H. COTÉ.

REED.

APPLICATION FILED MAR. 17, 1910.

990,528. Patented Apr. 25, 1911.

Fig. 1.

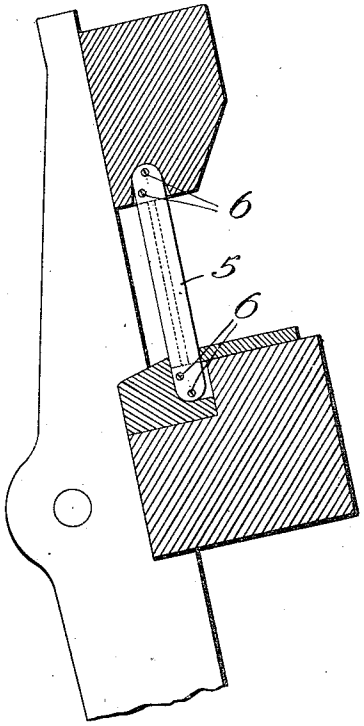


Fig. 7.

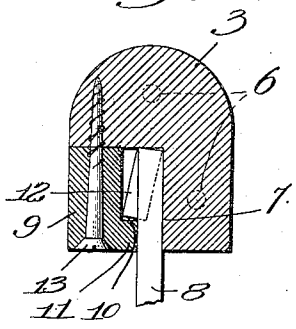


Fig. 2.

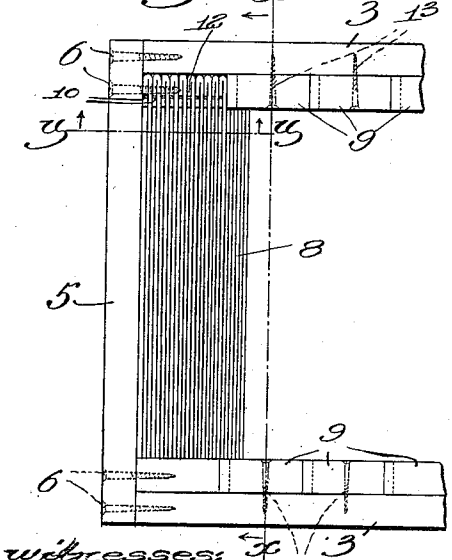


Fig. 3.

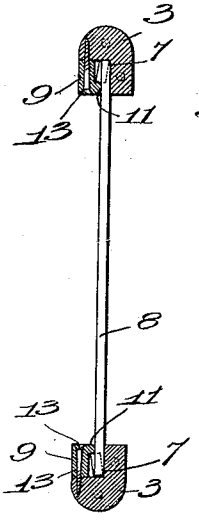


Fig. 4.

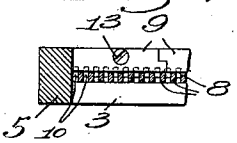
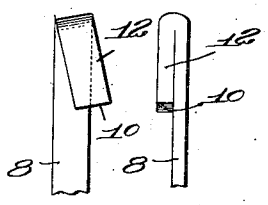


Fig. 5. Fig. 6.



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UNITED STATES PATENT OFFICE.

HENRY COTÉ, OF WEST WARREN, MASSACHUSETTS, ASSIGNOR TO WARE MACHINE & LOOM COMPANY, OF WARE, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

REED.

990,528. Specification of Letters Patent. Patented Apr. 25, 1911.

Application filed March 17, 1910. Serial No. 549,919.

To all whom it may concern:

Be it known that I, HENRY COTÉ, a citizen of the United States, and resident of West Warren, county of Worcester, and State of Massachusetts, have invented an Improvement in Reeds, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention relates to reeds, and has for its object to provide a novel reed which is adapted for use either as a loom reed, or as a warping reed, or in any other location where a reed or comb is necessary in the textile art.

One of the novel features of the invention resides in the manner in which the wires are held in place whereby any wire or set of wires can be readily removed from the reed without disturbing the other wires. This is a decided advantage because it often happens that one or two of the wires in a loom reed become bent for some reason or other and need to be replaced by new wires and with my improvement this can be readily done. It is also an advantage because oftentimes it is desirable to change the width of certain of the dents in either a loom reed or a warping reed for one purpose or another, and with my improvements this can be done by removing the wires where the change in the width of the dent is desired and replacing said wires with other wires adapted to give the desired width of dent.

