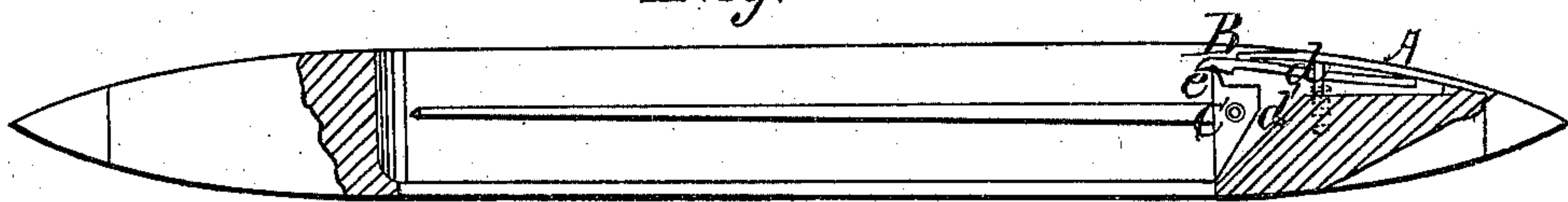


*E. Baggett.*  
*Shuttle.*

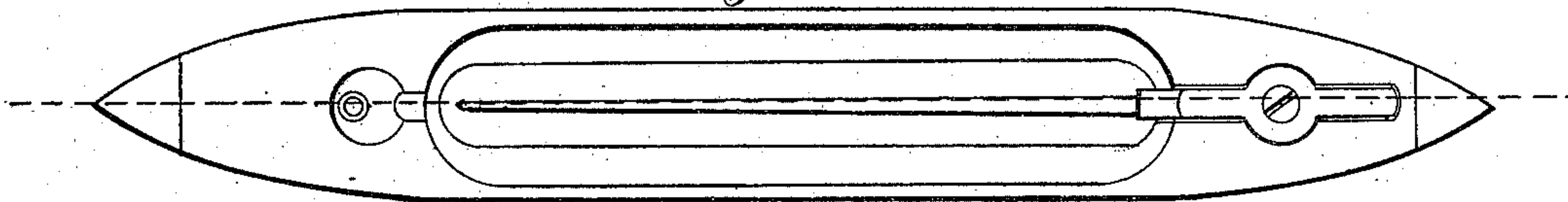
*N<sup>o</sup> 81,578.*

*Patented Sept. 1, 1868.*

*Fig. 1*



*Fig. 2*



*Witnesses*  
*Wm A. Morgan*  
*G. C. Cotton*

*Inventor*  
*E. Baggett*  
*per Munnell*  
*Attorney*

# UNITED STATES PATENT OFFICE.

EDWARD BAGGETT, OF FALL RIVER, MASSACHUSETTS.

## IMPROVEMENT IN SHUTTLES FOR LOOMS.

Specification forming part of Letters Patent No. **81,578**, dated September 1, 1868.

*To all whom it may concern:*

Be it known that I, EDWARD BAGGETT, of Fall River, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Shuttles; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The object of this invention is to provide an improved construction of shuttles, whereby the wear of the spring upon the shoulder of the spindle may be materially lessened, and whereby, also, they may be more readily and cheaply repaired when they become too much worn.

It consists in a secondary spring interposed between the spring commonly used to take the wear off from the shoulder of the spindle, and in constructing the shoulder of the spindle in a form adapted to the application of the said secondary spring.

Figure 1 represents a longitudinal sectional elevation of my improvement applied to a shuttle, and Fig. 2 represents a plan view of the same.

Similar letters of reference indicate corresponding parts.

A represents the ordinary spring, but which, according to my improvement, is preferably made shorter than as commonly used. B represents a secondary spring interposed between

the spring A and the shoulder C of the spindle. It is provided with a notch or groove at the front end, and with a slot, *d*, about the center. The rear end bears upon the face of a recess in the body of the shuttle under the spring A.

The shoulder of the spindle is reduced at the top to a narrow point, *e*, suitable to rest in the notch in the end of the secondary spring B. When the spindle is raised up, the spring B is moved by the action of the shoulder of the spindle, and takes the wear of the spring A.

In consequence of the greater length of the spring B than the ordinary face of the shoulder which bears against the spring, and also of the sliding movement of the same in a straight line, or nearly so, in contact with the spring A, the wear of the pawls will be materially less than according to the old arrangement.

When the spring B is worn out, a new one can be substituted at much less expense than a new spindle.

The shoulder of the slot in the spring limits the movement of the same when the spindle is raised up.

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

The combination, with the spring A and shoulder C, of the spindle of the secondary spring B, notched, slotted, and sliding substantially as and for the purpose described.

EDWARD BAGGETT.

Witnesses:

B. F. WINSLOW,  
JOHN D. MASON.