(No Model.) 2 Sheets—Sheet 1.

A. J. GASKING.

MACHINE BELTING.

No. 344,098. Patented June 22, 1886.

Fig. 1.

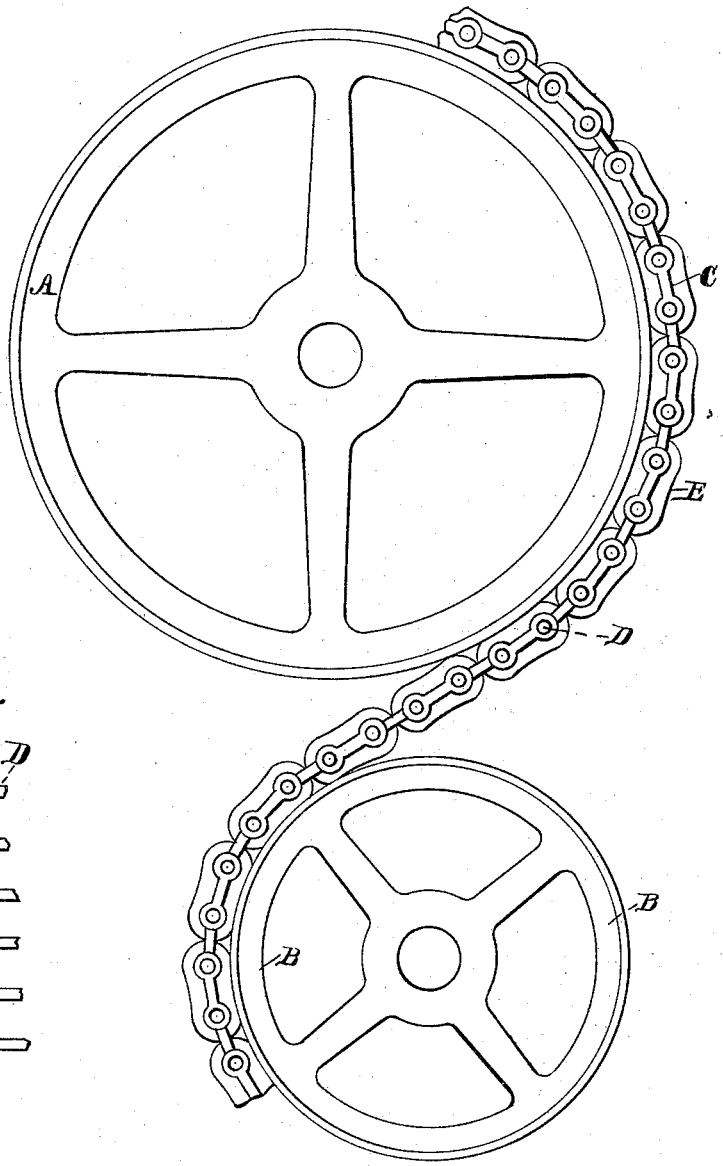
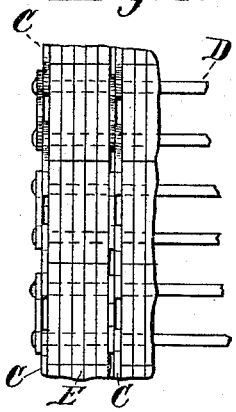


Fig. 2.



WITNESSES
P. W. Hale
W. R. Haight

INVENTOR
Alfred John Gasking
by Wm. H. Babcock
Attorney

(No Model.) 2 Sheets—Sheet 2.

A. J. GASKING.

MACHINE BELTING.

No. 344,098. Patented June 22, 1886.

Fig. 3.

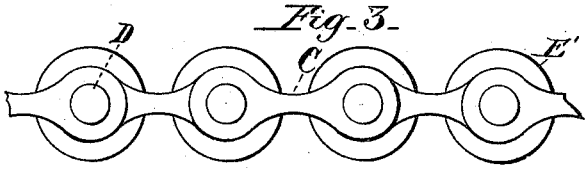


Fig. 4.

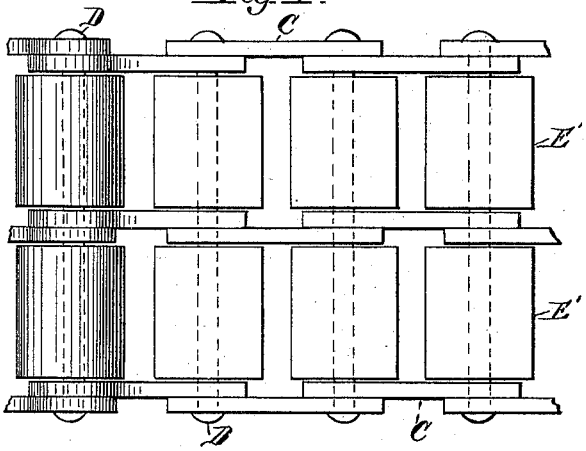


Fig. 5.

