Richards & Trant,

Endless Belt.

No. 82,640. Patented Sep. 29, 1868.

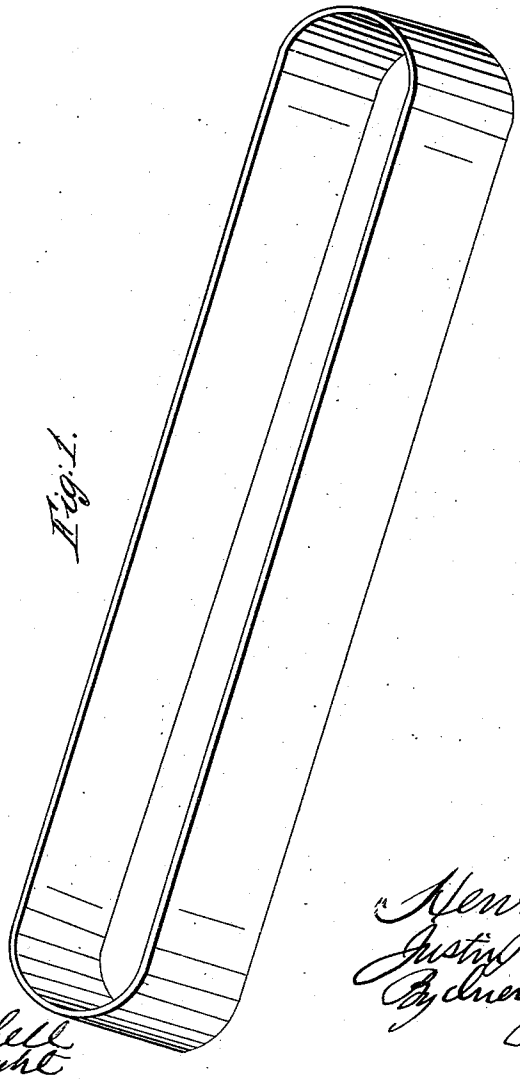


Fig. 1.



Fig. 2.

Witnesses:

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UNITED STATES PATENT OFFICE.

H. RICHARDS AND J. A. TRAUT, OF NEW BRITAIN, CONNECTICUT, ASSIGNORS TO J. A. TRAUT AND JEREMY W. BLISS, OF SAME PLACE.

IMPROVEMENT IN ENDLESS BELTS.

Specification forming part of Letters Patent No. **82,640**, dated September 29, 1868.

To all whom it may concern:

Be it known that we, HENRY RICHARDS and JUSTUS A. TRAUT, both of New Britain, county of Hartford, and State of Connecticut, have invented certain new and useful Improvements in Belts for Polishing, &c.; and to enable others skilled to make and use the same, we will proceed to describe by referring to the drawings, in which the same letters indicate like parts in each of the figures.

The nature of this improvement consists in arranging the threads in an endless position and in filling in the roof, so as to produce an endless piece of fabric or belt.

In making belts for (polishing belts) polishing or finishing regular or irregular forms or surfaces, great difficulty is experienced in making the joint, so as to be even, pliable, and not liable to jump, as it (the joint) passes successively under the work; and also so as not to be liable to come apart, as is frequently the case as they are now made (with lap-joint) when soaking for recoating, which, or either of which, is very annoying, especially where a great number of belts are constantly being used and recoated.

In the accompanying drawings, Figure 1 represents an endless belt made whole in one piece of fabric. Fig. 2 represents one of the heddles, such as we propose to employ in the manufacture of our endless fabric belts. It is made of metal, and is provided with an open eye to receive and guide the warp-thread, which is one continuous piece.

To effect this object we arrange a single warp-thread upon or over rollers, one of which is arranged near the front part of a loom and the other in the rear part of said loom at such distance that the warp arranged on said rollers will be about the length required for a belt. This warp-thread is first passed around these two rollers and the first end tied or made fast to the main thread; then these rollers being set in motion the warp-thread is thus laid from one to the other roller as many times as may be necessary for the number of threads required for the warp, and the last end secured to the adjoining thread directly opposite, or nearly so, to the first end.

The harness is or should be so constructed that the warp can be readily inserted into the eye of the heddles and easily removed therefrom, in order that after the belt shall have been nearly all woven, which is done in the ordinary manner of weaving, the then imperfect action of the heddles due to the limited portion of the warp remaining to be woven may be avoided, and the last of the filling-thread is then to be worked in by hand.

We believe we have thus shown the nature, construction, and advantage of this invention so as to enable others skilled to make and use the same therefrom.

What we claim, therefore, and desire to secure by Letters Patent, is—

As a new article of manufacture, an endless belt constructed substantially as described.

HENRY RICHARDS. [L. S.]
JUSTUS A. TRAUT. [L. S.]

Witnesses:
C. E. MITCHELL,
THOS. G. KNIGHT.