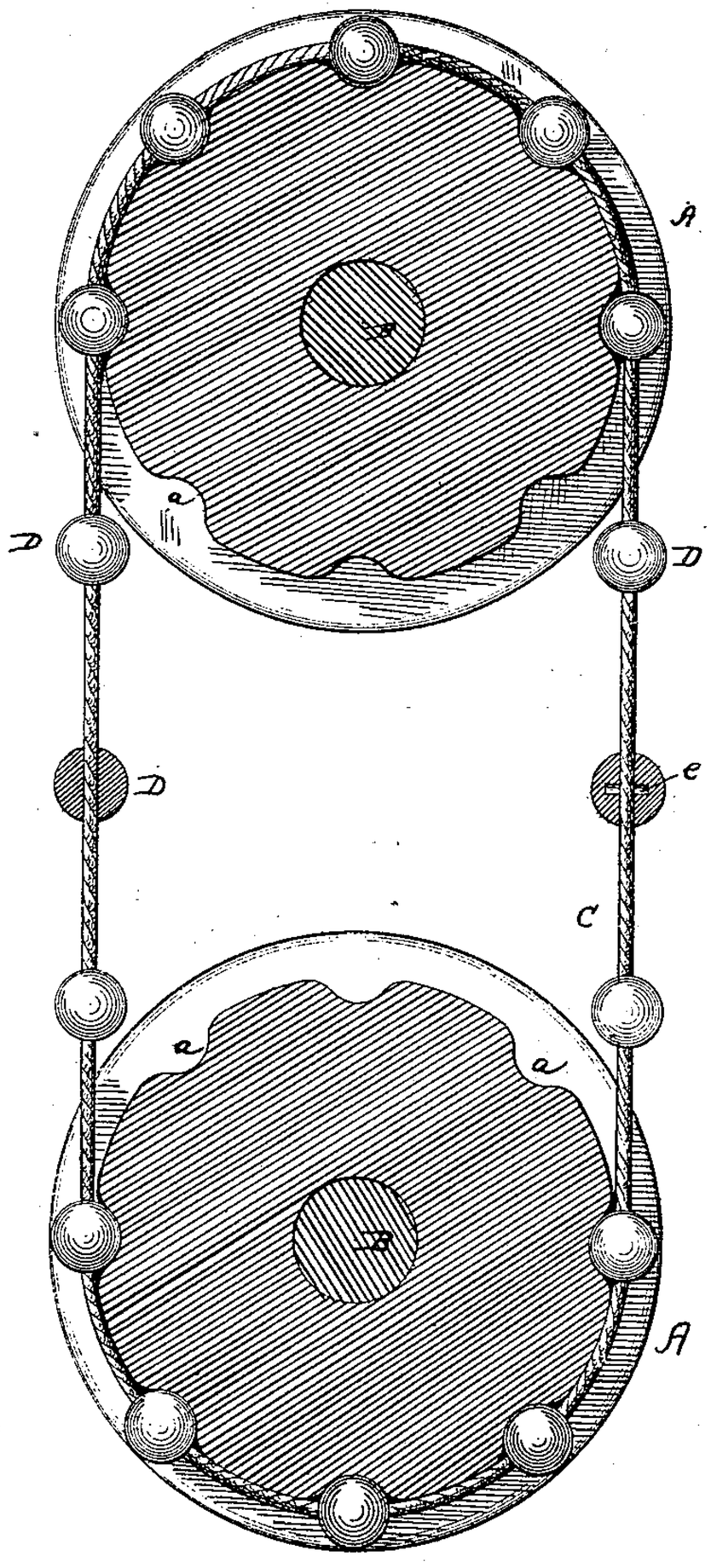
(No Model.)

J. MELLETTE & F. M. HARRIS.

DRIVING BELT.

No. 332,672. Patented Dec. 15, 1885.



WITNESSES

Chas. H. Dana

Wm. H. Gaus

INVENTORS,

John Mellette and F. M. Harris.

By Lemuel W. Serrell, Jr.

Their Attorney

UNITED STATES PATENT OFFICE.

JOHN MELLETTE AND FRANCIS M. HARRIS, OF WINAMAC, INDIANA, ASSIGNORS OF ONE-THIRD TO W. H. BOUSLOG, OF SAME PLACE.

DRIVING-BELT.

SPECIFICATION forming part of Letters Patent No. 332,672, dated December 15, 1885.

Application filed August 10, 1885. Serial No. 173,909. (No model.)

To all whom it may concern:

Be it known that we, JOHN MELLETTE and FRANCIS M. HARRIS, citizens of the United States, residing at Winamac, in the county of Pulaski and State of Indiana, have invented certain new and useful Improvements in Driving-Belts, of which the following is a specification, reference being had therein to the accompanying drawing.

Our invention relates to a mode of conveying power by means of a certain device, the peculiar construction of which will be hereinafter particularly described, the nature of the invention being confined to construction, as will be set forth.

The figure which accompanies this, and which forms a part of this specification, represents a side elevation with certain parts in section.

In the figure, A A represent (to more fully illustrate the invention) two grooved wheels similar to pulleys, but having at the bottom of their grooves a series of half-round depressions, *a a a*, at stated intervals apart, and which are intended to be used and work in a manner similar to sprocket-wheels reversed. These wheels are mounted on shafts B B, which are located at a suitable distance apart to adapt them to the work to be performed.

C represents a wire cord or rope composed of a series of smaller wires twisted together until the cord or rope to be used is of suitable diameter. Upon this rope are cast a series of metallic balls, D D, at such intervals apart as to correspond with the cups or depressions *a a*, into which they are intended to work. In casting the balls upon the rope the metal will naturally take into the inequalities made by the different threads, but to give more strength and better insure the stability of the balls, we may use pins, as seen at *e*, which are passed between the threads of the rope, and over which the balls are cast. We may have couplings for the rope, either within the balls or at any suitable point or place outside of them.

The mode of transmitting power with this invention is obvious; but the invention is more particularly confined to the rope and its construction and combination with the wheels.

We are aware that belts have been constructed with balls at intervals, and that said balls have been formed of iron, steel, or other hard substance; that they have been formed with a central passage for a wire rope, and a cross-passage partially tapped, to receive a set-screw from one side and a metal filling from the other.

Our invention consists of a wire rope with soft-metal balls cast directly thereon, so as to fill the irregularities of the rope and hold said balls in place, and also consists in passing a pin through said rope at intervals and casting the balls around said pins. Thus is produced a drive-belt equally efficient to the one above mentioned and vastly superior regarding simplicity and cheapness.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A belt consisting of a wire rope with at intervals a series of metallic balls cast directly on said rope, substantially as specified.

2. A belt consisting of a wire rope with pins at intervals, and metallic balls surrounding said pins and cast on said rope, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN MELLETTE.
FRANCIS M. HARRIS.

Witnesses:
JOSEPH C. HATHAWAY,
G. T. WICKERSHAM.