

(No Model.)

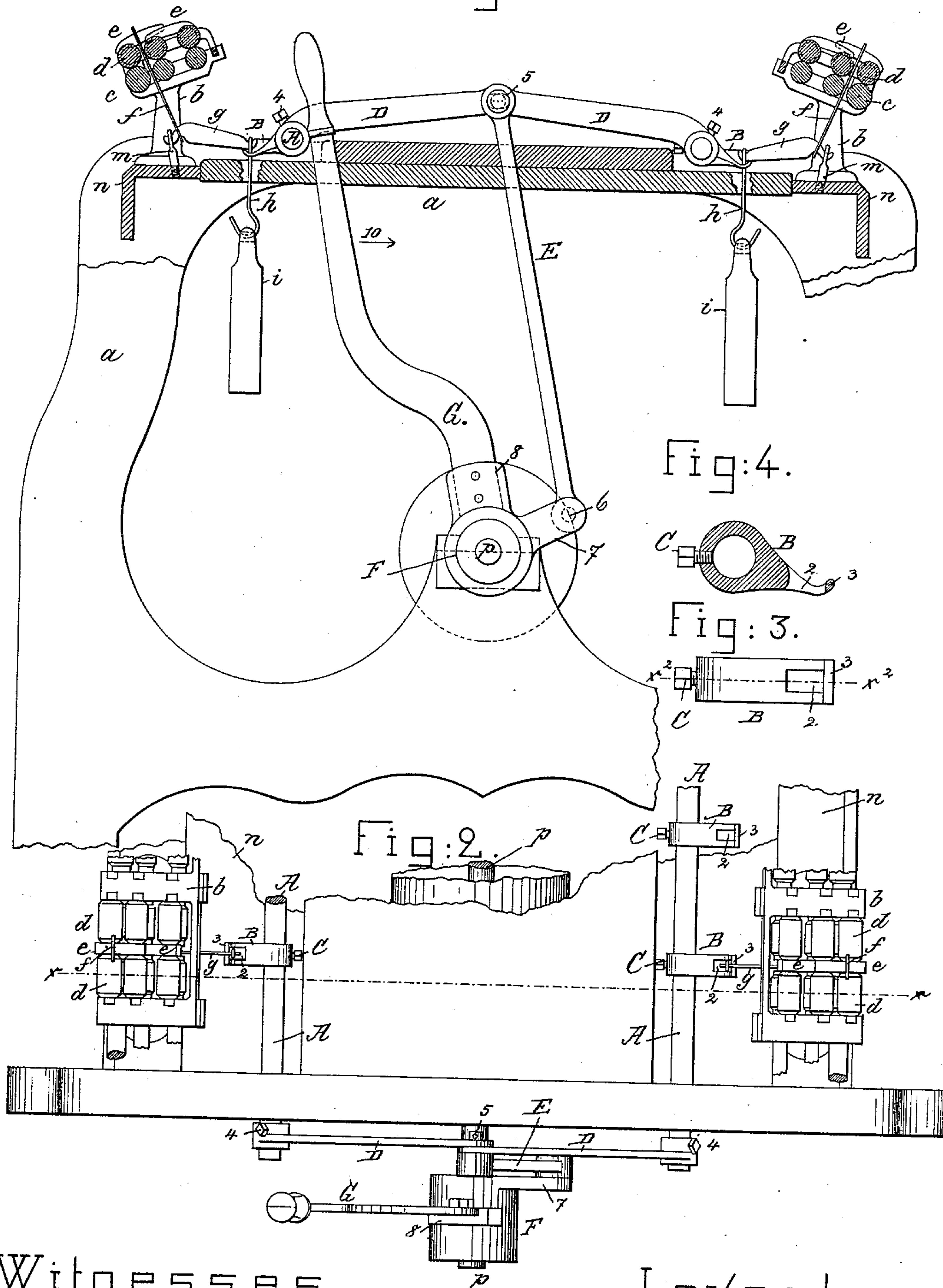
E. W. THOMAS.

