamps D, having sockets *h*, the clamps B, comprising the sections *l* and *m*, adjustably connected by bolt *v*, and the screw *q*, substantially as described.

10. The clamp B, comprising the sections *l* and *m*, provided with hooks *p*, lugs *t*, and slot *r*, the bolt *v*, and screw *q*, in combination with the bars A, each having the groove *b*, and the rings C, substantially as described.

11. The side bars A, provided with grooves *b*, in combination with the clamps D, having sockets *h*, the forked rods H, and clamps B, adjustably secured to said rods by screws 17 passing through slots in the clamp-sections, substantially as described.

12. The combination of two bars having straight inner edges, spinning-rings, and clamps for drawing said bars toward said rings.

13. The combination of two bars provided with longitudinal grooves, spinning-rings provided with flanges engaging said grooves, and clamps holding said bars in direct contact with said rings.

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