(No Model.)

E. A. PARKER.

DRIVING BELT FOR SPROCKET WHEELS.

No. 590,461. Patented Sept. 21, 1897.

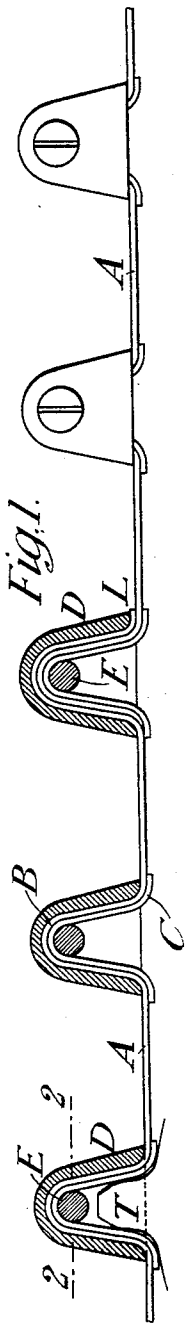

Fig. 1.

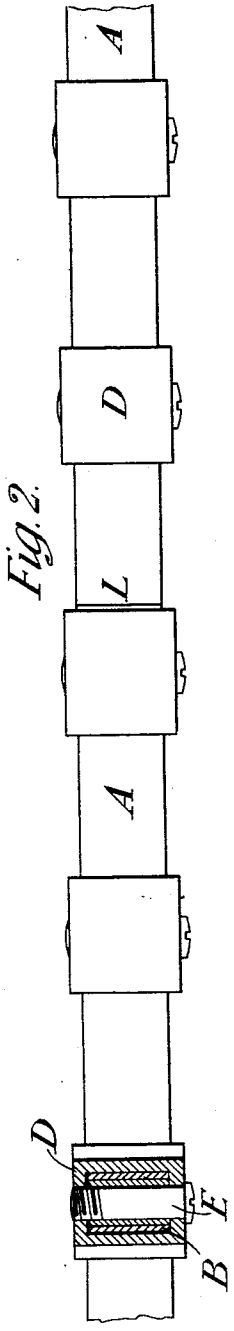

Fig. 2.

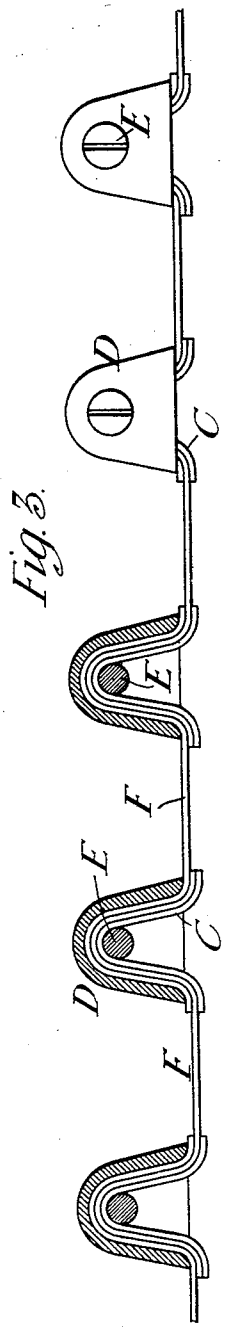

Fig. 3.

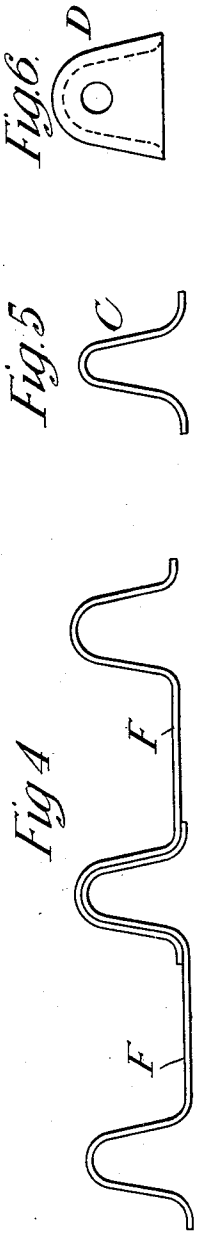

Fig. 6. Fig. 5 Fig. 4

Witnesses:
H. M. Conner
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by Bakewell & Bakewell
his attys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ERNEST A. PARKER, OF LONDON, ENGLAND.

