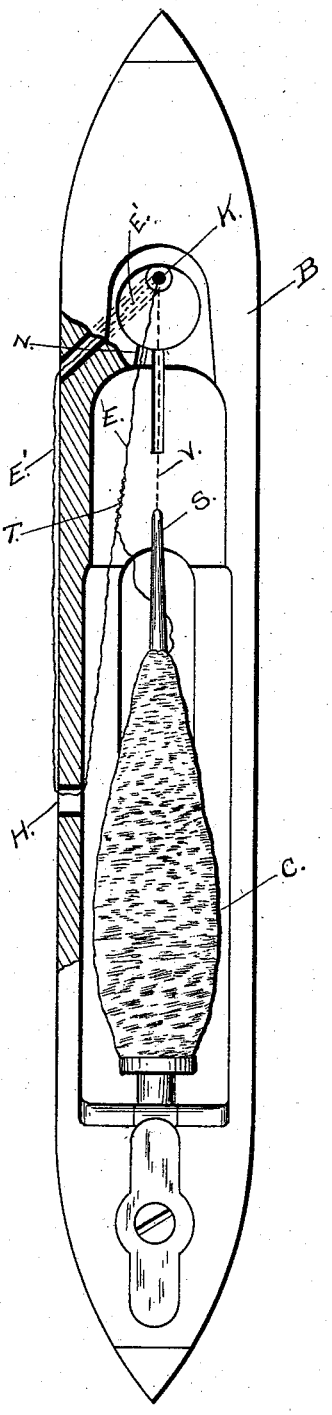
(No Model.)

A. BOULAY.

SHUTTLE THREADER.

No. 524,240. Patented Aug. 7, 1894.



Witnesses.
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UNITED STATES PATENT OFFICE.

ALFRED BOULAY, OF CENTRAL FALLS, RHODE ISLAND.

SHUTTLE-THREADER.

SPECIFICATION forming part of Letters Patent No. 524,240, dated August 7, 1894.

Application filed May 23, 1894. Serial No. 512,172. (No model.)

To all whom it may concern:

Be it known that I, ALFRED BOULAY, a citizen of the United States, residing at Central Falls, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Shuttles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which forms a part of this specification.

My invention relates to improvements in shuttles in which the thread or yarn from the cop passes through a tube or perforation in the side of the shuttle near its extremity; and the object of my invention is to provide a means of drawing the thread through the perforation with greater ease and safety than is possible with shuttles now in use.

I accomplish this object by the device shown in the accompanying drawing which shows a shuttle embodying my improvement.

B is the body of the shuttle; C the cop of yarn, and S the spindle supporting the cop.

K is the ordinary tube through which the yarn passes from the cop to the outside of the shuttle.

H is an additional perforation made in the side of the shuttle about midway of its length.

Through the two perforations K and H passes an endless band E—E′, having a tension just sufficient to enable it to be easily slipped or moved in the direction of its length without flapping. This band is made of loosely twisted cord of cotton or wool or some equivalent material, not smoothly finished upon the outside.

In the shuttles now in common use, the method of drawing the yarn through the perforation K consists in the weaver placing his mouth over the external orifice of the tube K, placing a bunch of the yarn against the internal opening of K, and sucking the yarn through into his mouth, a very dangerous and unhealthful practice.

With my invention the end of the yarn is taken between the thumb and finger and slightly twisted with the endless band E—E′, as shown at T; the thumb then draws the part E′ of the endless band downward along the body of the shuttle, thus drawing the inner portion E of the endless band through the tube K, and of course with it the end of the yarn T. The end of the yarn is then easily disengaged and the shuttle adjusted in the loom. A slight nick N keeps the endless band separate from the yarn while the shuttle is in motion in the loom.

V represents the normal course of the yarn to the eye or tube K when the shuttle is in use.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

A shuttle having the perforation H in the side wall thereof, the tube K near the end thereof, and the endless band E E′ passing through said perforation and tube substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

his
ALFRED × BOULAY.
mark

Witnesses:
AMBROSE CHOQUET,
STEPHEN P. STEERE.