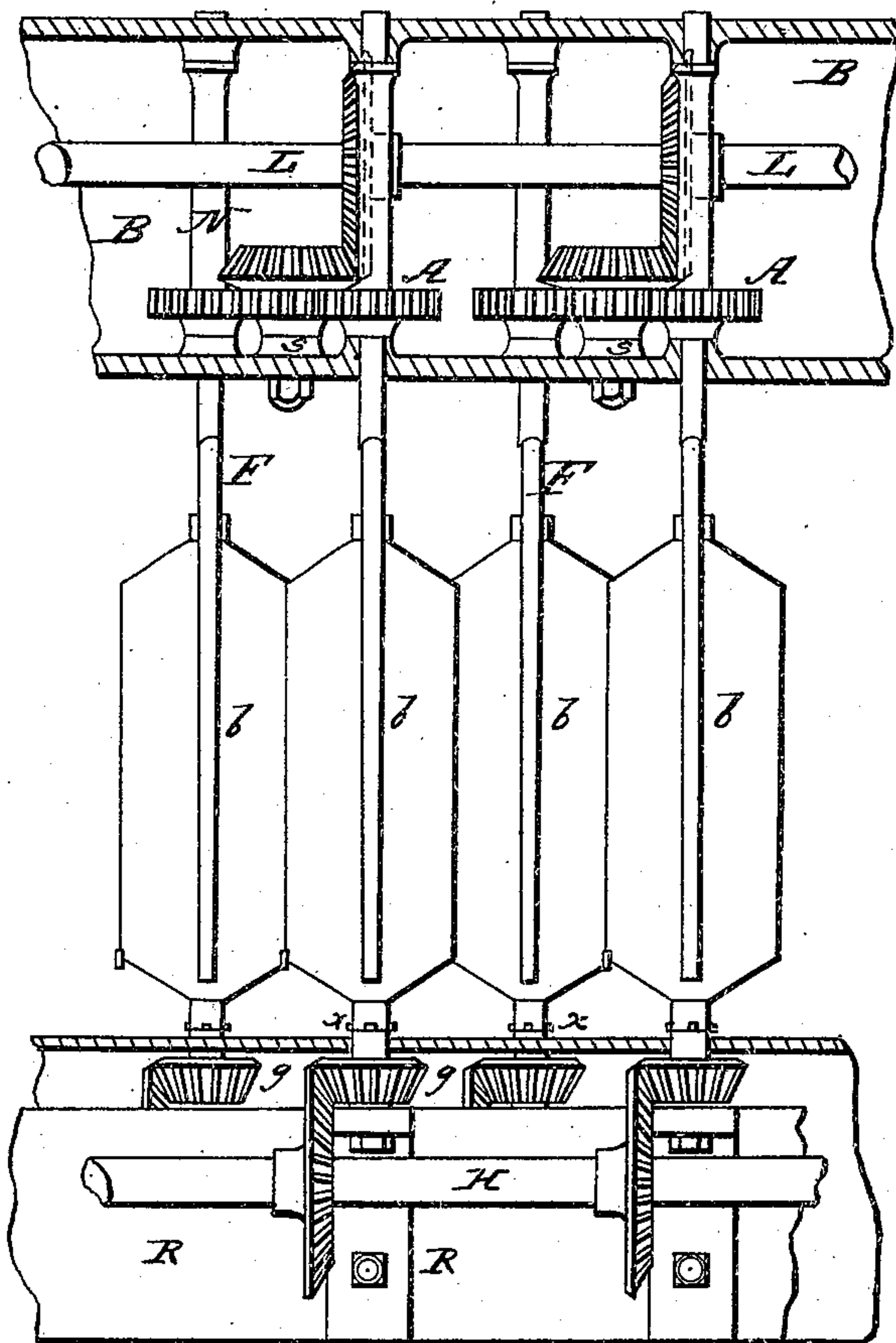
