No. 889,762. PATENTED JUNE 2, 1908.

A. D. CONVERSE.

DRUM.

APPLICATION FILED DEC. 31, 1907.

Fig. 1,

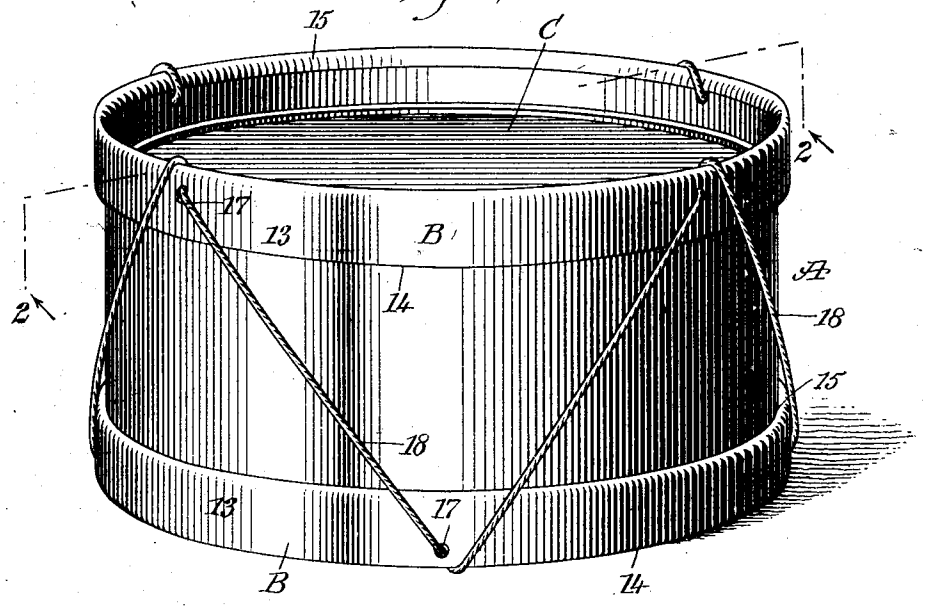


Fig. 2,

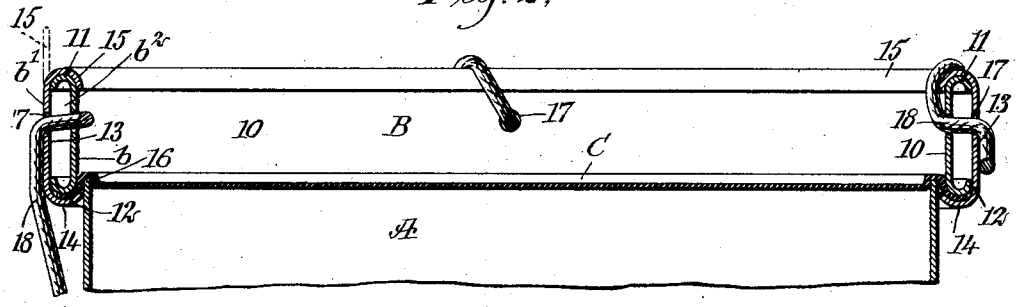


Fig. 3.

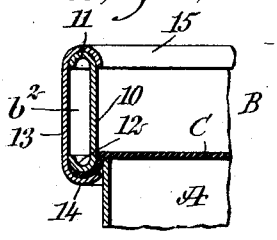


Fig. 4,

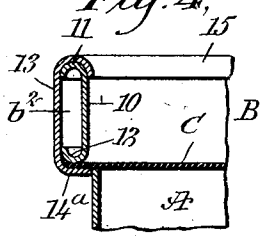
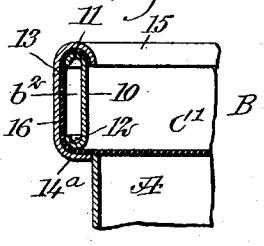


Fig. 5.



