

No. 766,930.

PATENTED AUG. 9, 1904.

DE LASKI T. CLEMONS.
BELT SPLICE.
APPLICATION FILED FEB. 29, 1904.

NO MODEL.

Fig. 1.

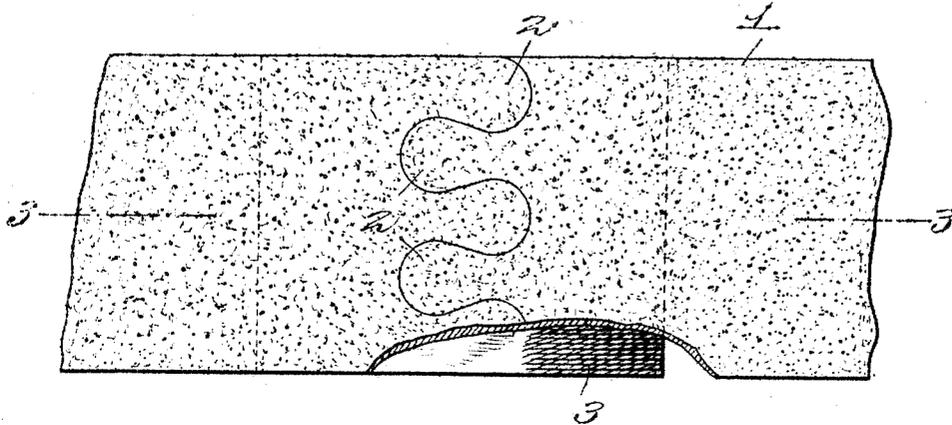


Fig. 2.

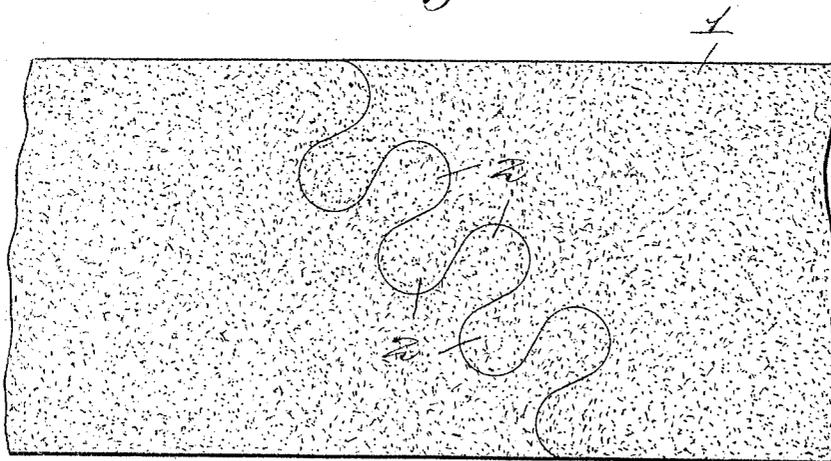
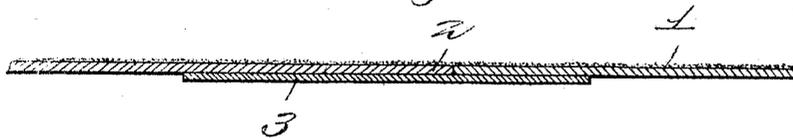


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

DE LASKI T. CLEMONS, OF HORNELLSVILLE, NEW YORK.

BELT-SPLICE.

SPECIFICATION forming part of Letters Patent No. 766,930, dated August 9, 1904.

Application filed February 29, 1904. Serial No. 195,931. (No model.)

To all whom it may concern:

Be it known that I, DE LASKI T. CLEMONS, a citizen of the United States, residing at Hornellsville, in the county of Steuben and State of New York, have invented a new and useful Belt-Splice, of which the following is a specification.

This invention relates to belt-splices.

The object of the invention is in a thoroughly feasible and practical manner to obviate the presentation of abutting edges extending longitudinally or transversely of the belt, thereby greatly to strengthen the union between the belt ends and to cause the abrading-surface at the point of juncture of the said ends to cut smoothly and without the formation of grooves in the work.