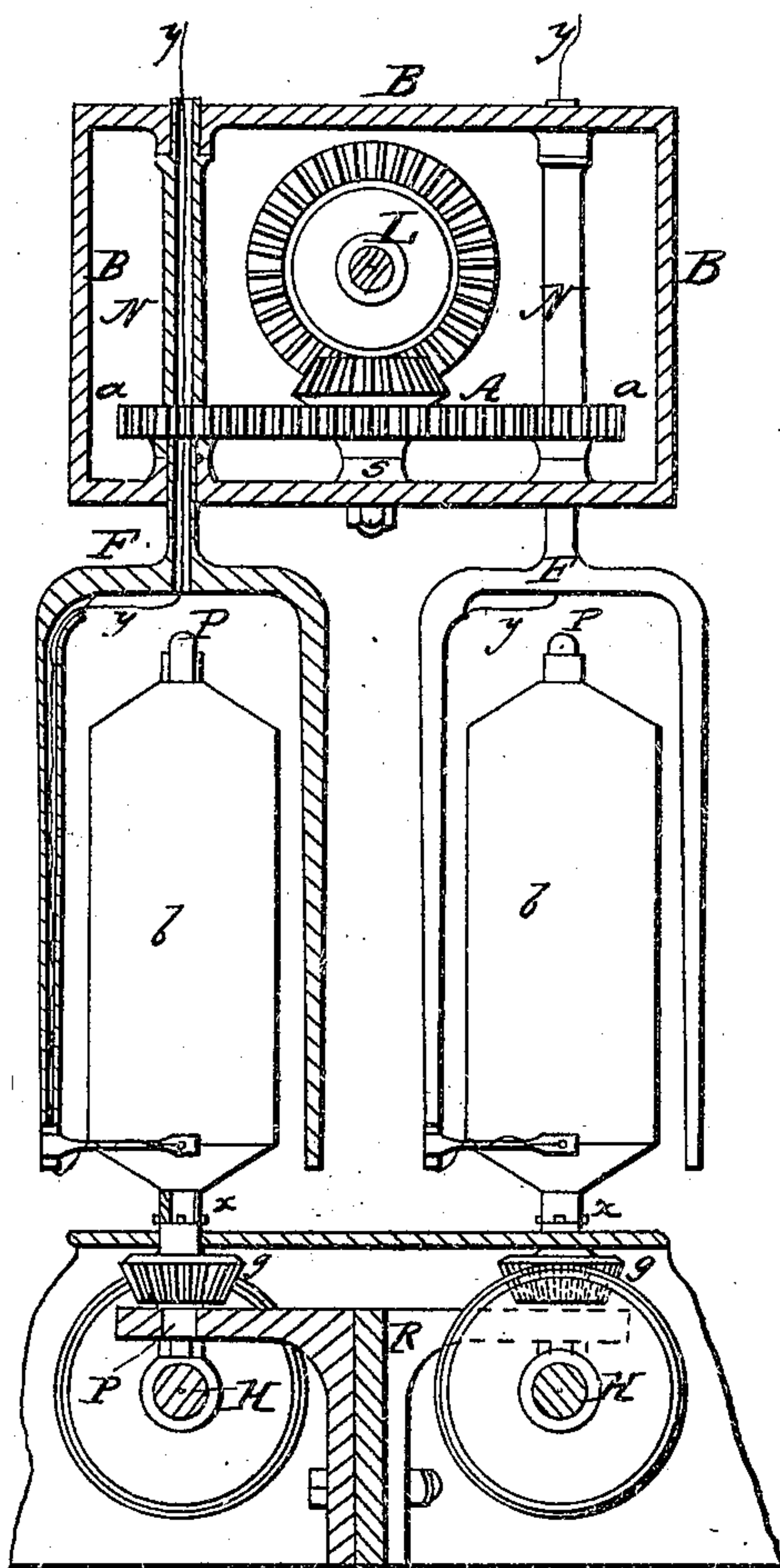