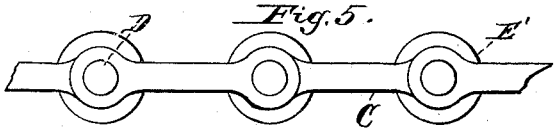
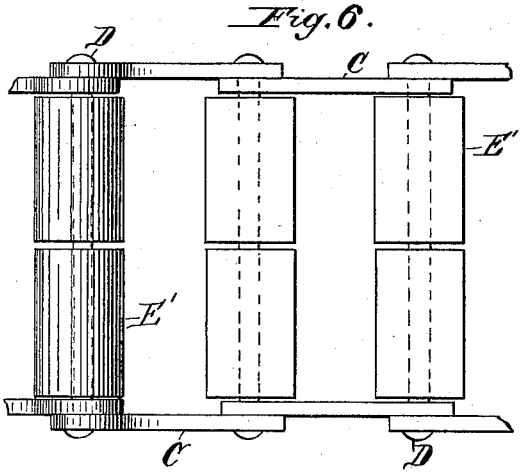


Fig. 6.



WITNESSES
P. W. Hale
W. R. Haight

INVENTOR
Alfred John Gasking
by Wm H Babcock
Attorney

UNITED STATES PATENT OFFICE.

ALFRED JOHN GASKING, OF ENFIELD, COUNTY OF MIDDLESEX, ENGLAND.

MACHINE-BELTING.

SPECIFICATION forming part of Letters Patent No. 344,098, dated June 22, 1886.

Application filed April 15, 1886. Serial No. 198,979. (No model.) Patented in England March 20, 1886, No. 3,942.

To all whom it may concern:

Be it known that I, ALFRED JOHN GASKING, of Enfield, in the county of Middlesex, England, leather-salesman, and a subject of the Queen of Great Britain, have invented certain new and useful Improvements in Bands or Chains for the Transmission of Work, (for which I have obtained Letters Patent in Great Britain, No. 3,942, dated March 20, 1886,) and I do hereby declare that the following is a sufficient description of the invention to enable those skilled in the art to which it appertains to carry the same into practical effect.

This invention relates to belting which is made up of pieces of leather or other suitable material strung upon transverse rods.

The said invention consists, chiefly, in the combination of a chain composed of said rods united at their ends by metallic links, with pieces of leather arranged on said rods between said links and constituting the body and operative portion of the belt.

It also consists, more specifically, in the combination of such a chain with rollers of leather or other frictional material turning on said transverse rods as axes, as hereinafter set forth.

In the accompanying drawings, Figure 1 is an elevation of two pulleys being driven by one of my bands. Fig. 2 is a front elevation of a part of the band as it is bent over the smaller pulley. Fig. 3 is an elevation of a band made to work upon a pulley having a special face prepared to receive the same. Fig. 4 is a plan of Fig. 3. Fig. 5 is an elevation of a band composed partly of steel or other metal and partly of wood or other material, but otherwise there is a similarity in design to Fig. 3. Fig. 6 is a plan of Fig. 5.

In making very strong bands several thicknesses of leather have frequently to be used to give the necessary strength, and such bands become excessively stiff, and do not bite the pulleys as well as they should. To obviate this disadvantage I have adopted the construction herein described.

In the accompanying drawings, A and B, Fig. 1, designate, respectively, a larger and smaller belt-wheel connected by a belt embodying my invention, a part of said belt being shown in said figure. The frame-work of said belt is a chain consisting of links C and cross-rods D, the former being arranged in longitudinal series at the sides of the belt, and preferably also in the middle thereof, as shown in Figs. 2 and 4. The ends of the links in each series overlap each other, and the rods D pass through these overlapping ends, so as to hold said links together, and form therewith a flexible frame or skeleton for the leather or other frictional material which forms the working-faces of the belt. This material is in pieces, which are fitted on said rods. As shown in Figs. 1 and 2, these pieces are oblong disks E, each of which is flattened at the edges that come in contact with the wheels A and B and arranged upon two of said rods D, which pass through it. A number of these disks thus arranged between two series of links C afford an excellent frictional surface, which is durable, flexible, and well supported by the chain or articulated frame-work. Instead of these elongated flattened disks, I sometimes prefer to use rollers E′, either of which may be made up of a number of circular disks, as shown in Fig. 4, or in a single piece, as in Fig. 6. Each one of these rollers turns on one of said rods D, and there are preferably two series of such rollers in the belt. Of course, the disks or other pieces used may have a great variety of different forms, corresponding to different peripheries of wheels.

I am aware that it is not new to form a belt by running transverse rods through pieces of leather and metal arranged alternately, but without any external metal frame-work. This I do not claim.

What I do claim, and desire to secure by Letters Patent, is—

1. A belt for transmitting power, consisting of a metallic frame, substantially as described, having transverse rods, in combination with pieces of leather or other frictional material arranged on said rods between the sides of said frame, and presenting the operative surface to the wheels, substantially as set forth.

2. The combination of the links C, having

overlapping ends, with the transverse rods D, which pass through said ends to form a flexible chain, having said links for its sides, and the pieces of leather which are arranged on said rods to present a frictional surface to the wheels, substantially as set forth.

In testimony that I claim the foregoing as my own I affix my name in the presence of two witnesses.

ALFRED JOHN GASKING.

Witnesses:

HERBERT E. DALE,

T. J. OSMAN,

Both of No. 17 *Gracechurch Street, London.*