WITNESSES

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DRUM.

No. 889,762. Specification of Letters Patent. Patented June 2, 1908.

Application filed December 31, 1907. Serial No. 408,799.

To all whom it may concern:

Be it known that I, ATHERTON D. CONVERSE, a citizen of the United States, and a resident of Winchendon, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Drums, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide metal hoops for drums, which hoops are constructed of thin metal in such manner as to give the hoops the appearance of thickness, or the appearance of being solid, the hoops being adapted for use in connection with either metal, paper, or skin heads.

It is also a purpose of the invention to provide a metal hoop for drums that can be manufactured in an economical and expeditious manner, that can be used with equally good results and also be as readily applied to the body of a drum, as a wooden hoop.

The invention consists in the novel construction and combination of the several parts as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a drum having the improved hoops applied; Fig. 2 is an enlarged vertical section taken practically on the line 2—2 of Fig. 1; Figs. 3 and 4 are sections through the improved hoop and a portion of the body of the drum, showing a different manner by which a metal head can be held in position by the hoop; and Fig. 5 is a section similar to that shown in Figs. 3 and 4, illustrating the application of the improved hoop to a skin, paper, or other pliable head to hold it in engagement with the body.

In the construction of the metal hoop for drums, I aim in addition to the objects hereinbefore mentioned, to provide a hoop in which one part braces the other, and likewise to provide a hoop perfectly round and of uniform size, which result is almost impossible to obtain in the construction of wooden hoops.

A represents the body of the drum and B represents the hoops therefor, and C the heads. The body A may be constructed of wood, but is preferably made of metal, but the hoops B are made of metal as thin as possible consistent with strength, which hoops comprise two members, namely, an inner member *b* and an outer member *b'*, and these members are so separated as to form between them a space b^2, and the two said members *b* and *b'* are so brought together that the hoop appears to be solid, and stands out from the body A when placed on the body in like manner as a wooden hoop.

The inner member *b* of the hoop consists of a body section 10, the upper edge whereof is curved outwardly and downwardly, and the lower edge is curved upwardly and outwardly providing curved edge flanges 11 and 12, respectively. The outer member *b'* consists of a body section 13 that corresponds to the body section 10 of the inner member *b*, and the said outer member *b'* at its lower portion is curved upwardly and inwardly, as is shown at 14 in Figs. 2 and 3 forming a curved bottom edge flange. 14, the curvature of which corresponds practically to the curved flange 12 at the lower end of the inner member *b*, but the two curves are in reverse direction and one is greater than the other.

After the inner member *b* of the hoop has been fitted to the lower portion of the outer member *b'*, the upper end of the outer member is seamed over the upper curved flange 11 of the inner member *b* in any suitable or approved manner, and has preferably a close engagement with the flange 11, and primarily the flange 15 that is curved inwardly and downwardly from the upper edge portion of the outer member *b'*, has the vertical position shown in dotted lines in Fig. 2. The edge of the head C is received between the lower flanges 12 and 14 of the two members *b* and *b'* of a hoop, and is clamped, thereby conforming to the curvature of said flanges, as is clearly shown in Figs. 2 and 3, the clamping contact at the lower portion of the hoop with the said head being brought about by the seaming or rolling over of the upper portion of the outer member *b'* of the head the corresponding portion of the inner member *b*.

In Fig. 2 the head C is shown as provided with an annular groove 16 in its under face adjacent to the engagement of said head with the inner face of the hoop, whereby that portion of the head that is within the hoop is below the edge of the body A by which it

is supported, and the edge of the body enters the said groove 16. Whereas in Fig. 3 the head C is shown as perfectly straight, extending without a groove from side to side of the inner portion of the hoop to which the head belongs, the head C in this construction being made to simply rest upon an edge of the body.

