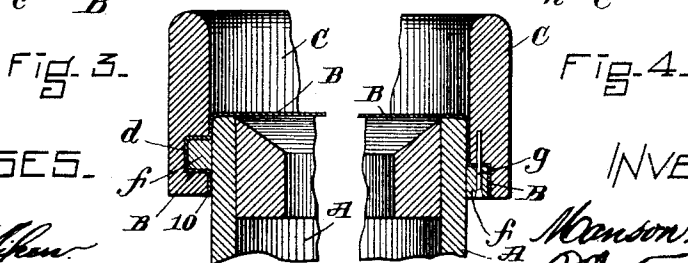
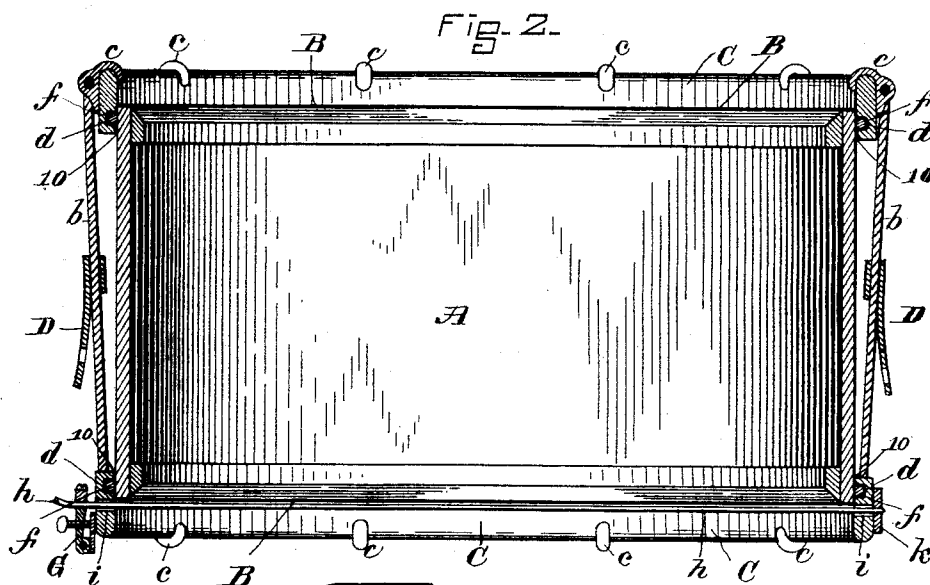


M. WOODMAN.  
DRUM.

Patented Oct. 21, 1890.



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# UNITED STATES PATENT OFFICE.

MANSON WOODMAN, OF BOSTON, MASSACHUSETTS.

## DRUM.

SPECIFICATION forming part of Letters Patent No. 438,670, dated October 21, 1890.

Application filed April 9, 1890. Serial No. 347,254. (No model.)

*To all whom it may concern:*

Be it known that I, MANSON WOODMAN, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Musical and Military Drums, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation of a snare-drum constructed in accordance with my invention. Fig. 2 is a vertical section of the same. Fig. 3 is an enlarged sectional detail on the line *x* of Fig. 1. Fig. 4 is a sectional detail illustrating a modification of my invention.

My invention relates to musical and military drums, and has for its object to dispense with the "skin" or "flush" hoops hitherto used in connection with the "cord-hoops" for securing the drum-heads in place upon the shell, whereby the construction of the drum is simplified, its cost reduced, and a greater clearness and brilliancy of tone secured.

To this end my invention consists in attaching the drum-head directly to the inner side of the cord-hoop, which is provided on said inner side with a groove or rabbet for the reception of the portion of the drum-head around its edge, which is securely held therein by a narrow retaining-strip or piece of wood, metal, or other suitable material fitting within said groove or rabbet and lying flush, or nearly so, with the inner surface of the cord-hoop, which is drawn down over the edge of the shell or body to stretch the drum-head thereover by means of cords or other devices commonly employed for this purpose.

In the said drawings, A represents the shell or body of the drum, composed, as usual, of wood or metal.

B B are the heads, which are stretched over the upper and lower edges of the shell by means of the strain or cord hoops C C, which are drawn toward each other, as usual, by the cords *b*, which pass through the hooks *c* and are provided with the ordinary leather tightening-ears D.

Each of the cord-hoops C is provided on the inside near its inner edge with an annular groove *d*, within which is fitted a narrow strip or retaining-piece *f*, of wood, metal, or other

suitable material, which is adapted to fill the groove *d*, as seen in Figs. 2 and 3. The head B is attached directly to the inner side of the cord-hoop by inserting the portion around its edge, when wet, within the groove *d*, in which it is securely held by the retaining strip or piece *f*, by which it is forced tightly into the groove, as seen in Figs. 2 and 3, the portion of the head which projects beyond the groove being afterward trimmed off flush with the inner edge 10 of the cord-hoop.

The strip *f* when in place may lie flush with the inner surface of the cord-hoop, but is preferably made to project out slightly beyond said surface, whereby when the hoop is placed over the shell or body A and drawn down by the cords *b* the strip *f* will be brought into contact with the shell and be kept thereby securely in place against any strain that may tend to loosen it or withdraw it from the groove.

In Fig. 4 is illustrated a modification of my invention, in which a rabbet or groove is formed at the inner edge of the cord-hoop instead of at a short distance therefrom, as shown in Figs. 2 and 3, and in this case the retaining strip or piece *f*, which holds the head within the rabbet or groove, is secured therein by means of brads or nails *g*, which may be driven in a vertical direction, as shown, or in any other suitable manner. I prefer, however, to locate the groove a short distance from the edge of the cord-hoop, as shown in Figs. 2 and 3, as it makes a neater finish, and the retaining-strip *f* does not then require to be nailed in place.

*h* are the snares, which pass through slots or openings *i*, formed in the opposite sides of the lower cord-hoop C, said snares being fastened at one end to a piece *k* of leather or other suitable material, fitting against the outside of the hoop and being held at the opposite end by a snare-fastener G of any suitable or well-known construction.

By thus dispensing with the skin or flush hoop hitherto in use and attaching the head directly to the inner side of the cord-hoop, as described, a head of much smaller diameter may be used for a drum of a given size, as all that portion of the skin which has hitherto extended down around the skin or flush hoop is saved, and the cost of the head is thus ma-

terially reduced. Moreover, with the old construction the head necessarily extended down a considerable distance over the edge of the shell and in direct contact therewith, which  
5 tended to deaden the tone, whereas with my improved construction a much smaller portion of the head is brought into contact with the outside of the shell, whereby greater clearness and brilliancy of tone is secured.

10 What I claim as my invention, and desire to secure by Letters Patent, is—

1. A drum having its head secured directly to the inner side of the cord-hoop by means of a groove or rabbet within which the portion of the head around its edge is held by a  
15 retaining strip or piece fitting within said groove or rabbet, substantially as set forth.

2. In a drum, the combination, with the shell or body, of a cord-hoop having a groove  
20 or rabbet on its inner side, a head having the

portion around its edge placed within said groove or rabbet, and a retaining strip or piece fitting within said groove or rabbet and adapted to hold the head therein, substantially as described.

25 3. In a drum, the combination, with a shell or body, of a cord-hoop having a rabbet or groove on its inner side, a head having the portion around its edge placed within said rabbet or groove, and a retaining strip or piece  
30 secured within said rabbet or groove by means of nails and adapted to hold the head therein, substantially as described.

Witness my hand this 4th day of April, A. D. 1890.

MANSON WOODMAN.

In presence of—

P. E. TESCHEMACHER,  
HARRY W. AIKEN.