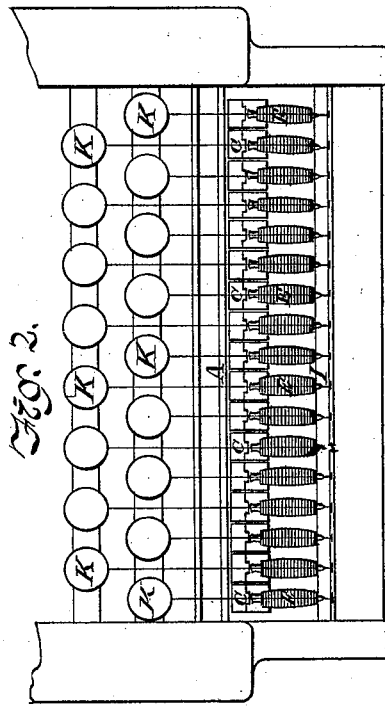
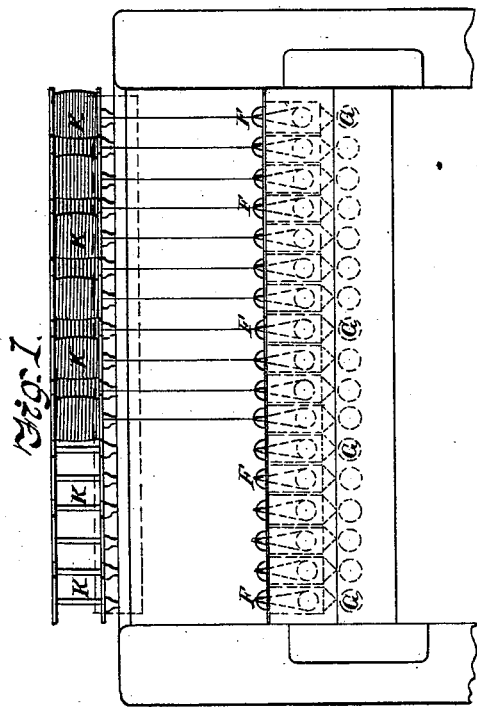
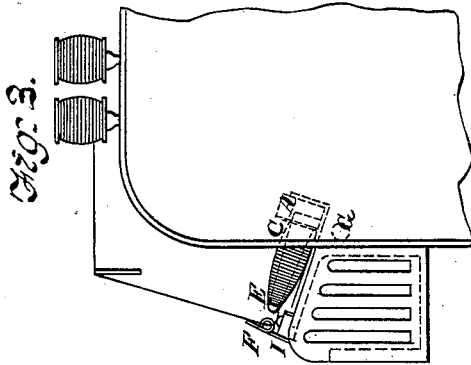


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Winding and Reeling Cotton, Silk, Worsted, &c.

No. 199,348.

Patented Jan. 22, 1878.



Witnesses:

*Wm Wagner*  
*R. T. Dyer*

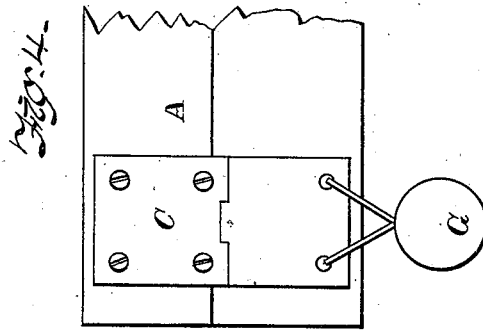
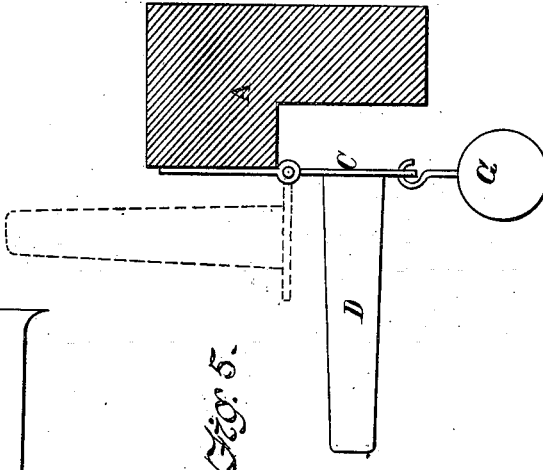
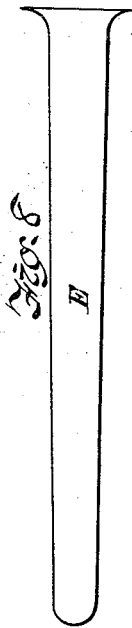
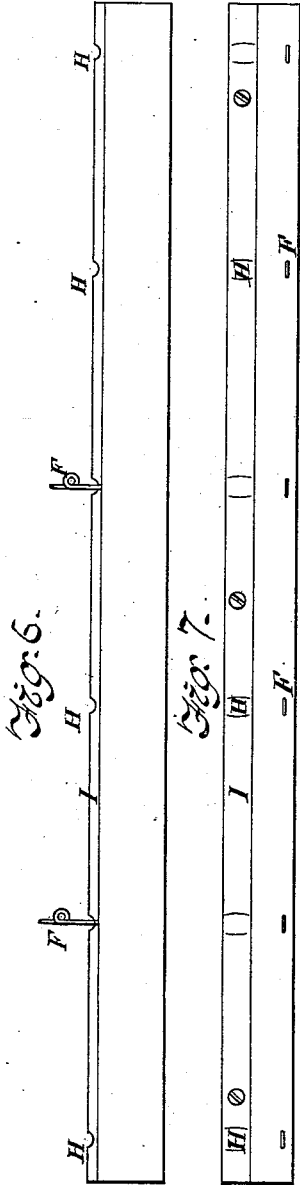
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By *Geo. W. Dyer*  
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 By *Geo. W. Dyer & Co*

