

(No Model.)

W. D. ROSENCRANTZ.

TAKE-UP ROLLER FOR CONDENSERS OF CARDING MACHINES.

No. 575,851.

Patented Jan. 26, 1897.

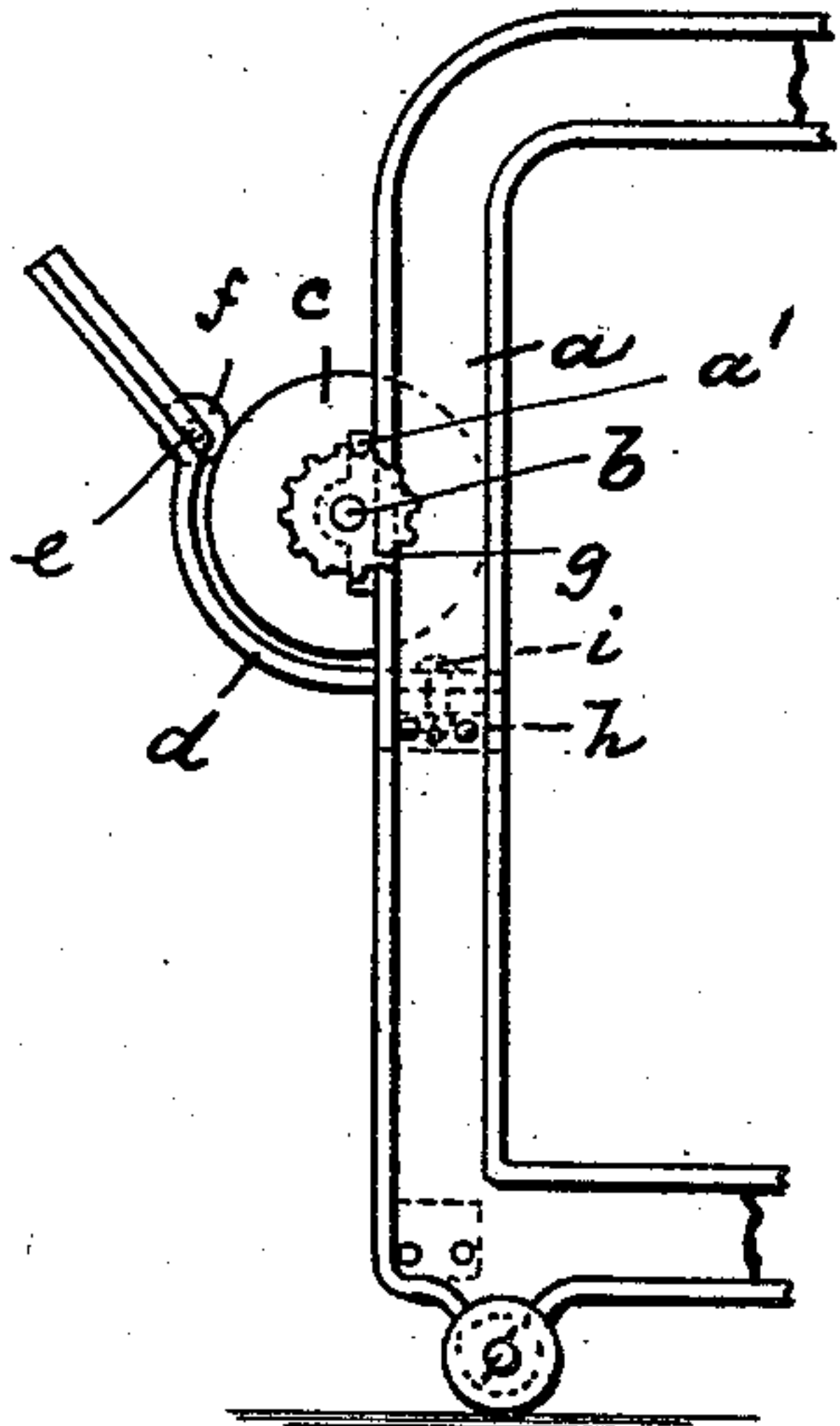


Fig. 1.