DRIVING-BELT FOR SPROCKET-WHEELS.

SPECIFICATION forming part of Letters Patent No. 590,461, dated September 21, 1897.

Application filed May 12, 1897. Serial No. 636,128. (No model.)

To all whom it may concern:

Be it known that I, ERNEST ALFRED PARKER, a citizen of England, residing at 36 Cornford Grove, Balham, London, in the county of Surrey, England, have invented certain new and useful Improvements in Driving-Belts for Sprocket-Wheels, of which the following is a specification.

My invention relates to the construction of a flexible belt for driving sprocket-wheels, as I shall describe, referring to the accompanying drawings.

Figure 1 is a longitudinal section, partly in side elevation, of part of a belt according to my invention. Fig. 2 is a plan, partly sectional. Fig. 3 is a longitudinal section, partly in side elevation, showing a modification. Fig. 4 is a side view showing two parts of Fig. 3 separately. Fig. 5 is a side view of a lining-piece. Fig. 6 is a side view of a cap or socket.

The belt, as shown in Figs. 1, 2, 5, and 6, consists of a strip or ribbon A of flexible elastic metal, such as steel, which while it is in a soft condition is bent to form corrugations B at suitable intervals apart and is afterward tempered. In each of the corrugations is inserted a piece of strip or ribbon C, bent so as to fit within the corrugation B. Over each corrugation B is fitted a cap or socket D, having holes in its sides. Through one of these holes a screw E is passed and is screwed into the other hole, which is threaded. This screw serves to retain the cap in its place on the belt. The interiors of the corrugations, as indicated at T, Fig. 1, receive the teeth of the sprocket-wheels to which the belt is applied, the pieces C serving as linings which, by withdrawing the screws E, can be removed when they are warm, fresh lining-pieces being substituted for them.

As shown in Figs. 3 and 4, instead of employing a continuous strip or ribbon the belt may be made up of separate lengths F, each of which is bent at both ends, the bends of the one length forming outer portions of the corrugations and the bends of the next length forming inner portions of the corrugations, and so on alternately. The lengths F and lining-pieces C are held together by the caps or sockets D and the screws E. The two ends of the ribbon A are connected so as to make the belt endless by making the corrugation of the one end part enter the cap D along with the corrugation of the other end part, so as to be held between it and the lining-piece C.

Having thus described the nature of this invention and the best means I know for carrying the same into practical effect, I claim—

1. A flexible driving-belt for sprocket-wheels, consisting of a strip of metal provided with corrugations arranged to be entered by the sprocket-wheel teeth, outer sockets or caps covering the corrugations, and means for securing the same in place; substantially as described.

2. A flexible driving-belt for sprocket-wheels consisting of a strip of metal having corrugations, lining-pieces in said corrugations, outer sockets or caps covering the corrugations, and means for securing the lining-pieces and caps in place, substantially as described.

3. A flexible driving-belt for sprocket-wheels, consisting of a strip or ribbon of elastic metal having corrugations, lining-pieces in said corrugations, and outer sockets or caps covering the corrugations, the lining-pieces and caps being secured by screw-pins; substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 29th day of April, A. D. 1897.

ERNEST A. PARKER.

Witnesses:
FRED C. HARIES,
GERALD L. SMITH.

Correction in Letters Patent No. 590,461.

It is hereby certified that in Letters Patent No. 590,461, granted September 21, 1897, upon the application of Ernest A. Parker, of London, England, for an improvement in "Driving-Belts for Sprocket-Wheels," an error appears in the printed specification requiring correction, as follows: In line 39, the word "warm" should read "*worn*"; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 28th day of September, A. D. 1897.

[SEAL.]

WEBSTER DAVIS,
Assistant Secretary of the Interior.

Countersigned:

BENJ. BUTTERWORTH,
Commissioner of Patents.