*Attorneys.*

# UNITED STATES PATENT OFFICE.

WILLIAM L. BRIGHT, GEORGE INGHAM, AND JACOB FIELDING, OF ROCHDALE,  
ENGLAND.

IMPROVEMENT IN WINDING AND REELING COTTON, SILK, WORSTED, &c.

Specification forming part of Letters Patent No. **199,348**, dated January 22, 1878; application filed  
May 22, 1877.

*To all whom it may concern:*

Be it known that we, WILLIAM LEATHAM BRIGHT, cotton-spinner, GEORGE INGHAM, overlooker, and JACOB FIELDING, mechanic, all of Rochdale, in the county of Lancaster, England, have invented certain new and useful Improvements in Winding and Reeling Cotton, Silk, Worsted, or other Fibrous Substances, which improvements are fully set forth in the following specification.

The object of this invention is to supersede the use of spindles in machinery for winding and reeling cotton, silk, worsted, or other fibrous substances, to obtain increased speed of working with decrease of cost in the manufacture of the frames, and great saving of oil or other lubricating agent.

The invention consists in the combination and construction of the parts for holding the bobbin, as fully hereinafter explained.

For better comprehension, reference may be made to the accompanying drawings, in which—

Figure 1 is an elevation of a winding-frame with our improvements in position; Fig. 2, a top, and Fig. 3 an end, view of same; Figs. 4 and 5, a front view and cross-section of the supporting-rail, showing one of the weighted hinges; Figs. 6 and 7, views of the bar upon which the ends of the bobbins rest; Fig. 8, a view of one of the bobbins.

Like letters denote corresponding parts.

We fit to an ordinary winding frame or reel, longitudinally, a horizontal rail of wood, A, or other suitable material, to which are fixed the single halves of hinges C, the other halves hanging and working freely in the fixed portions. To the lower or free portions of the hinges are attached taper pegs D, for carrying the cops or bobbins E, which, by means of the hinges, can be moved from the oblique working position to a vertical position, and vice versa, as may be necessary, when it is requisite to fix or detach the cops or bobbins for working purposes.

When in the oblique working position, the points of the bobbins farthest removed from the wood rail bear or press on hollow recesses H in a bar, I, of metal or other material, the said bearing or pressure being insured by means of weights G, hung on the lower and free halves of the hinges, thus tending to bring the bobbins to the horizontal position F, and would do so were it not that the bar of metal or other material referred to resists the pressure, and keeps the bobbins in an inclined position.

The yarn from the cops or bobbins passes under the tapered ends or points of the same through the guide-wire, and receives a check, thereby preventing the yarn from snarling upon the bobbin or swift K, and the yarn, in passing from the cop or bobbin, is cleaned from fluss and neps, thus producing a cleaner yarn.

The cops or bobbins fit loosely on the taper pegs, but do not revolve thereon, the yarn being pulled therefrom by the action of the winding frame or reel.

Having thus fully described our invention, what we claim as new therein, and desire to secure by Letters Patent, is—

1. The combination, with the rail A, of the weighted hinge C, having the peg D, for carrying a bobbin, substantially as described and shown.

2. The combination of the rail A with the weighted hinge C, peg D, and bar I, substantially as described and shown.

WILLIAM LEATHAM BRIGHT.  
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