

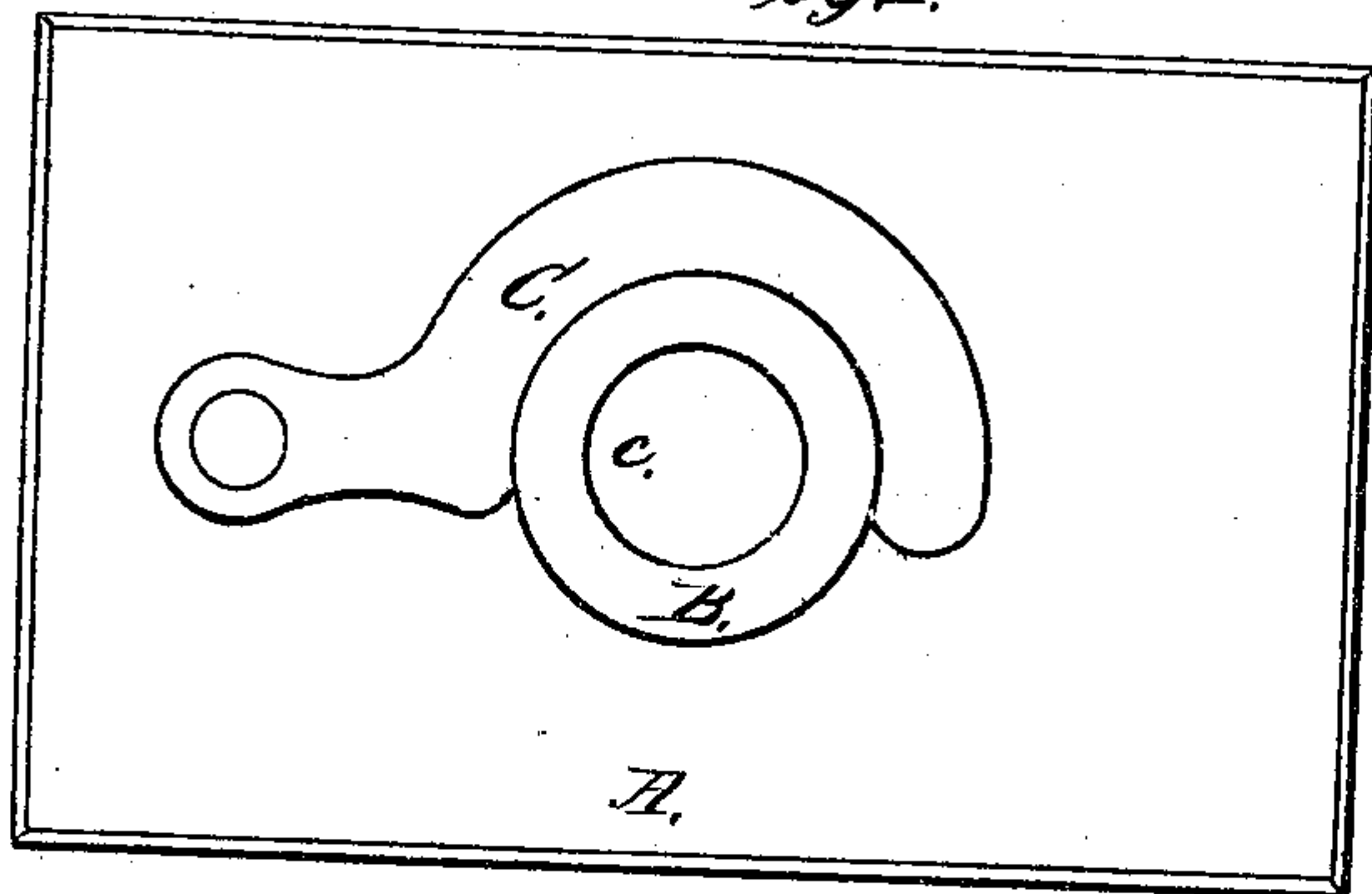
*J. Brown.*

*Bolster*

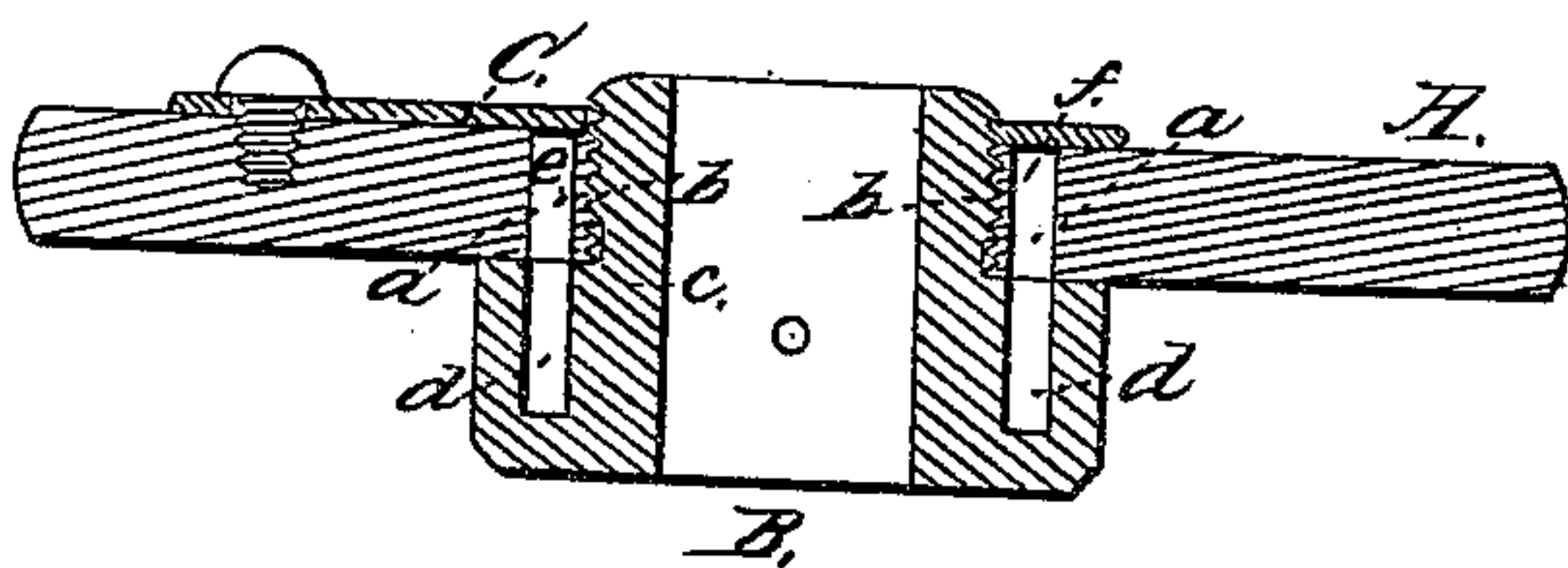
