## E. JAGGER.

## APPARATUS FOR PLACING DRIVING BELTS.

(Application filed Nov. 27, 1900.)

(No Model.)

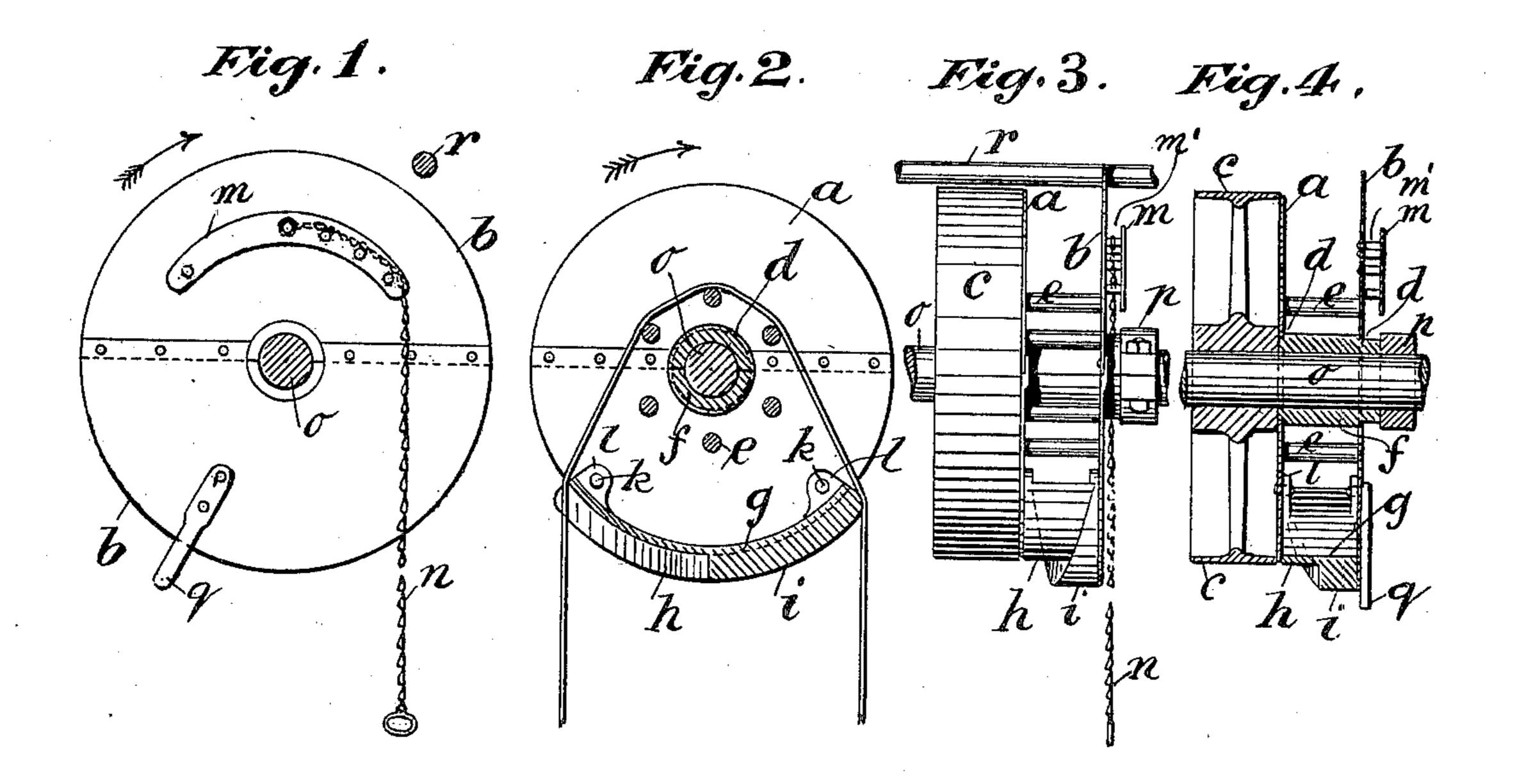
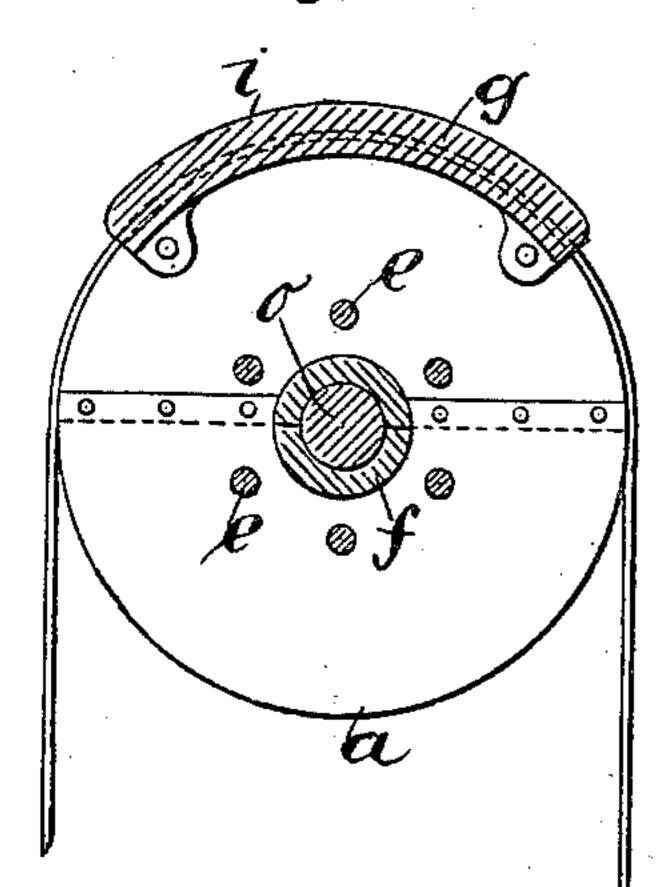
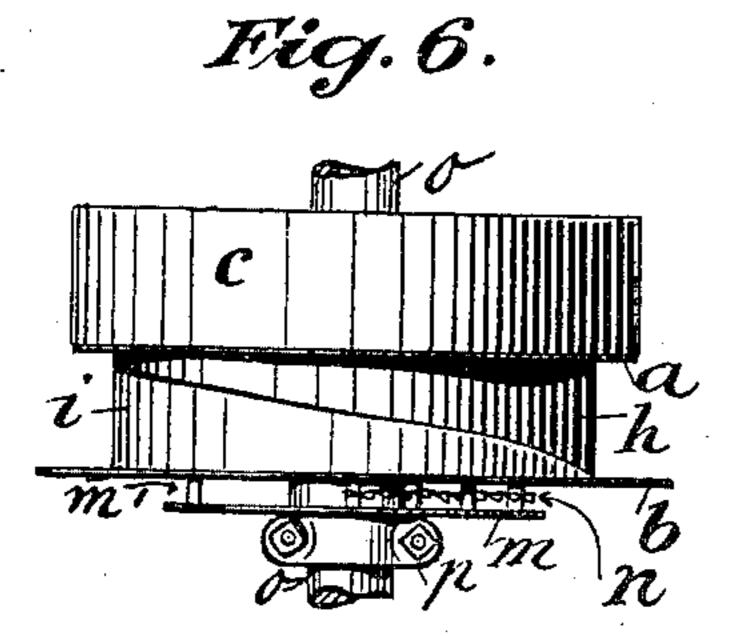


