

W. TUNSTILL.
SHUTTLE FOR LOOMS.

No. 45,682.

Patented Dec. 27, 1864.

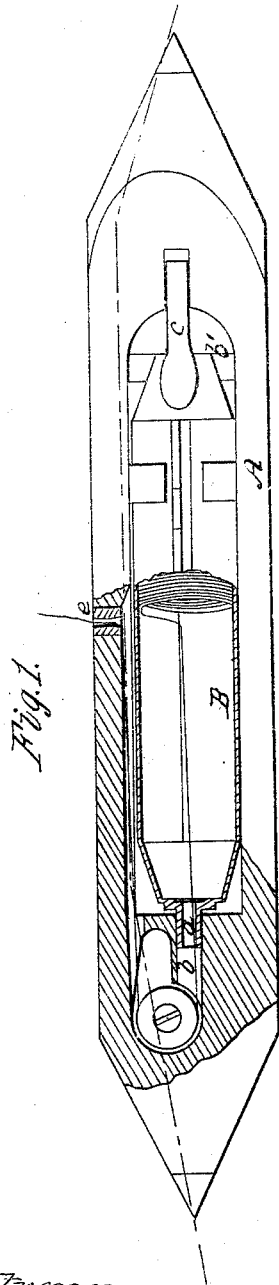
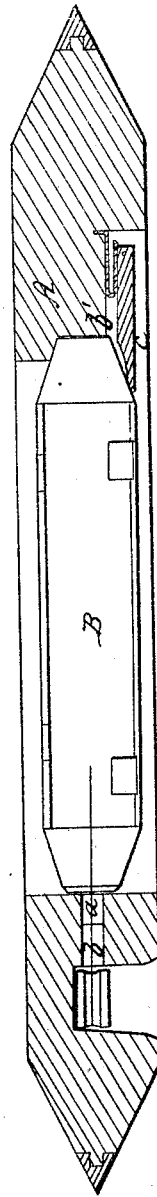


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN SHUTTLES FOR LOOMS.

Specification forming part of Letters Patent No. **45,682**, dated December 27, 1864.

To all whom it may concern:

Be it known that I, WILLIAM TUNSTILL, of the city, county, and State of New York, have invented a new and useful Improvement in Shuttles for Looms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a sectional plan or top view of this invention. Fig. 2 is a longitudinal vertical section of the same.

Similar letters of reference indicate like parts.

This invention consists in the employment or use of a case made of sheet metal or other suitable material, just large enough to receive a cop of suitable form and size, and secured in a shuttle in place of the ordinary quill in such a manner that the weft-thread is perfectly protected, and the liability of said thread becoming entangled is materially reduced.

A represents a shuttle for a loom, said shuttle being of the usual form and construction, but without a quill. Instead of the quill, a case, B, of sheet metal or other suitable material, is fitted into the shuttle, as shown in the drawings. Said case is made in the form of a cop, its central part being cylindrical with two conical ends, and from one of these ends extends a tubular gudgeon, *a*, which is inserted into a hole, *b*, in the shuttle, and the opposite

end of the case drops into a cavity, *b'*, in the shuttle, being retained in its position by a spring-catch, *c*, of any suitable construction.

The cops are wound by suitable mechanism and placed into the case B, which is provided with a lid, so that it can be easily opened whenever it may desired, and the end of the cop is drawn out through the tubular gudgeon *a*, and round a roller, *d*, as clearly shown in Fig. 1, and thence to the eye *e* of the shuttle. By these means the weft-thread is perfectly protected, and if the cops are properly wound, it (the weft-thread) is not liable to become entangled. The cops which I use are wound so that the thread can be taken from their inside, and I find that by using cops of this description the liability of the thread becoming entangled is still further reduced. It must be remarked, however, that I do not wish to restrict myself to cops of any particular kind or construction, since the case B can be advantageously applied with cops of any description.

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

The employment or use of the case B, in combination with a shuttle, A, constructed, applied, and operating substantially as and for the purpose set forth.

WILLIAM TUNSTILL.

Witnesses:

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