In Fig. 4 the construction of the hoop is the same as that shown in the other views with a slight exception, namely the lower flange 14^a of the outer member b' of the hoop instead of being curved inwardly and upwardly as is shown at 14 in Figs. 2 and 3, is curved beneath the lower curved flange 12 of the inner member b and carried practically to an engagement with the outer face of the body A, and when this construction is employed, the head C is in the form of a disk, its marginal portion being received between the lower section 12 of the inner member b and the opposing face of the lower flange 14^a of the outer member b'.

In Fig. 5 the construction of the hoop is the same as that shown in Fig. 4, but the head C is a skin, paper, or flexible head, and in securing such a hoop to the head, its marginal portion is passed not only between the lower flanges 14^a and 12 of the members b and b' of the hoop, but is also carried up and is passed between the upper sections 11 and 15 of the hoop. Each hoop is provided with apertures 17 at desired distances apart, and cords 18 are laced through these apertures, as is particularly shown in Fig. 1, and the ends of the cords are connected in any suitable or approved manner after the cord has been drawn sufficiently taut, to hold the hoops and accompanying heads in firm and proper position on the body A of the drum.

When a hoop is constructed in the manner shown and described, it is not only stronger than a wooden hoop, but in addition to having all of the offset appearance of a wooden hoop. The metal constituting the metal hoop may be decorated in large sheets before the parts are put together, which is a great improvement over the old hand process of painting and striping.

Having thus described my invention, I claim as new and desire to secure by Letters Patent,—

1. In drums, the combination with the body thereof, of a hoop constructed in two members having a space between them, the inner member having its edges curved outwardly and toward each other, and the outer member having its edges over-lying the edges of the inner member, and the edges of the outer member being curved in a reverse direction to the corresponding edges of the inner member.

2. In drums, a metal hoop constructed in two members, comprising an inner member having its upper and its lower edges curved outwardly and toward each other, and an outer member having its upper and lower edges curved over the corresponding edges of the inner member, the upper and lower edges of the said outer member being curved in a reverse direction to the corresponding edges of the inner member.

3. In drums, a metal hoop constructed in two members, comprising an inner member having its upper and its lower edges curved outwardly and toward each other, and an outer member having its upper and lower edges curved over the corresponding edges of the inner member, the upper and lower edges of the said outer member being curved in a reverse direction to the corresponding edges of the inner member, and a head, the marginal portion whereof is received and held between the opposing lower edges of the two said members of the hoop.

4. The combination of an inner hoop member of stiff sheet material, an outer hoop member of like material spaced from the inner hoop member, each hoop member having an edge flange, with the edge flange of one of the hoop members overlying the edge flange of the other hoop member, and a drum head secured between said flanges.

5. The combination of an inner hoop member having its edges turned outwardly, of an outer hoop member having its edges turned inwardly and inclosing the edges of the inner hoop member, a drum body arranged on the inside of the hoop members, and a drum head covering one end of the body with its margin, secured between adjacent edges of the hoop members.

6. The combination of two hoop members having edge flanges, with the flanges of one of the members covering the flanges of the other member, and a drum head secured between adjacent flanges of the hoop members.

7. A drum hoop comprising an inner sheet metal member, and an outer sheet metal member surrounding and spaced from the inner member, each member having a curved edge flange, with the curved edge flange of one member overlying the curved edge flange of the other member.

8. The combination of a sounding head, and a hoop in resonating relation to the sounding head comprising an inner sheet metal member having outwardly-curved edge flanges, and an outer sheet metal member having inwardly-curved edge flanges overlapping the edge flanges of the inner member.

9. The combination of a sounding head, and a hollow hoop of sheet metal approximately O-shaped in cross-section securing the sounding head.

10. The combination of a sounding head. and a hoop in resonating relation to the

sounding head comprising an inner hoop member, and an outer hoop member surrounding the inner hoop member and spaced therefrom intermediate its width, with the upper and lower edges of said hoop members turned together.

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

ATHERTON DARLING CONVERSE.

Witnesses:
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