*N<sup>o</sup> 81,064.*

*Patented Aug. 18, 1868.*

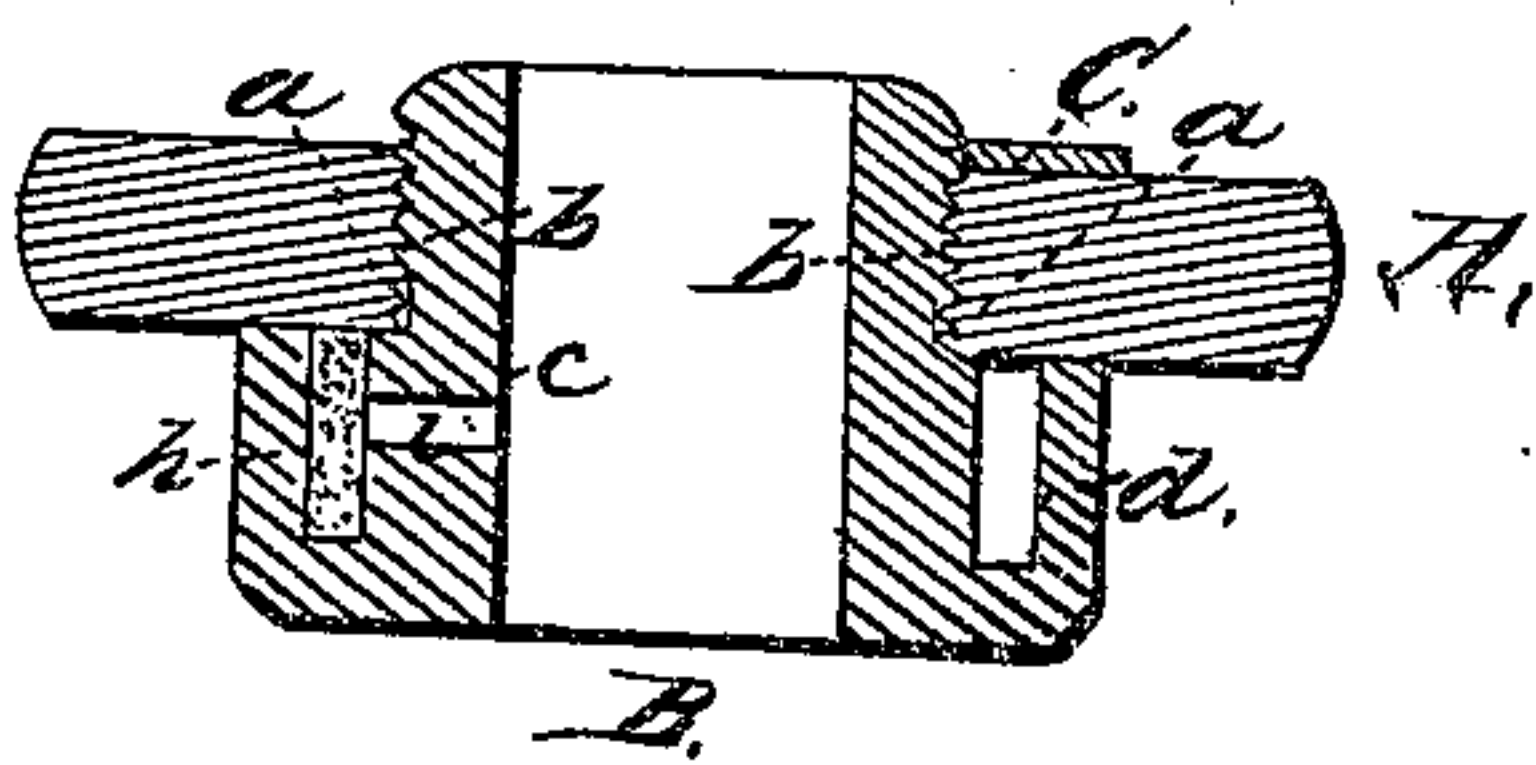
*Fig. 1.*