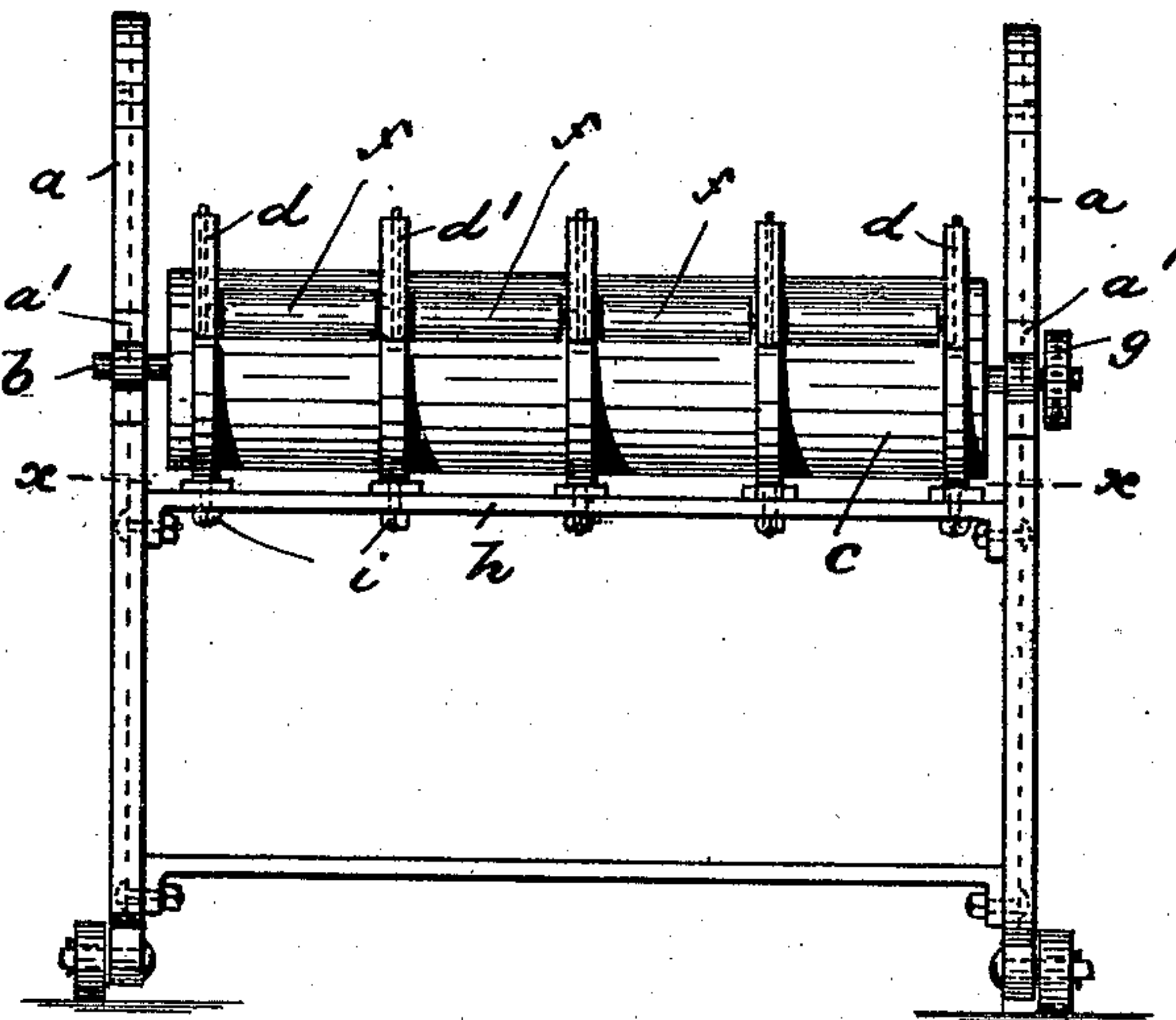


Fig. 2.