As is well-known, the ordinary procedure of securing together the abutting ends of a sandpaper-belt, such as is used in furniture-factories, is to bring the ends together and hold them juxtaposed by a flexible backing or reinforce pasted to the back of the belt and covering the meeting edges thereof. The abutting edges may be disposed at right angles to the length of the belt or obliquely thereto; but in either event there are presented straight edges which if loosened from their backing or reinforce under the operation of the belt will result in the destruction of the joint and also the formation of grooves in the work which will tend to mar the same. Furthermore, where a rupture in the juncture between the belt ends occurs the union will gradually be destroyed, for the reason as the belt revolves around the driving wheels or pulleys at each revolution there is a further disruption or separation of belt from its backing.

The above objectionable features are in the present instance positively eliminated by providing the belt ends with the tongues, the perimeters of which are formed throughout on curved lines, the tongues on one end being the counterpart of those on the other, so that when interlocked a neat, finished, and strong joint will be provided. As all of the edges of the tongues are on curved lines, it follows that when the belt ends are assembled there will be no straight abutting edges extending

longitudinally or transversely of the belt, and thus the uneven dressing of lumber will be obviated, and a positive retention of the interlocked relation of the tongues will be assured. The tongues are held interlocked and against separation under longitudinal strain through the medium of a flexible backing, preferably of textile fabric, which is glued or cemented to the back of the belt and bridges the point of juncture between the two ends. The arrangement of the present belt-splice is such that even under long continued use there will be no tendency of the interlocked tongues to separate from the backing, and thus a thoroughly effective and durable abrading-belt is effected.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists, generally stated, in the novel forms of belt-splice hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, there are illustrated two forms of embodiment of the invention, each capable of carrying the same into practical operation, it being understood that the invention is not to be limited to the precise arrangements shown.

In the drawings, Figure 1 is a view in elevation, partly in section, of an abrading-belt, showing the splice disposed transversely of the length of the belt. Fig. 2 is a view in elevation, exhibiting a portion of a belt in which the splice is disposed obliquely to the length of the belt. Fig. 3 is a view in transverse section through the belt.

The belt (designated generally 1) is made preferably from sandpaper, although any other abrasive material suitable for the purpose may be employed. The ends of the belt are formed with tongues 2, which are adapted to interlock, as shown in Figs. 1 and 2, and are held against separation through the medium of a reinforce or backing 3, of textile fabric, which is glued or cemented to the back of the belt and bridges the point of juncture between its two ends. As shown in Fig. 1, the tongues are disposed in the direction of the length of the belt, and as shown in Fig. 2 they extend

obliquely thereto preferably at an angle of about forty-five degrees; but whatever their angle of disposition be with relation to the length of the belt there will never be formed 5 straight abutting edges that will tend to groove the work over which the belt passes. The positive holding of the tongues against separation under longitudinal strain is secured by constructing them on the lines of a double 10 ogee curve—that is to say, on the lines of a figure formed by uniting the upper ends of two ogee curves with their bulges disposed in opposite directions, the perimeters of the 15 tongues being formed throughout on curved lines, so that when a head of one tongue is positioned between the necks of two adjacent tongues there is to all intent and purposes a dovetailed joint formed, the holding properties of which are well known, but without the 20 presentation of straight abutting edges that will be present in the ordinary dovetail joint.

In addition to the advantages enumerated in this form of belt-splice the tongues by reason of the manner in which they are interlocked 25 will greatly increase the strength of the juncture between the belt ends and will cooperate with the backing in preventing their separation in use.

Having thus fully described my invention, 30 what I claim is—

1. An abrading-belt having its ends united

by interlocked tongues, the perimeters of which are formed throughout on curved lines.

2. An abrading-belt having its ends united by interlocked tongues, the perimeters of 35 which are formed throughout on curved lines, and a reinforce secured back of the tongues.

3. An abrading-belt having its ends united by interlocked approximately double ogee-shaped tongues. 40

4. An abrading-belt having its ends united by interlocked approximately double ogee-shaped tongues, and a reinforce secured back of the tongues.

5. An abrading-belt having its ends united 45 by interlocked approximately double ogee-shaped tongues, the heads of which are disposed in the direction of the length of the belt.

6. An abrading-belt having its ends united by interlocked approximately double ogee-shaped 50 tongues, the heads of which are disposed in the direction of the length of the belt, and a reinforce secured to the back of the belt and bridging the splice formed by the tongues.

In testimony that I claim the foregoing as 55 my own I have hereto affixed my signature in the presence of two witnesses.

DE LASKI T. CLEMONS.

Witnesses:

JOHN F. RICHARDSON,
JULIUS PEYTRUNT.