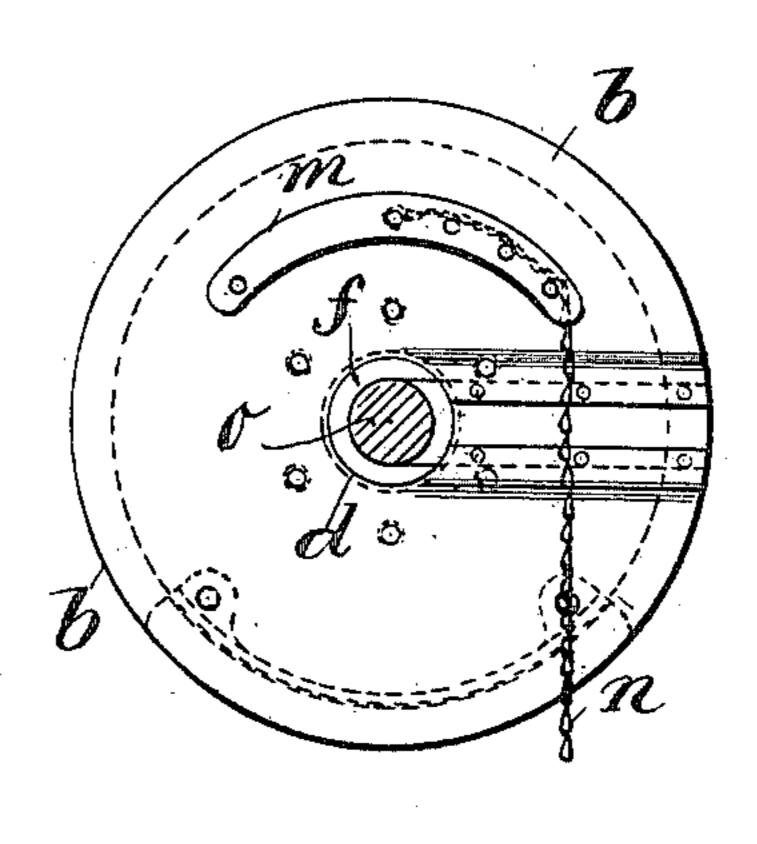
Fig. 5.