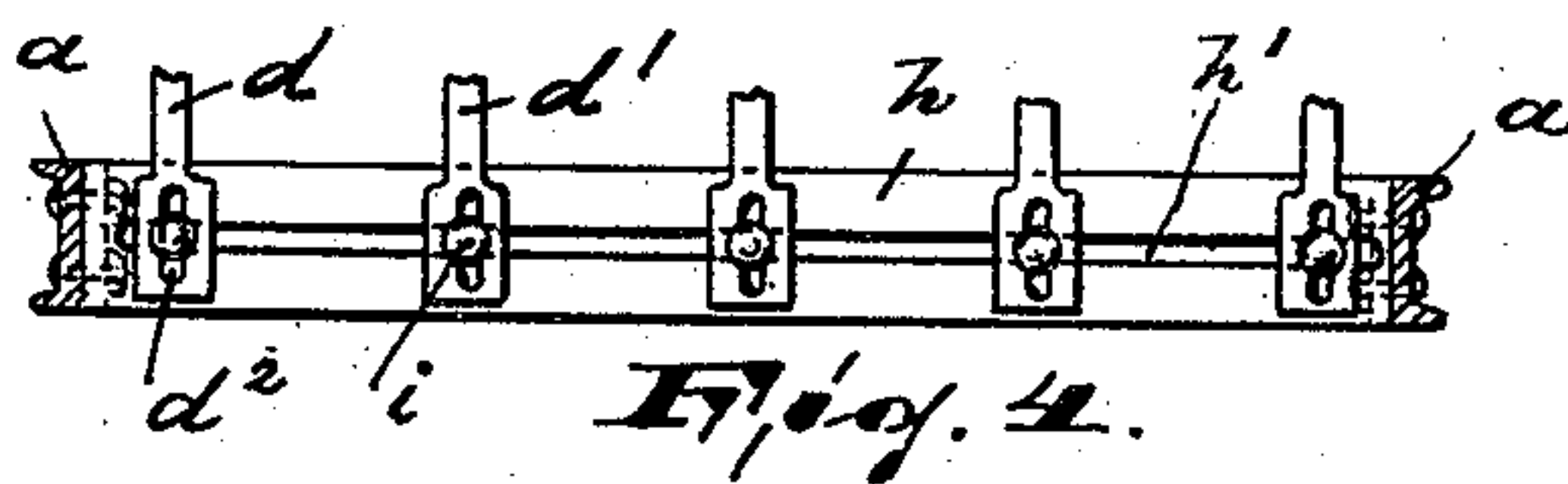


Fig. 4.