DEVICE FOR REMOVING PRESSURE FROM ROLLS OF SPINNING FRAMES, &c.

No. 329,975.

Patented Nov. 10, 1885.

Fig:1.



Witnesses.

Arthur Lippert.
John F. Co. Printer.

Inventor.

Edward W Thomas.
by Crosby & Gregory attys.

UNITED STATES PATENT OFFICE.

EDWARD W. THOMAS, OF LOWELL, ASSIGNOR OF ONE-HALF TO GEORGE DRAPER & SONS, OF HOPEDALE, MASSACHUSETTS.

DEVICE FOR REMOVING PRESSURE FROM ROLLS OF SPINNING-FRAMES, &c.

SPECIFICATION forming part of Letters Patent No. 329,975, dated November 10, 1885.

Application filed December 22, 1884. Serial No. 150,942. (No model.)

To all whom it may concern:

Be it known that I, EDW. W. THOMAS, of Lowell, county of Middlesex, State of Massachusetts, have invented an Improvement in
5 Devices for Removing Pressure from Rolls of Spinning-Frames, &c., of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

10 This invention has for its object to lift the weights from the top rolls when desired. To do this I have provided the machine at each side with a rock-shaft having arms or fingers adapted to lift the weighted levers of the
15 roller-stands, and I have connected with the said rock-shafts mechanism whereby they may be moved when desired, the said mechanism being under the control of a hand-lever.

Figure 1 is a side elevation of a spinning-
20 machine embodying my invention, the upper part of the frame and the rollers being in section in the line $x x$, Fig. 2. Fig. 2 is a top or plan view of a sufficient portion of a spinning-machine of usual construction to illustrate my
25 improvements. Fig. 3 is a top view of one of the arms or fingers detached, and Fig. 4 a section thereof in the line $x^2 x^2$.

The frame-work a , roller-stand b , rolls $c d$, saddles $e e$, stirrup f , levers g , rod h , weight i ,
30 stirrup-screw m , roller-beam n , and main shaft p are all old and as in spinning-machines now commonly in use.

In accordance with my invention I have mounted on this common frame two rock-
35 shafts, A , and to the said shafts I have attached lifting arms or fingers B by means of set-screws C , so that the same may be adjusted thereon in desired position. The arms B at their outer ends are provided with openings
40 2 for the passage of the rods h , the cross-pieces 3 at the ends of the arms extending under the levers g , so as to act against and lift the said levers and their attached weights when the rock-shafts are turned by mechan-

ism to be described, such lifting of the levers 45 removing the customary pressure from the saddles of the top rolls. The rock-shafts $A A$ at their ends are provided, as shown, with arms D , connected therewith by set-screws 4. These arms D are joined loosely by pivot-pin 5c 5 with the link E , connected by pin 6 with the arm 7 of a hub, F , mounted loosely on the usual end box supporting the shaft p , the latter serving merely as a fulcrum for the hub. A hand-lever, G , is connected with an arm, 8, 55 of the hub F . Movement of the hand-lever G from its usual position, Fig. 1, in the direction of the arrow 10 depresses the ends of the arms $D D$ and turns the rock-shafts to elevate the fingers B and lift the levers g . 60

My invention is applicable not only to that class of spinning-machines known as "ring-spinning frames," but also to roving-frames, wherein top rollers are used which are held down by saddles, stirrups, and levers. 65

I claim—

1. The rock-shaft provided with fingers, and means, substantially as described, whereby the rock-shaft and link may be moved, combined with the roller-stands, rolls therein, saddles, 70 links, and levers g , and means to support the same, with its attached weights, substantially as described.

2. The two sets of roller-stands, rolls therein, saddles, stirrups, weighted levers g , and two rock-shafts, A , provided with fingers B , 75 combined with the arms $D D$, link E , and means whereby the latter may be moved to lift the levers g at each side of the frame, substantially as described. 80

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

EDWARD W. THOMAS.

Witnesses:

GEORGE H. BENSON,
JOHN R. ROARKE.