No. 765,819. PATENTED JULY 26, 1904.

G. A. CUTTER.

BELT.

APPLICATION FILED JULY 14, 1903.

NO MODEL.

Fig. 1.

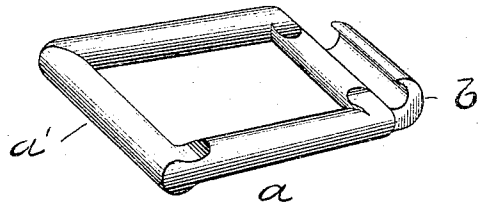


Fig. 2.

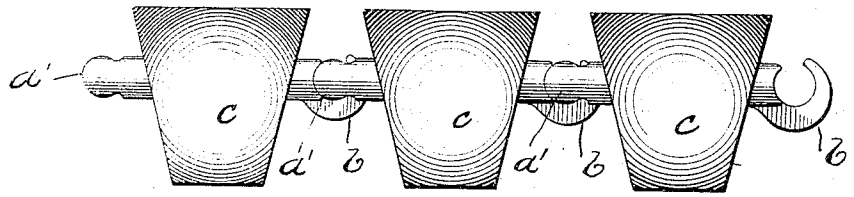


Fig. 3.

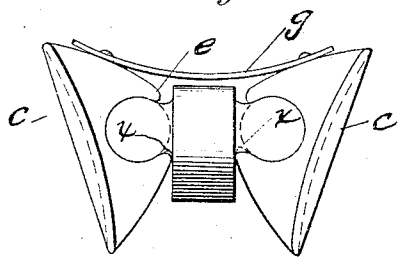
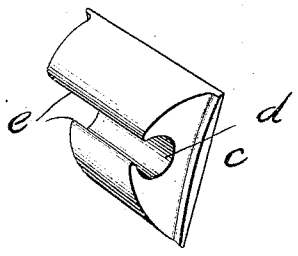


Fig. 4.



Witnesses
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No. 765,819. Patented July 26, 1904.

UNITED STATES PATENT OFFICE.

GEORGE A. CUTTER, OF NASHUA, NEW HAMPSHIRE.

BELT.

SPECIFICATION forming part of Letters Patent No. 765,819, dated July 26, 1904.

Application filed July 14, 1903. Serial No. 165,474. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. CUTTER, a citizen of the United States of America, residing at Nashua, in the county of Hillsboro and State of New Hampshire, have invented certain new and useful Improvements in Belts, of which the following is a specification.

The object of the invention is to produce a device of the kind specified having features of novelty and advantage.

In the drawings, Figure 1 is a perspective view of a chain-link. Fig. 2 is a side view of part of a belt embodying my invention. Fig. 3 is an end view of a link. Fig. 4 is a perspective view of one of the shoes.

A belt constructed as herein described is adaptable for a large variety of uses—for instance, as a driving-belt, conveyer-belt, &c.

The belt illustrated in the acompanying drawings is adapted for use as a driving-belt and comprises a chain of the detachable-link variety and contact-shoes carried by the side bars of the links and detachably secured thereto in practically the same manner as the links are secured together.

The construction and manner of use of detachable-link chains is well known, each link *a* being provided at one end with a hook-shaped projection, as *b*, into which the end bar *a'* of the link is slid endwise until the projection lies between the side bars of the link. This prevents lateral displacement of the links with respect to one another when they are in their working positions, it being apparent that in order to assemble the links they must be turned up out of their working position to permit the hook projection to pass the side bars. I do not claim any novelty in connection with the construction of the chain itself.

The contact-shoes *c* are pivoted to the side bars of the links in such manner as to permit them to rock slightly in a vertical plane to accommodate themselves to varying conditions presented by the driving-pulleys.

The method of attachment of the contact-shoes to the side bars is in general the same as that of the several links. The rear of each shoe is grooved, as at *d*, to fit upon the side bars, the bounding edges of the grooves forming lips *e*, which lie between the end bars of the link when the shoes are in working position.

When the shoes are being positioned, they must be turned up to permit the lip to pass the end bar. The locking of the shoes to prevent their displacement is clearly shown by dotted lines at *x* in Fig. 3. The shoes are maintained in a mid-position by a spring *g*, attached thereto, which will permit them to readily change position as required.

The arrangement provides a chain construction which is very inexpensive to manufacture and very readily assembled and permits of any broken part to be renewed with the utmost ease.

To utilize the invention for conveyer purposes, it is only necessary to replace the shoes illustrated in the drawings with buckets or other proper conveyer devices. Such a conveyer-belt would have many features of advantage over those now in use, particularly in its simplicity of construction, the small cost of manufacture, and the readiness with which broken or worn parts could be replaced without the use of any tools whatsoever. The application of the invention to other uses is accomplished with equal readiness.

I claim as my invention—

1. A belt made up of chain-links suitably secured together, and members carried by said belt and provided with means adapted to interengage with the side bars of said links, as and for the purposes specified.

2. The combination with a belt made up of chain-links detachably secured together, of members carried thereby, said members being grooved in their rear sides and adapted to fit over the side bars of said links.

3. In combination a driving-belt comprising a detachable-link chain, and contact-shoes pivoted to the side bars of each link.

4. In combination a driving-belt comprising a detachable-link chain, and contact-shoes pivoted to the side bars of each link and detachable therefrom.

5. The combination with a driving-belt comprising a detachable-link chain, of contact-shoes having grooves formed in their rear sides adapted to fit over the side bars of said links.

6. The combination in a driving-belt with the chain, of contact-shoes grooved to fit upon and partially embrace the side bars of the chain-links, the end bar of the link being grooved crosswise thereof to permit the shoe to be slid endwise onto the side bar in one position only.

7. A driving-belt comprising the detachable-link chain, contact-shoes pivoted to the side bars of the link and being adapted for attachment to the side bars by being slid endwise thereon, and stops to prevent the displacement of said shoes when in their normal or working position.

8. A driving-belt comprising the detachable-link chain, the contact-shoes pivoted to the side bars thereof, and the spring, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE A. CUTTER.

Witnesses:

B. A. PEASE,

W. C. TOLLES.