

N. CARON.
HAND THREADING SHUTTLE ATTACHMENT.
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976,632.

Patented Nov. 22, 1910.

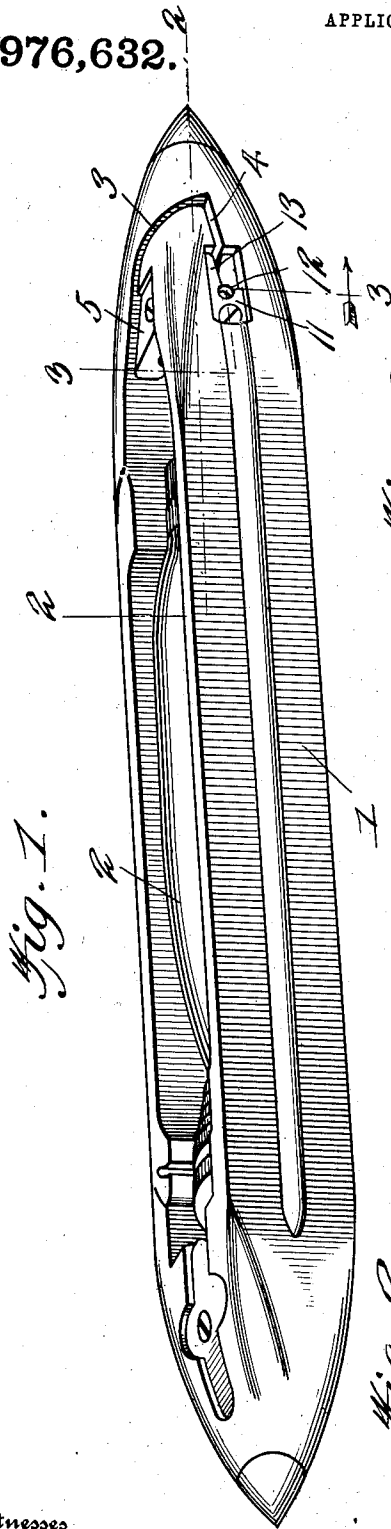


Fig. 1.

Fig. 3.

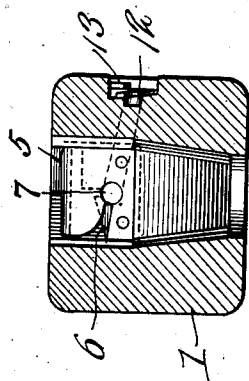


Fig. 5.

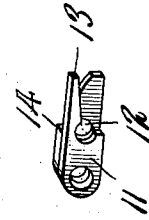


Fig. 2.

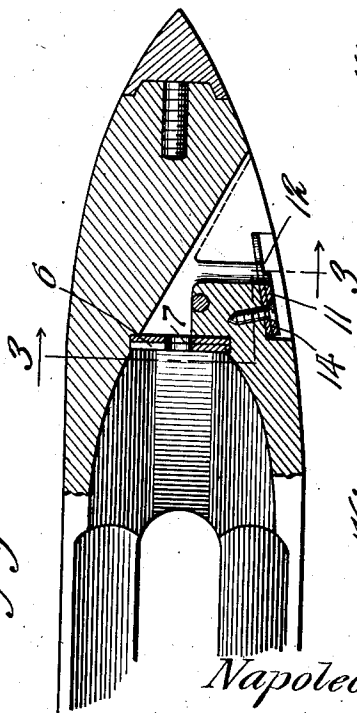


Fig. 4a.

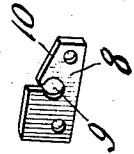
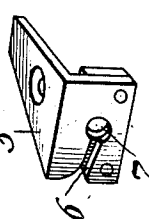


Fig. 4.



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UNITED STATES PATENT OFFICE.

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HAND-THREADING-SHUTTLE ATTACHMENT.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, NAPOLEON CARON, a citizen of the United States, residing at Nashua, in the county of Hillsboro and State of New Hampshire, have invented new and useful Improvements in Hand-Threading-Shuttle Attachments, of which the following is a specification.

This invention relates to shuttles for looms, and the primary object of the invention is to provide a shuttle with novel means whereby the yarn may be easily and quickly fed from the bobbin without danger of breaking the same.

With the above and other objects in view which will appear as the description progresses the invention resides in the novel construction and combination of elements hereinafter fully described and claimed.

In the accompanying drawing there has been illustrated a shuttle constructed in accordance with my invention and in which,

Figure 1 is a perspective view of the shuttle. Fig. 2 is a horizontal section upon the line 2—2 of Fig. 1. Fig. 3 is a transverse sectional view upon the line 3—3 of Fig. 1. Figs. 4 and 5 are perspective views of the guide members.

In the accompanying drawing the numeral 1 designates an ordinary shuttle for looms. This shuttle 1 is provided with a usual spring pressed spindle upon which is positioned a bobbin 2 also of the ordinary construction. The forward end of the shuttle is provided with an angularly arranged vertical slot 3 upon its solid forward portion and this slot 3 communicates with a horizontal slot or opening 4. The inner transverse wall of the solid end of the shuttle 1 is provided with a yarn guide 5. This guide 5 comprises a substantially L-shaped member having its vertical wall provided with an inclined slot 6 communicating with an enlarged eye 7. Secured upon the inner face of this vertical portion of the L-shaped member 5 is a yarn guard member 8. This member 8 is provided with an eye 9 alining with the eye 7 and is also provided with a wall 10 which communicates with the center of the eye 9 and which is arranged at a different inclination to that of the slot 6 of the member 5 so as to effectively prevent the

yarn from being drawn rearwardly through the said slot 6.

The outer face of the side of the shuttle 1 is provided with a suitable recess communicating with the cut away portion 4 of the said shuttle. This recess is adapted for the reception of a second guard member designated by the numeral 11. This member 11 is preferably constructed of a guide member and a guard member each provided with a semi-cylindrical opening comprising an eye 12 and overlying finger portions 13 arranged adjacent each other. The inner finger portion 13 is cut away as at 14 to allow for the entrance of the thread to the eye 12 and the said portion has its edge adjacent the cut away portion 14 arranged at a suitable curve or angle so as to provide for the free passage of the yarn to the said eye 12. When it is desired to thread the yarn carried by the bobbin 2 it is merely necessary to draw a portion of the thread from the bobbin and pass the same within the vertical slit 3 of the bobbin and when the same has been drawn downwardly and rearwardly it will be readily passed within the eyes 7 and 12 of the guide members 5 and 11. The plates of these members have their outer edges slightly spaced apart which provides for the ready passage of the yarn to the eyes of the members. It is to be understood that each of the guide members have their body portions provided with suitable openings adapted for the reception of screws or the like and through the medium of which the said members are secured in position upon the bobbin.

Having thus fully described the invention what is claimed as new is:

The combination with a shuttle provided with a bobbin having yarn thereon, said shuttle having its forward solid portion provided with a horizontal slit and a vertical slit communicating therewith, the outer face of the shuttle being provided with a depression communicating with the horizontal slit, yarn threading members, one of said yarn threading members being located transverse to the throat of the shuttle, the second yarn threading member being located within the horizontal depression provided upon the side of the shuttle and communicating with the

horizontal slit thereof, each of said members
comprising a guide and a guard member
connected together and having their for-
ward ends slightly spaced away from each
5 other and said members being provided with
oppositely inclined fingers terminating in
eyes.

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

NAPOLEON CARON.

Witnesses:

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