*T. W. Taylor.*  
*Spinning Throstle.*

*N<sup>o</sup> 15,535*

*Patented Aug. 12, 1856.*



*Witnesses.*  
*Geo. F. Wilson.*  
*Richmond Jones & Co.*

*Inventor.*  
*Thomas W. Taylor.*



# UNITED STATES PATENT OFFICE.

THOMAS W. TAYLOR, OF CANNELTON, INDIANA.

## SPINNING-FRAME.

Specification of Letters Patent No. 15,535, dated August 12, 1856.

*To all whom it may concern:*

Be it known that I, THOMAS W. TAYLOR, of the town of Cannelton, county of Perry, State of Indiana, have invented a new and  
5 useful Improvement in the Methods of Constructing Roving or Fly Frames; and I do hereby declare that the following is a full and exact description of the same, reference being had to the annexed drawings, making  
10 a part of this specification, in which—

Figure 1, is a cross-section of that portion of the fly-frame in which the fliers and bobbins are introduced, and Fig. 2, a longitudinal section of the frame and elevation of the  
15 gearing by which the fliers and bobbins are driven.

As this portion of the frame has hitherto generally been constructed, the flier has been attached to the top of and rests upon the  
20 bobbin-spindle. The great length of the spindle between its bearings at the extreme of the traverse, and the superincumbent weight of the flier, cause, when run at such high speeds as would otherwise be desirable, a vibratory or "wabbling" motion of  
25 the spindle,—thereby producing rapid wear and consequent failure of the bearings,—especially that in the bobbin or lifting-rail. It may be noticed, moreover, that the front  
30 and back lines of fliers are now generally driven by two separate shafts. To remedy these defects, I have provided that the bobbin-spindle shall have no connection with the flier and shall be of no greater length  
35 than is necessary to fulfil its purpose as an axis for the bobbin to revolve upon. This is accomplished by making the neck of the flier of sufficient length to receive bearings in the upper and lower sides of a box running lengthwise of the frame, through which  
40 passes a shaft communicating motion by bevel gears to a spur gear working upon a stud centered upon the middle point of the diagonal line passing through the bearings  
45 of two nearest opposite fliers, and meshing into pinions upon the necks of the fliers. Both front and back lines of fliers are thus

driven by one and the same shaft, instead of two shafts which are now generally used for this purpose. The bobbin-spindles may be  
50 fixed in the lower rail and be stationary, the bobbins resting upon the bevel gears worked by the present bobbin driving shaft and revolving about the bobbin-spindle as an axis.

To enable others skilled in the art to make  
55 and use my invention, I will proceed to describe its construction, reference being had to the accompanying diagrams, in the different figures of which the same letters refer to like parts.

P, P, represents the bobbin-spindle affixed to the lower rail R; *b, b*, the bobbins resting upon the bevel gears *g, g*, worked by the shaft H, and attached to these gears by  
60 small pins *x, x*, fitting into slots in the lower end of the bobbin-case.

B, B, represents the box inclosing the shaft L driving by bevel gears the spur gears A upon the stud *s* centered upon the middle point of the diagonal line passing  
70 through the bearings of two nearest opposite fliers, and meshing into the pinions *a, a*, upon the necks of the fliers N, N. The necks of the fliers are made tubular to allow the yarn *y, y*, to pass down, through, and around  
75 one arm of the flier F, F.

The upper box or rail B, is made stationary and the lower rail R is made to traverse by the same or similar contrivances and connections with the other parts of the  
80 frame as are now in use for this special purpose.

What I claim as my invention and desire to secure by Letters Patent is—

The construction, arrangement, and driving of the fliers of fly-frames in combination with either a live or dead bobbin-spindle, as the case may be, substantially as set forth in my specification.

THOMAS W. TAYLOR.

Witnesses:

GEO. F. WILSON,  
RICHMOND JONES, Jr.