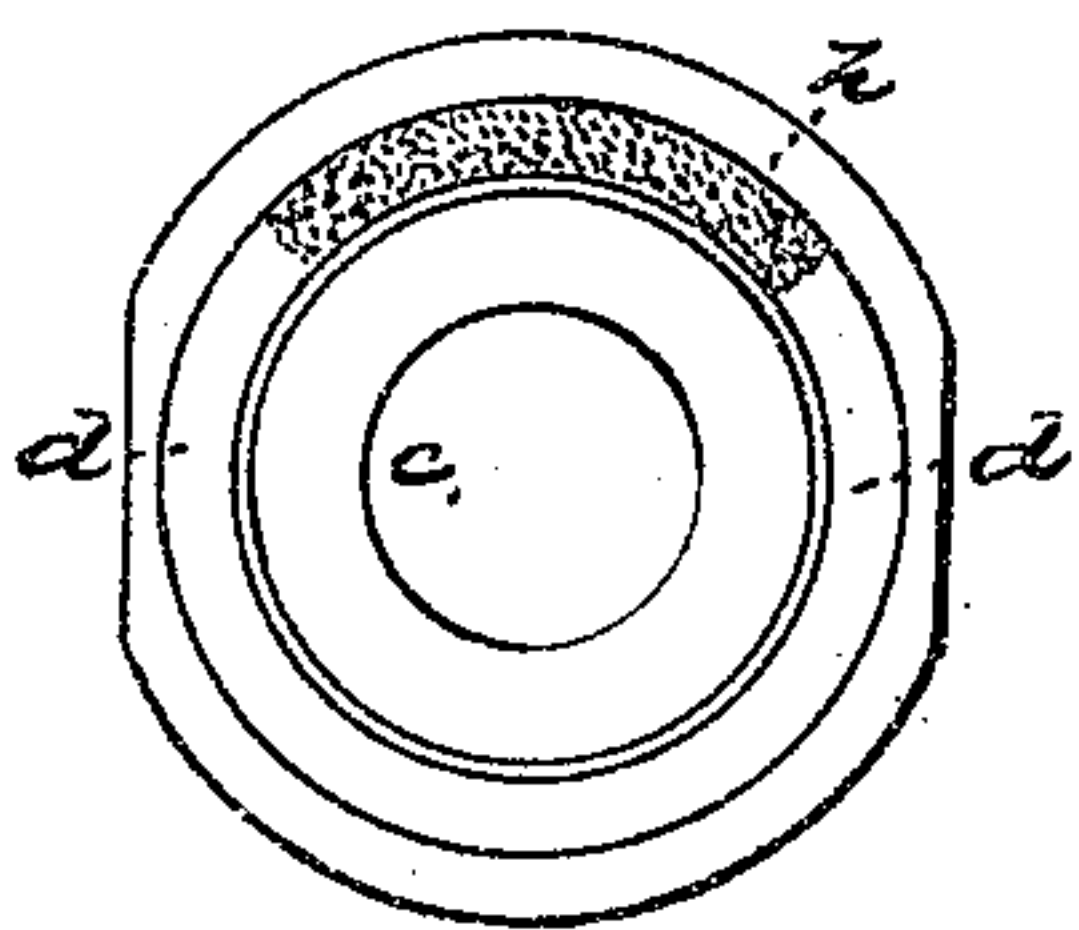
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