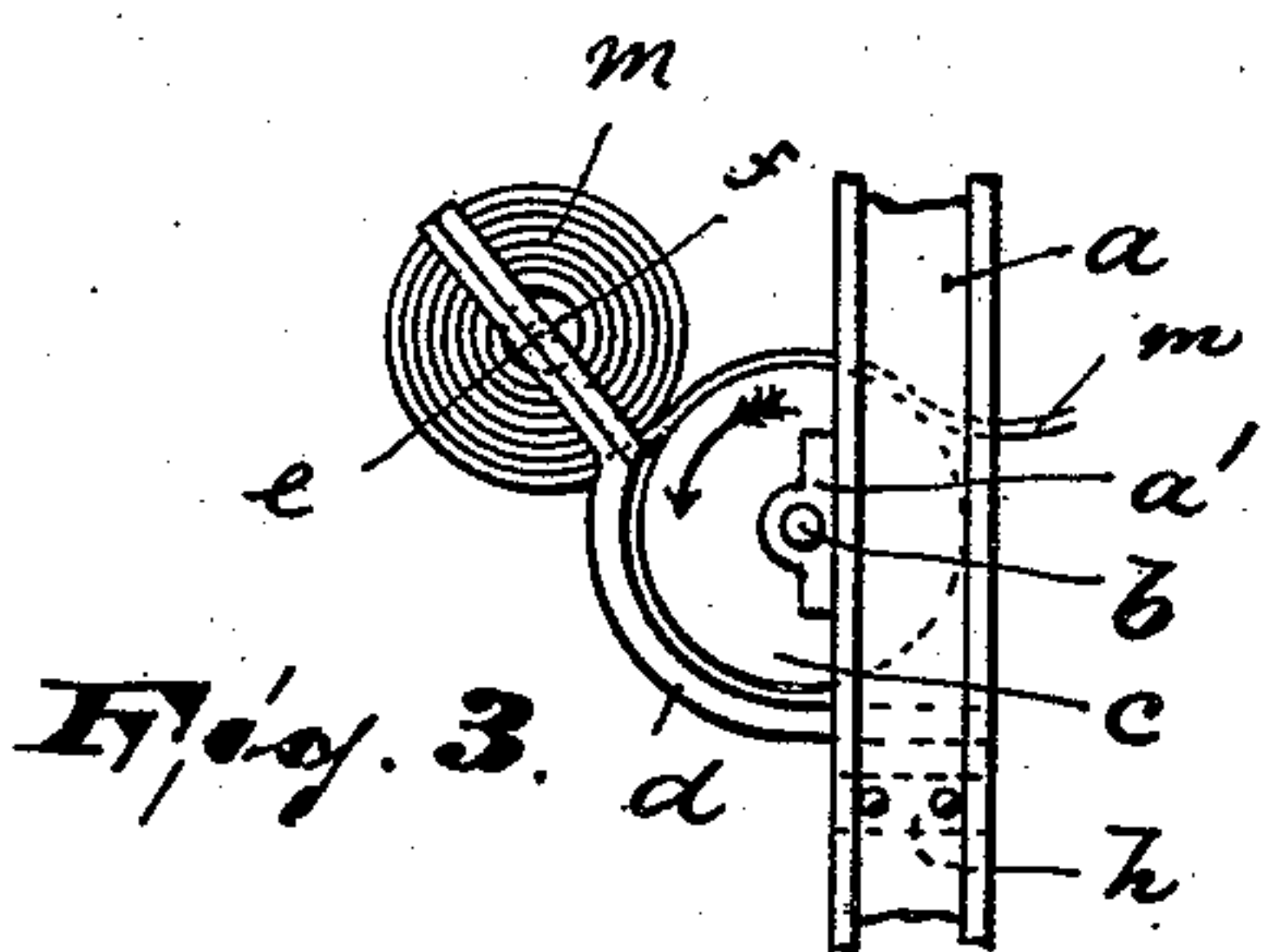


Fig. 3.

