

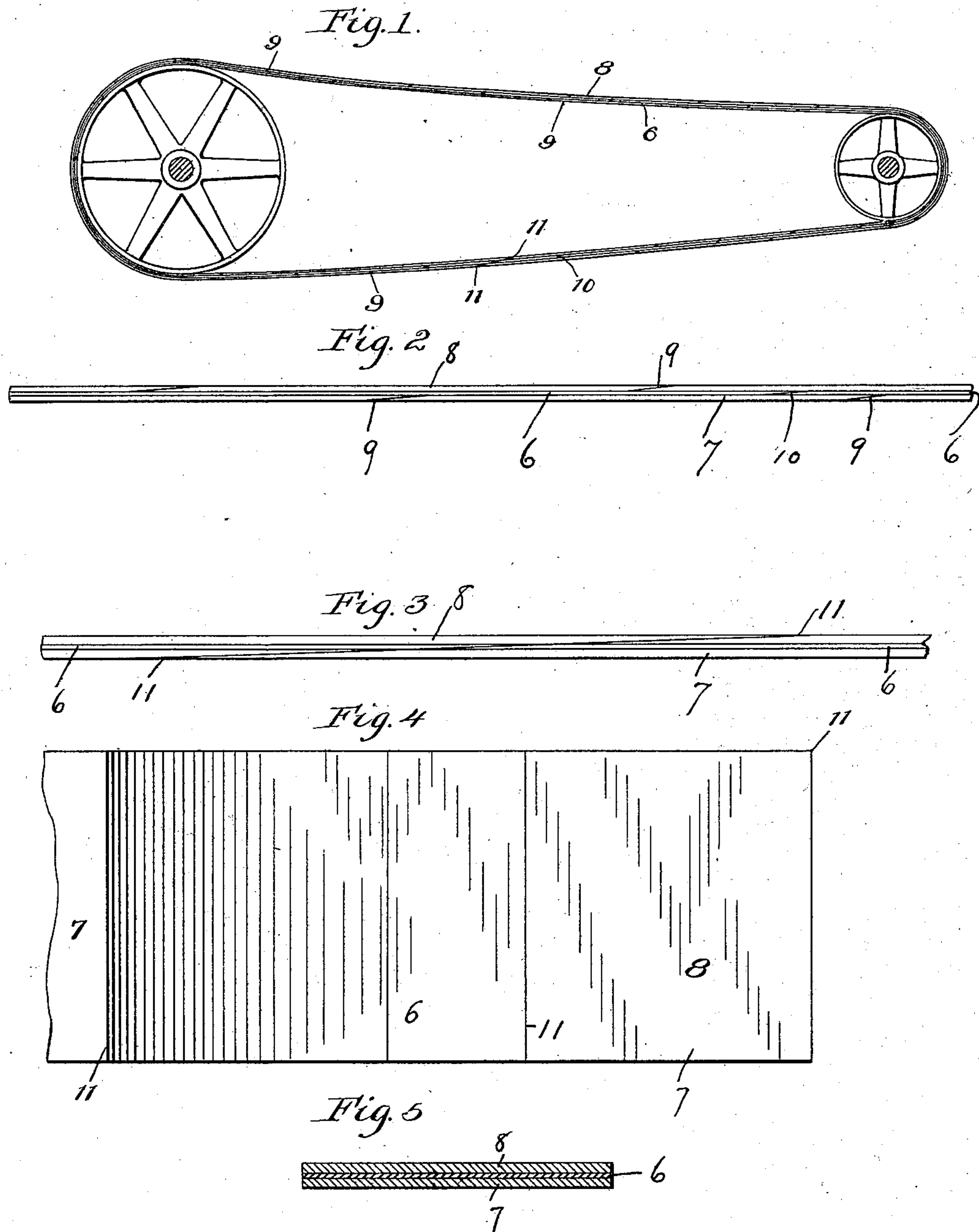
No. 723,917.

PATENTED MAR. 31, 1903.

G. E. PRESTON.
MACHINERY BELT.

APPLICATION FILED JUNE 18, 1902.

MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

GEORGE E. PRESTON, OF CHICAGO, ILLINOIS.

MACHINERY-BELT.

SPECIFICATION forming part of Letters Patent No. 723,917, dated March 31, 1903.

Application filed June 19, 1902. Serial No. 112,285. (Model.)

To all whom it may concern:

Be it known that I, GEORGE E. PRESTON, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Machinery-Belts, of which the following is a specification.

This invention relates to an improved construction of machinery-belts whereby they may be prevented from stretching, so that the weakening of the belts and the loss of time and annoyance caused by frequent stoppages to take up the slack may be avoided.

My improved belt is composite in its nature—that is to say, it employs two or more materials in its make-up; and it consists of a continuous band of hard dry rawhide, in combination with a suitable friction-surface. The latter may be leather, fullered rawhide, rubber, or duck, and preferably an outer covering of the same or other suitable material is employed. The rawhide band which forms the main strength-giving feature of my belt is composed of united lengths of ordinary dry and hard rawhide—that is, rawhide which has been fleshed and unhaired in the ordinary manner and then thoroughly dried. I use it without softening it or fulling or mechanically treating or stretching it, as I find that in its natural state such rawhide is practically non-stretchable and very strong, while it is also sufficiently pliant for belt purposes, and when combined with a proper leather or other inside facing for friction with the pulley it forms a very desirable and strong belt, requiring no taking up.

I show in the accompanying drawings at Figure 1 a side elevation of my improved belt, at Figs. 2 and 3 edge views of different portions of the belt, at Fig. 4 a partial plan, and at Fig. 5 a cross-section.

In said drawings, 6 6 represent lengths of hard dry rawhide united together by scarf-joints and forming a continuous band of the rawhide, possessing great strength and no stretchability under the strain required. To this band is applied an inner surface 7, of

leather or other material suitable for exercising friction on the pulleys over which the belt runs, and preferably an outer surfacing 8 of some suitable material is also applied. Where the surfacing material is of leather or mechanically-treated rawhide, the sections thereof are united by scarf-joints 9 in the usual manner, and they are united to the rawhide band 6 by glue or cement in the usual way of uniting the courses of leather and other belts. The sections 6 of rawhide are also united by scarf-joints 10, and the rawhide may be scarfed in the ordinary scarfing-machine by first moistening the end which is to be cut away without permanently softening the hide. The joint which unites the ends of the belt is shown at 11.

In such a belt as that described the dry rawhide portion prevents the stretching of the surfacing material, so that the user avoids the frequent waste in the belt itself and the loss of time occasioned by taking up of the stretch.

I am aware that laminated belts have been patented embodying fullered or prepared rawhide. Such belts are not claimed by me and do not accomplish the end held in view herein, because the fullered or prepared rawhide stretches even more than the leather.

I claim—

1. The belt herein described consisting of a band of hard, dry rawhide and a surfacing of friction material, substantially as specified.

2. The belt herein described consisting of a band of hard, dry rawhide the lengths whereof are united by scarf-joints, and a surfacing of friction material, substantially as specified.

3. The composite non-stretching belt having its strain-resisting member formed of dry hard rawhide in its natural state, substantially as specified.

GEORGE E. PRESTON.

Witnesses:

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