*Witnesses*  
*S. N. Piper*  
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*Inventor.*  
*James Brown,*  
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*R. H. Ledy.*

# United States Patent Office.

JAMES BROWN, OF PAWTUCKET, RHODE ISLAND.

*Letters Patent No. 81,064, dated August 18, 1868.*

## IMPROVEMENT IN BEARING FOR FLIERS IN SPINNING-MACHINES.

*The Schedule referred to in these Letters Patent and making part of the same.*

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, JAMES BROWN, of Pawtucket, in the county of Providence, and State of Rhode Island, have invented an Improved Bearing for Speeder-Fliers; 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 is a top view.

Figure 2, a longitudinal section.

Figure 3, a transverse section of a flier-rail with my invention applied thereto.

Figure 4 is a top view of the bearing as separated from the rail.

The said bearing is intended to receive and support the nose or upper journal of a spindle-flier.

In the drawings, A denotes the flier-rail, it being formed with a female screw, *a*, cut in it, to receive the male screw *b*, of the flier-bearing B. The said bearing consists of a tube, *c*, having an annular trough or channel, *d*, extended around its lower half, in manner as represented. It also has a male screw, *b*, cut or formed on its upper half. Two holes, *e f*, made with the rail A, on opposite sides of the screw *b*, lead into the channel *d*. The rail A is provided on its upper surface with a cover, C, so applied to it as to be capable of being turned laterally on a pin, in order to either cover or uncover the said holes.

When oil is being poured into one of the holes for the purpose of supplying the trough with a quantity of such oil, the air of the trough, displaced by the oil, will flow out of the hole.

Between the said two holes there is disposed within the trough, and in one-half thereof, a packing, *h*, of felt, or other proper absorbent material, it being arranged to cover an eduction-passage, *i*, leading from the trough *d*, at or near its bottom, into the bore of the tube *c*.

When the trough *d* is supplied with oil, a small portion thereof from time to time will leak through the packing *h* into the passage *i*, and will find its way through it to the inner surface of the bore of the bearing B, and while the flier-neck may be therein, such oil will lubricate the contiguous surfaces of such neck and the bearing. The top of the trough constitutes a shoulder, to arrest the upward movement of the screw *b*, and by being borne against the lower surface of the rail A, will cause the trough to be so covered by such rail as to prevent dust from entering the trough.

I am fully aware of the inventions described in the United States patents, Nos. 30,937, 34,221, 44,988, and 45,752. Although the spindle-bearings described in such patents, or in some one or more of them, have a trough or oil-chamber to extend around and concentrically with the bore or space for reception of the spindle, and such trough has two inlets and one or more eduction-passages, and contains a packing, as is the case with my speeder-flier bearing, yet in neither of the said inventions so patented do we find the bearing provided with a male screw to screw up into the rail; nor do we find the rail provided with a female screw to receive the said male screw; nor do we find in either of the said patents the oil-trough of the bearing, as arranged underneath the rail, and open at top, so that the rail may serve as a cap to the trough; nor do we find the oil-supply and air-exit holes made in the rail; nor do we find the packing arranged so as to cover the eduction-hole only, without covering the inner ends of the oil-supply and air-outlet holes.

My arrangement of the packing renders the trough capable of holding a larger quantity of oil than it would were the packing to extend entirely around it. Therefore it will be seen that while there are some features common to my speeder-bearing, and the others, as hereinbefore referred to, there are others of value and importance in mine not found in those described in such patents.

What, therefore, I claim as my invention or improvement, is as follows:

I claim the within-described arrangement of the confining-screws *a b*, the tube *c*, the rail A, and the oil-trough *d*, placed underneath the rail, the screws by such arrangement being within the rail, and the oil-trough being below, and covered by it, in manner as specified.

I also claim the arrangement of the confining-screws *a b*, the tube *c*, the rail A, provided with oil and air-ducts *e f*, the oil-trough *d*, and the oil-duct *i*, substantially as described.

JAMES BROWN.

Witnesses:

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