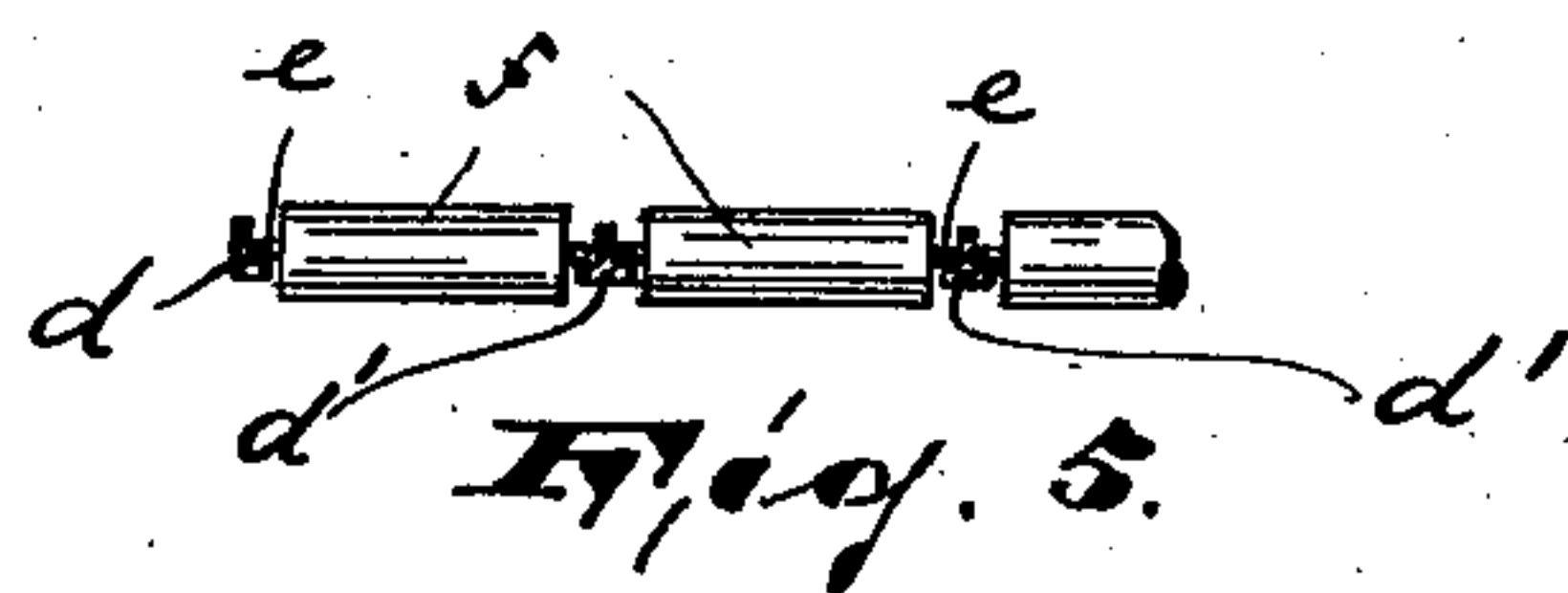


Fig. 5.



Fig. 6.

WITNESSES: \_\_\_\_\_

Wm. D. Mcell.  
Duncan W. Robertson.

INVENTOR: \_\_\_\_\_

William D. Rosencrantz

BY Partner & Co.

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

WILLIAM D. ROSENCRANTZ, OF HOHOKUS, NEW JERSEY.

## TAKE-UP ROLLER FOR CONDENSERS OF CARDING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 575,851, dated January 26, 1897.

Application filed May 21, 1896. Serial No. 592,438. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM D. ROSENCRANTZ, a citizen of the United States, residing in Hohokus, Bergen county, State of New Jersey, have invented certain new and useful Improvements in Take-Up Rollers for Condensers of Carding-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide the condenser of a carding-machine with sectional take-up tubes or rollers, on which a series of one or more threads of roving can be wound, (after said roving has left the condenser,) and which tubes or rollers after being full are doffed and put in the creel of a spinning-frame.

The invention consists in the arrangement of sectional take-up tubes or rollers, in connection with the drum or delivery-roller, in the condenser of a carding-machine, in their respective guides and supports, and in the combination and arrangement of the various parts thereof, substantially as will be hereinafter more fully described and finally embodied in the clauses of the claim.

Referring to the accompanying drawings, in which like letters of reference indicate corresponding parts in each of the several views, Figure 1 is a side elevation of a portion of the frame of the condenser of a carding-machine and of its drum or delivery-roller and provided with my improvement, only those parts being shown which are necessary to illustrate the nature of my said invention. Fig. 2 is a front elevation of Fig. 1; Fig. 3, a detail view corresponding with Fig. 1 and illustrating the sectional tubes or rollers when being filled with roving; Fig. 4, a sectional view on the line *xx* of Fig. 2; Fig. 5, a detail view showing the arrangement of the sectional rollers and their guiding-supports, and Fig. 6 a detail front elevation illustrating a modified form of sectional tubes.