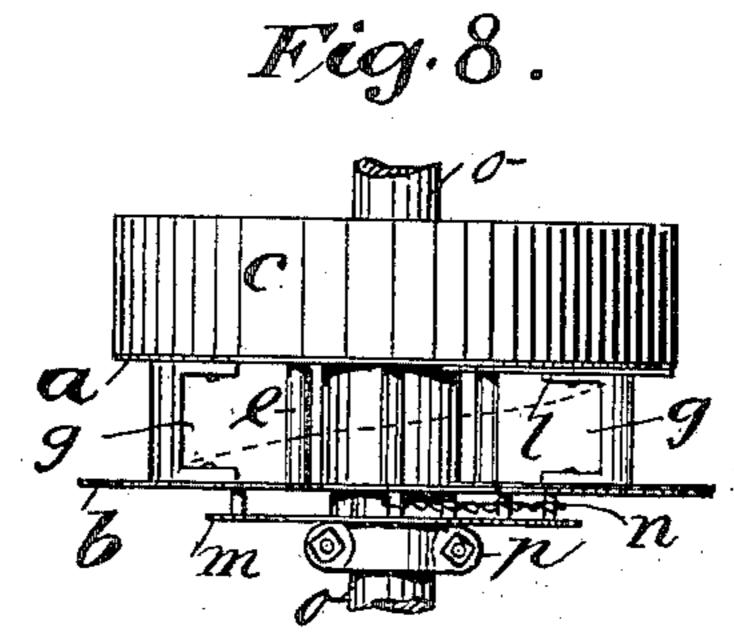




Witnesses Alfred Bosshardt Gianley Bramall

Fig. 7.





## United States Patent Office.

ELI JAGGER, OF WERNETH, ENGLAND.

## APPARATUS FOR PLACING DRIVING-BELTS.

SPECIFICATION forming part of Letters Patent No. 679,317, dated July 30, 1901.

Application filed November 27, 1900. Serial No. 37,911. (No model.)

To all whom it may concern:

Be it known that I, ELI JAGGER, a subject of the Queen of Great Britain, residing at Werneth, in the county of Lancaster, Eng-5 land, (whose post-office address is Green street, Werneth,) have invented new and useful Improvements in Apparatus for Placing Driving Straps, Belts, or Ropes on Their Pulleys, (for which I have made application for ro a patent in Great Britain, No. 16,860, dated September 22, 1900,) of which the following

is a specification.

