H. DANSETTE & A. DAZIN.

DEVICE FOR SECURING BOBBINS TO SHUTTLES FOR WEAVING LOOMS.

APPLICATION FILED FEB. 6, 1911.

1,006,441.

Patented Oct. 17, 1911.

2 SHEETS—SHEET 1.

Fig. 2

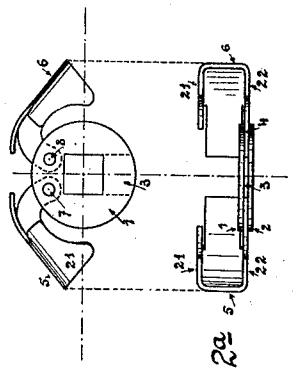


Fig. 2a

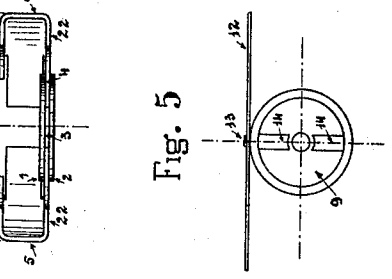


Fig. 5

Fig. 4

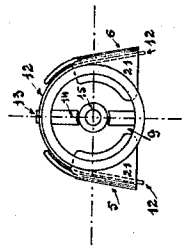


Fig. 1

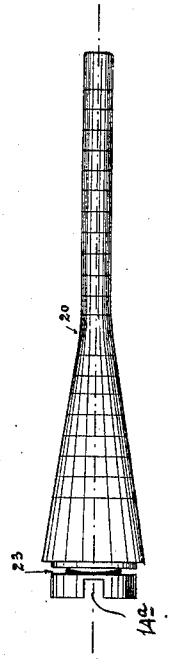
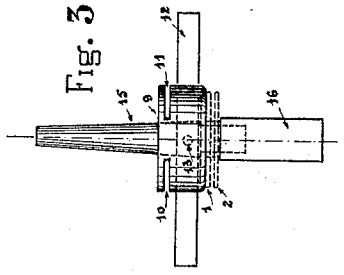


Fig. 3



Witnesses:-

Inventors.
Henri Dansette & Albert Dazin.
by their Attorney

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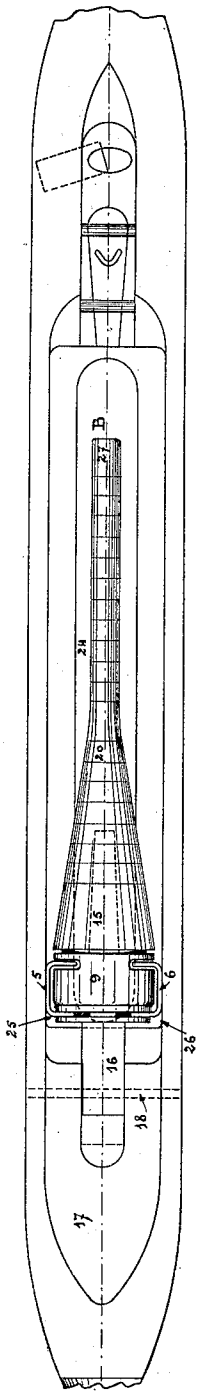

Fig. 7

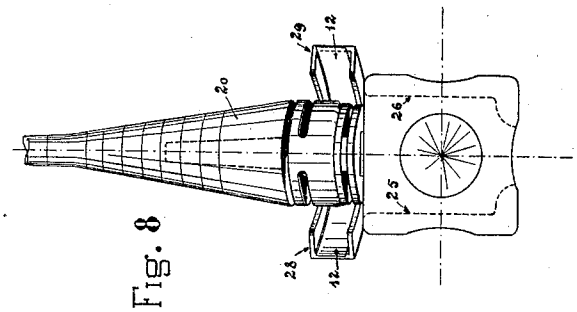

Fig. 8

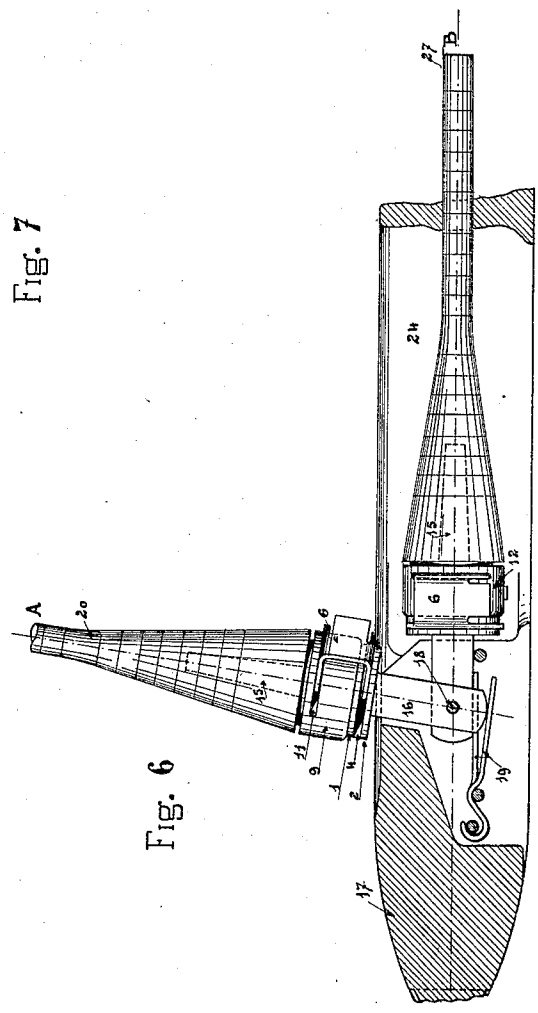

Fig. 6

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UNITED STATES PATENT OFFICE.