Another novel feature of the invention resides in the means for holding the wires under longitudinal tension.

Other novel features of my invention will be more fully hereinafter described and then pointed out in the appended claims.

Referring now to the drawings, Figure 1 is a vertical section through the lay of a loom showing my improved reed therein; Fig. 2 is an enlarged front view of a portion of a reed embodying my invention; Fig. 3 is a section on the line *x*—*x*, Fig. 2; Fig. 4 is a section on the line *y*—*y*, Fig. 2; Fig. 5 is a side view and Fig. 6 is an edge view of the wires of my improved reed; Fig. 7 is an enlarged sectional view through one side of the reed.

Although the reed is shown in Fig. 1 as it would be used as a loom reed, yet I wish to state distinctly at the outset that my invention is not limited to use as a loom reed, but might be used wherever a reed or comb is necessary. The reed herein shown comprises a reed frame which involves top and bottom sides 3 and the end pieces 5. These sides may be either of metal or of wood as desired, and the ends and sides may be secured together in any appropriate way. I have herein shown screws 6 for this purpose. The two sides 3 are each rabbeted along one edge so as to present the bearing face 7 against which the wires 8 of the reed rest, as clearly seen in Figs. 3 and 7. The wires are held in place by retaining members 9 which are arranged not only to clamp the wires against the faces 7, but also to place the wires under tension longitudinally. Each wire 8 is provided near its end with a shoulder 10 which is adapted to be engaged by a shoulder or lip 11 formed on the retaining member 9. This shoulder 10 on each wire may be made in a variety of ways, but will preferably be made by bending the end 12 of the wire back onto the body of the wire and at the same time offsetting said bent portion 12 slightly, so that the end thereof will project beyond the edge of the wire, as best seen in Figs. 5 and 6. This construction has the advantage that the doubled-over portion 12 of each wire not only provides the shoulder 10, but also acts as a spacer to space the wire from the next adjacent wire and thus form the spaces or dents between the wires.

The retaining members 9 may be secured in position in any suitable way, one convenient way being by means of screws 13, as shown in Fig. 3. I will preferably make these retaining members in sections, as best seen in Figs. 2 and 4, which are independently removable, each section having one or more screws 13 therein for fastening it in place. The advantage of making the retaining members in section is that any one section may be readily removed and when this is done the wires that are beneath said section and are clamped in place thereby can be removed from the reed. If, therefore, any wire or wires become bent or broken, new wires can be readily substituted by simply removing the proper section or sections of the retaining member. If, for any reason, it is desired to substitute at the end or any

other part of the reed wires adapted to make narrower or wider dents, this can be readily done by simply removing the proper section of the retaining member.

It will be observed that when the clamping members are secured to the sides 3 and 4, the pressure of the lips 11 against the shoulders 10 will tend to place the wires 8 under tension longitudinally. This is of advantage because it holds the wires firmly and stiffens the reed.

While I have illustrated herein one embodiment of my invention, I do not wish to be limited to the construction shown, as the advantages above enumerated might be secured with other arrangements than that illustrated.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a reed, the combination with a reed frame, of wires having shoulders near their ends, and means acting on the shoulders in the direction of the length of the wires to place them under longitudinal tension.

2. In a loom reed, the combination with a reed frame, of wires therefor, each formed of a flat piece of metal bent back on itself at one end to form a portion of double thickness, the bent-over portion of each end being offset slightly to present a laterally-extending shoulder, and a retaining member secured to the frame and engaging the shoulders.

3. In a reed, the combination with a reed frame, the upper and lower sides of which are provided with wire-receiving faces, of wires having their ends resting on said faces, each wire having a laterally-extending shoulder, retaining members overlying the ends of the wires and provided with lips to engage the shoulders of the wires, and means to cause the lips of the retaining members to press against the shoulders in the direction of the length of the wires thereby to place them under longitudinal tension.

4. In a loom reed, the combination with a reed frame, of independently-removable wires forming between them dents, each wire formed of a flat piece of metal bent back on itself at each end to form a portion of double thickness, the bent-over portion of each end being offset slightly to present a laterally-extending shoulder, and retaining members secured to the frame and engaging said shoulders.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

HENRY COTÉ.

Witnesses:
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