(No Model.)

H. LANDON.

BELT GEARING.

No. 266,699. Patented Oct. 31, 1882.

Fig. 1.

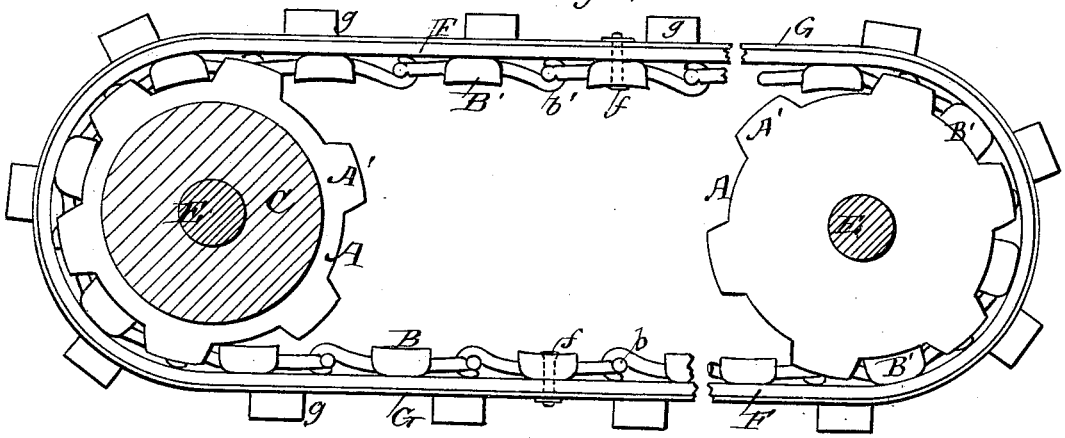


Fig. 2.

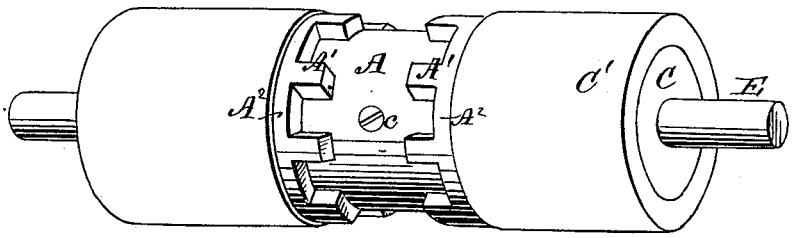


Fig. 3.

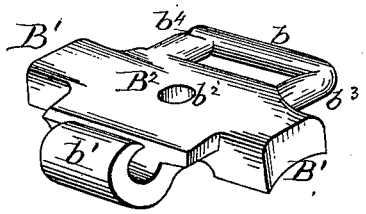
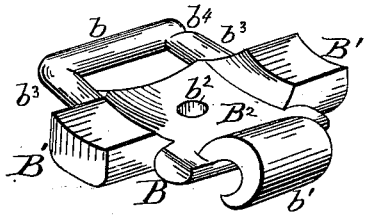


Fig. 4.



Witnesses:
W. B. Masson
L. C. Hills

Inventor:
Henry Landon
by E. E. Masson
atty

UNITED STATES PATENT OFFICE.

HENRY LANDON, OF MASSILLON, OHIO.

BELT-GEARING.

SPECIFICATION forming part of Letters Patent No. 266,699, dated October 31, 1882.

Application filed September 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY LANDON, a citizen of the United States, residing at Massillon, in the county of Stark and State of Ohio, have invented a new and useful Improvement in Belt-Gearing, of which the following is a specification.