My invention relates to an improved construction of that type of apparatus for plac-15 ing driving straps, belts, or ropes on their pulleys, which apparatus are hinged to the driving-shaft, whereby such apparatus are rendered more reliable, durable, and easier to manipulate than heretofore has been the 20 case, and the strap, belt, or rope is prevented from getting entangled. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a side view, Fig. 2 a sectional 25 side view, Fig. 3 a front view, and Fig. 4 a sectional front view, of my improved apparatus in its normal position; Fig. 5, a sectional side view, Fig. 6 a plan when operated, and Figs. 7 and 8 a side view and a plan, respec-

30 tively, of a modification thereof.

Similar letters refer to similar parts throughout the several views.

My improved strap, belt, or rope placing apparatus consists of two disks ab, the inner 35 one, a, being the same diameter as or a little smaller than that of the pulley c, for which the apparatus is intended, and the outer, b, of somewhat larger diameter. Each of these disks is formed in the center with a hole 40 d and at suitable distance apart from each other connected together by means of distance-studs e, arranged around the said holes, while the latter are provided with a bush f. At the periphery I secure between the said 45 disks a casting g, forming part of a circle and having on its face h a wedge-shaped projection i. The face h is situated next to and of |the same radius as the smaller disk a or the driving-pulley, while the projection i is of 50 the same diameter as the larger disk b. The said "part circle" may be secured to the said

passing through the said disks and eyes m on the said part circle. The outer side of the latter I furnish with a flange m, forming a segmen- 55 tal groove m', adapted to receive a rope, strap, or chain n, having one end secured thereto.

The apparatus described is placed onto the driving-shaft o with its smaller disk a next to the driving-pulley c, for which it is in- 60 tended, and kept laterally in position on the shaft o by a collar p, fixed thereon. In a condition of rest the apparatus hangs suspended from the said shaft with the narrow end of the wedge-shaped projection i forward. (See 65) Fig. 2.) The strap, belt, or rope when moved off the driving-pulley c falls between the disks ab upon the distance-studs e against the ends of the said part circle and is thus prevented from leaving the apparatus and becoming en- 70 tangled with the shaft of the driving-pulley

or adjacent parts.

When it is desired to place the strap, belt, or rope on its pulley, the apparatus is raised from below to near the top of the driving- 75 shaft (see Figs. 5 and 6) by pulling the strap, rope, or chain n, during which action the wedge-shaped projection i, bearing against the edge of the strap, belt, or rope which then lies upon the face h of the part circle, pushes 80 the same onto the pulley c. The said part circle is made heavy enough to act also as a weight to bring back and retain the apparatus in its normal position of rest, Fig. 2. The said disks may be formed solid or with arms 85 or perforations, as may be found most suitable, and in order to facilitate the placing onto the driving-shaft they may be made in halves, as shown in Figs. 1, 2, 3, 4, 5, and 6, or each with a radial slot s (see Figs. 7 and 8) to allow of 90 being slid onto the shaft, which slot is afterward suitably closed.

To prevent the apparatus described from being raised too far or rotating with the driving-shaft o and pulley c, I may furnish same 95 with a stud or projection q, adapted to abut against a stationary rail r, say, fixed to the pillars carrying the bearings for the driving-

shaft.

What I claim as my invention, and desire 100 to secure by Letters Patent, is—

1. In apparatus for placing driving straps, belts or ropes on their pulleys, the disks a, bdisks by means of screws, rivets l, or the like [ concentrically formed with holes and con-

nected together by the distance-studs e and the casting g, the latter forming a "part circle," the face h of which has the wedge-shaped projection i, the radius of the disk b corresponding with the radius of the face h and the radius of the disk a with the wedge-shaped projection i, all the said parts combined substantially as and for the purpose set forth.

2. The two disks a, b concentrically formed with holes and connected together by the distance-studs e and the "part-circle" casting g, the said disk b being furnished with the grooved segmental flange m having attached the rope or chain n, all the said parts combined substantially as and for the purpose set

3. The two disks a and b concentrically formed with holes and connected together by the distance-studs e and the part-circle casting g, the segmental flange m and the projection q on the disk b and the stationary rail r, the chain attached to said flange, and the said projection being adapted to abut against the said rail r, all the said parts being combined substantially as and for the purpose set 25 forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

ELI JAGGER.

Witnesses:

ALFRED BOSSHARDT, STANLEY R. BRAINALL.