HENRI DANSETTE AND ALBERT DAZIN, OF LILLE, FRANCE.

DEVICE FOR SECURING BOBBINS TO SHUTTLES FOR WEAVING-LOOMS.

1,006,441. Specification of Letters Patent. **Patented Oct. 17, 1911.**

Application filed February 6, 1911. Serial No. 606,769.

To all whom it may concern:

Be it known that we, HENRI DANSETTE and ALBERT DAZIN, citizens of the French Republic, both residing at Lille, in France, have invented certain new and useful Improvements in Devices for Securing Bobbins to Shuttles for Weaving-Looms, of which the following is a specification.

The present invention relates to means for securing bobbins in shuttles for weaving looms with automatic release thereof, and the object is to maintain the bobbin always rigidly held well in the center of its recess in the shuttle, and consequently to obviate all shaking and rocking thereof, to assure regular feed of the thread, to prevent breakage of said thread and to prevent the bobbin from rising during action.

An embodiment of the invention is shown in the accompanying drawings, in which—

Figure 1 is an elevation of the wound bobbin detached. Fig. 2 is an elevation of the base and jaws hereinafter referred to. Fig. 2^a is a plan view thereof. Fig. 3 is an elevation of the complete bobbin securing device detached. Fig. 4 is a plan view thereof with the spring hereinafter referred to in a different position. Fig. 5 is a detail view of parts shown in Figs. 2 to 4. Fig. 6 is a sectional elevation showing a portion of a shuttle with a bobbin in both operative and inoperative positions. Fig. 7 is a plan view of a shuttle with a bobbin secured in operative position therein. Fig. 8 is a detached perspective view of a bobbin with part of the securing device and shuttle.

The improved bobbin attaching means comprises a metal frame consisting of a base formed of two washers 1 and 2 separated by a space 3 and connected together as by rivets (not shown). In the space 4 between said washers are located jaws 5 and 6 mounted to freely rotate about pivots 7 and 8 and having flanges 21 and 22.

On the base is mounted a bowl 9, (Fig. 3) provided with lateral apertures 10 and 11 to permit the passage of and to guide the two upper flanges 21 of the jaws 5 and 6, Fig. 4, the two lower flanges 22 thereof entering the space 4 between the washers 1 and 2.

To the exterior wall of the bowl 9 is secured a flat spring 12, by means of a rivet 13 passing through its center, the ends of said spring being passed between the flanges of the jaws 5 and 6 in order to hold them apart in the position shown in Fig. 2 when the device is out of action.

Within the bowl at the bottom thereof are fixed two bars or projections 14 on which the foot of the bobbin rests, said projections engaging a recess 14^a in said foot.

A steel pin 15 is passed through the bowl and base screwed into a block 16 serving as a bearing to the device which is placed in the recess 24 in the shuttle 17 (Fig. 6 position A.) said block being secured therein by the pin 18 passing therethrough.

The block 16 bears upon a flat spring 19 fixed permanently within the shuttle.

The operation or function of the device is as follows:—Upon the pin 15 being introduced into the end of the bobbin 20 the ends of the jaws 5 and 6 are pressed by the operator to cause the flanges 22 and 21 to pass respectively into the recesses 4 in the bowl and into the recess 23 and foot of the bobbin through the apertures 10 and 11. At the same time that the operator presses on the jaws as described he imparts a downward effort on the device and the latter with the bobbin rotate about the pivot 18 and enter the recess 24 in the shuttle to position B without jar, this being prevented by the friction caused by the backs of the jaws 5 and 6 which bear against the interior walls 25 and 26 of the recess 24. To raise the device and remove the empty bobbin, the operator lifts the end 27 of the bobbin and the device automatically assumes its original position A, the jaws 5 and 6 which have been forced back by the spring 12 thereupon assuming the position shown at 28 and 29 (Fig. 8), thus automatically releasing the foot of the bobbin which can be removed.

What we claim as our invention and desire to secure by Letters Patent of the United States is:—

1. A device for securing bobbins to the shuttles of weaving looms, comprising a base having two series of peripheral recesses, means for pivotally securing said base within the shuttle, spring jaws pivoted in said base and separated flanges on said jaws, one set of flanges engaging the one series of apertures in the base and the other set of flanges extending through the other series of apertures for engagement with a recess in the bobbin.

2. A device for securing bobbins to the shuttles of weaving looms, comprising a base formed of spaced interconnected plates,

means for pivotally securing said base within the shuttle, a bowl secured to said base for reception of the bobbin and having peripheral apertures, a pair of spring pressed jaws pivoted in said base, and flanges on said jaws adapted respectively to enter the space between the base plates and extend through the apertures in the bowl to engage a recess in the bobbin.

3. A device for securing bobbins to the shuttles of weaving looms, comprising a base formed of spaced interconnected plates, a bowl secured to said base for reception of the bobbin and having peripheral apertures, a pair of jaws pivoted in said base, a spring acting to normally separate said jaws, flanges on the latter adapted respectively to enter the space between the base plates and extend through the apertures in the bowl to engage a recess in the bobbin against the action of the aforesaid spring, a pin extending through the bowl and base and adapted to axially enter the bobbin, and a block secured to said pin and adapted for pivotal attachment within the shuttle.

In witness whereof we have signed this specification in the presence of two witnesses.

HENRI DANSETTE.
ALBERT DAZIN.

Witnesses:
CLEMENT DUBUISFOR,
HENRI MASTAING.