My invention relates to improvements in means for transmitting motion; and it consists mainly in short cylinders or rings carrying two series of lugs or cogs facing each other, placed upon a plain circular shaft, so that the cogs will mesh with corresponding lugs projecting from the sides of drive-chain links made with a solid central part; these links are riveted at their center to a leather belt, which is in turn secured to a canvas belt having slats upon which straw, sawdust, &c., may be carried to any desired point; and the objects of my improvements are, first, to provide a strong lug-articulation between the belt and pulleys, and to dispense upon the latter with sprockets liable to injure the canvas belt; second, to produce bearing-lugs projecting from the sides of solid chain-links for the cogs or lugs fastened in pairs to the revolving shaft to transmit the power uniformly and reduce the danger of breakage; third, to secure, by means of a leather belt attached to the drive-chain provided with side lugs, a firm and even support for the traveling canvas. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view, showing the edge of the canvas belt carrying the slats upon its surface, and also the leather belt and drive-chain secured thereto and passing over short cogged cylinders mounted upon suitable shafts, the latter being shown in section. Fig. 2 is a perspective view of one of the driving-cylinders mounted upon its shaft. Fig. 3 represents in perspective the upper side of one of the drive-chain links. Fig. 4 is a similar view of the under side of said link.

Similar letters refer to similar parts throughout the several views.

The short cylinder A constitutes the foundation of the invention. It is usually made of cast metal, and has projecting upon its surface two series of rectangular lugs or cogs, A′, facing each other. These cogs are arranged at such a distance apart upon each end of the cylinder as to easily receive the lugs B′, projecting from the side of the drive-chain links B. When the cylinder A is to be of large size it is usually mounted upon a wooden shaft, as shown at C on the left-hand side of Fig. 1 and in Fig. 2, and secured thereto with screws *c*, and sleeves C′ are placed upon the shaft C on each end of the cylinder A to form bearings for the leather belt D, the diameter of said sleeves being such that their surface is even with or slightly above the surface of the cogs A′. When the cylinders A are to be of small size they can be secured directly to the bearing-shaft E, as shown on the right-hand side of Fig. 1, and sleeves C′ of suitable size be placed upon the shaft at each end of the cylinder. This cylinder A can be provided with a rim, A^2, at each end, as shown in Fig. 2, to strengthen it as well as the cogs A. The drive-chain is composed of a succession of links B, having their central portion, B^2, solid between the side lugs, B′. One end of the link is provided with a transverse bar, *b*, and the opposite end with a hook, *b′*, adapted to receive the corresponding bar, *b*, of a similar link. The bar *b* is united to the body of the link by the side bars, b^3, one of which is slightly grooved at b^4 for the passage of the point of the hook *b′* when uniting the links together. A small hole, b^2, is bored in the center of its central portion, B^2, to receive a rivet, *f*, to secure the links to the leather belt or strap F, which is broad enough to completely cover the short cast cylinder A and its lugs A′. The rivets *f* firmly unite, also, the narrow belt F to the canvas apron or wide belt G, which carries the slats *g* and conveys to any desired location what may be placed thereon.

It is evident that any desired number of drive-chains and belts F may be secured to the canvas apron, according to its width and the power required to move it, a corresponding number of cylinders A being used for that purpose. The form of the lugs A′ may vary from the one shown, without departing from my invention, when the lugs upon the sides of the links B are made to correspond with the space between them.

I am aware that prior to my invention carrying-belts have been provided with drive-chains having pendent lugs to enter within the peripheral groove of pulleys and engage with lugs upon said pulleys; but they differ from mine in construction and capabilities of use.

Having now fully described my invention, I claim—

1. The combination of a cylinder having journal E at each end, and a short cylinder, A, secured thereto, and having a series of lugs, A′, at each end thereof, with drive-chain links B, having lugs B′ upon their sides, adapted to enter between the lugs of the cylinder A, substantially as and for the purpose described.

2. The combination of a cylinder, A, having a series of lugs, A′, arranged in pairs facing each other, with drive-chain links having lugs B′ projecting from their sides, and a solid central portion, B^2, uniting said lugs, substantially as and for the purpose described.

3. The combination of drive-chain links having side lugs and a central solid portion, B^2, with a belt, F, riveted to said part B^2, substantially as and for the purpose described.

HENRY LANDON.

Witnesses:
CHAS. E. TAYLOR,
ANDREW C. BOBERTSON.