In said drawings, Figs. 1 to 5, *a* represents a portion of the frame of a condenser, and *c* the drum or delivery-roller mounted on shaft *b*, arranged in bearings *a'*, and operated or

revolved by means of the gear-wheel *g*, receiving its motion from a train of gears, in the usual manner, and therefore not shown in the drawings. A horizontally-arranged cross-bar or bridge *h* is secured to and thus braces and connects the sides of the frame *a*. Said bar is provided with an elongated slot *h'*, in which are adjustably arranged by means of the bolts *i* a series of parallel guide-frames or brackets *d d'*, having their upper portion bent outward, as clearly shown in the drawings, and provided in their lower extremities with elongated slots *d<sup>2</sup>*, through which the bolts *i* pass. The bent outward portions of the end brackets *d* are L-shaped in cross-section, while the intermediate brackets *d'* are reversed T-shaped, and are adapted to form the path and guide for the trunnions *e* of the short rollers *f*, which latter are resting on and thus are in frictional engagement with the drum or delivery-roller *c*, as clearly shown. Said rollers *f* and their respective trunnions *e* are free to revolve, and are adapted to receive a series of one or more threads of roving *m*, passing from the condenser over the drum *c*, and while thus being built up slowly slide upward on the guides *d* and *d'*, and when full are doffed and put in the creel of a spinning-frame.

In the modification illustrated in Fig. 6 the intermediate brackets *d'* are done away with, and in place of the sectional rollers *f* and their respective trunnions *e* only one shaft *e'* is used, which extends clear across the machine and rests on the L-shaped end brackets. On said shaft *e'* a series of short tubes *f'* are arranged in such a manner that said tubes can be laterally moved on and removed from the shaft, but are bound to rotate therewith. For this purpose the tubes are made to fit closely upon said shaft, or, if preferred, may be secured thereon by means of a key-and-feather arrangement or by any other well-known equivalent.

From the foregoing it can be seen that rollers or tubes of any length can be used, according to the number of threads of roving to be wound thereon, and that when rollers are used, as in Figs. 1 to 5, the brackets *d* and *d'* can easily be adjusted to the required position.

I do not intend to limit myself to the precise construction shown and described, as va-



rious alterations can be made without changing the scope of my invention; but

What I claim as new, and desire to secure by Letters Patent, is—

5 1. In a carding-machine, the combination with the frame, of the drum or delivery-roller mounted in said frame, a series of parallel guide-brackets projecting from said frame and longitudinally and transversely adjustable therein, said guide-brackets having their  
10 upper portions bent outward and a series of rollers or tubes loosely mounted on said bent-outward portions of adjustable guide-brackets, said rollers or tubes being independent  
15 of each other and in frictional contact with said drum or delivery-roller, all said parts, substantially as and for the purposes described.

2. In a carding-machine, the combination  
20 with the frame, of a drum or delivery-roller mounted in said frame, a cross-bar or bridge

traversing said frame and secured thereto, parallel with said drum, and provided with an elongated slot, a series of guide-brackets, provided at their lower ends with elongated  
25 slots, which guide-brackets are adjustably arranged by means of their elongated slots in the slot of the cross-bar, and having their upper portions bent outward, and a series of rollers or tubes loosely mounted on said bent-  
30 outward portions of the guide-brackets, and in frictional contact with said drum or delivery-rollers, all said parts, substantially as and for the purposes described.

In testimony that I claim the foregoing I  
35 have hereunto set my hand this 23d day of April, 1896.

WILLIAM D. ROSENCRANTZ.

Witnesses:

ALFRED GARTNER,  
DUNCAN M. ROBERTSON.