B. E. Sampson.

Spinning Flyer.

No. 45,300. Patented Nov. 29, 1864.

Fig. 1.

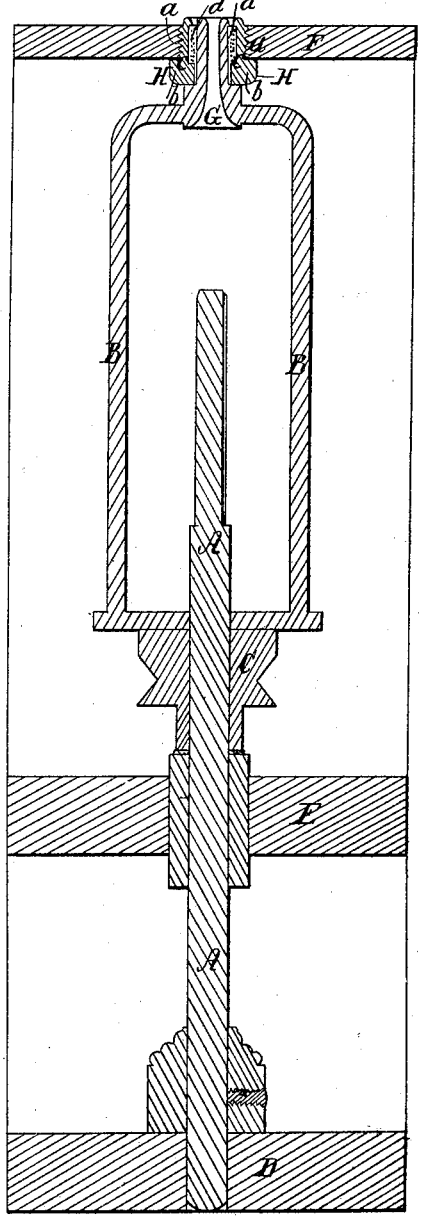

Fig. 2.

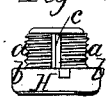

Fig. 3.

Witnesses.
F. D. Hale Jr
Arthur Neal

Inventor
Haney E Sampson

UNITED STATES PATENT OFFICE.

BLANEY E. SAMPSON, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF AND GEORGE N. TROWBRIDGE, OF ROLLINSFORD, N. H.

IMPROVEMENT IN BEARINGS FOR FLIERS OF SPINNING-MACHINES.

Specification forming part of Letters Patent No. **45,300**, dated November 29, 1864.

To all whom it may concern:

Be it known that I, BLANEY E. SAMPSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Flier-Bearings; and I do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 denotes a vertical section of a flier and its spindle, having my improvement applied to the bearing of the former. Fig. 2 is a side view, and Fig. 3, a horizontal section, of the flier-neck bearing.

My improvement consists in the application of a green or raw hide collar, or its equivalent, within and to the flier-neck bearing substantially in manner as hereinafter specified, the purpose of the said collar being to effect not only a saving of oil or lubricating material used on the flier-neck, but a consequent economy in wear upon, and in the power employed to revolve the flier.

In the drawings, A denotes a spindle, and B the flier of a spinning-machine, C being the whirl of the flier. D is the spindle or movable rail, while E and F are the stationary or flier rails. G is the neck of the flier, and H the bearing of such neck. This bearing is a cylindrical screw-nut, which is screwed upward into the flier-rail F, and for the purpose of being so affixed to such rail it is made with a screw, *a*, and a shoulder, *b*. The bore or the interior of the said bearing H is provided with an annular chamber, *c*, for the reception of an annular or tubular green or raw hide collar, *d*. In order to enable the said collar to be inserted in the said annular chamber, the neck-bearing H is constructed with an opening or passage, *e*, leading laterally out of the chamber and through the bearing, as shown in Figs. 2 and 3. It is through the said opening that a strip of hide having a transverse section corresponding to that of the opening is pushed endwise, and into and around in the chamber until the end so introduced shall be caused to abut against the strip. A cylindrical pin is next driven into the chamber in a manner to spread the strip of rawhide and set it firmly into the chamber or against the circumference thereof, after which the strip is to be cut off in the passage *e*, or at or near the outer extremity thereof. The part of the strip which will remain within the passage will prevent the collar from revolving within the chamber while the flier may be in revolution.

The rawhide collar is much more durable than a metallic one, and causes the machinery to run with much less noise and vibration.

I claim—

1. The application of the green hide collar, or its equivalent, to the flier-neck bearing in the manner or by the mode substantially as hereinbefore specified.

2. The improved flier neck bearing as made with the annular chamber *c* (for reception of the rawhide collar *d*) and with the opening or passage *e*, leading laterally out of the said chamber, in manner as specified.

BLANEY E. SAMPSON.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.