

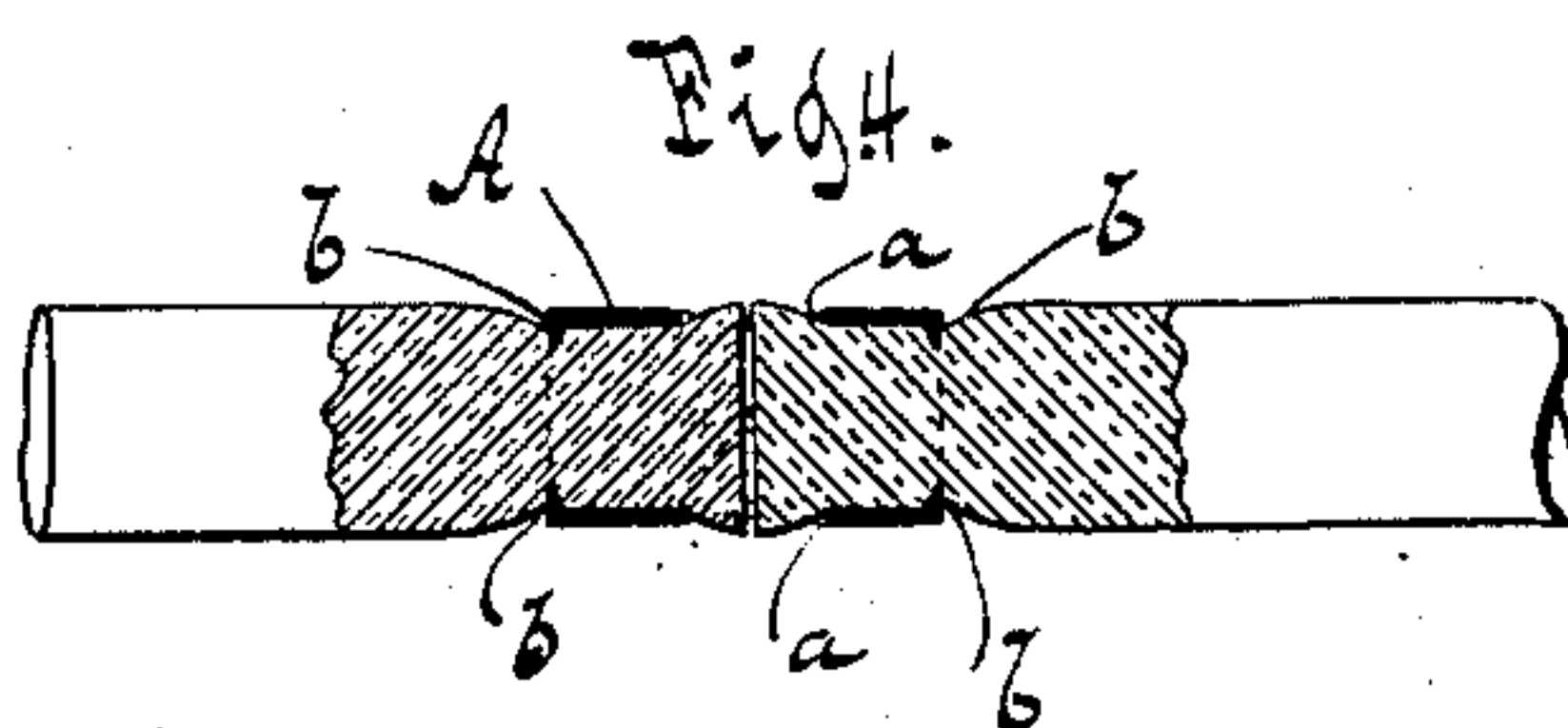
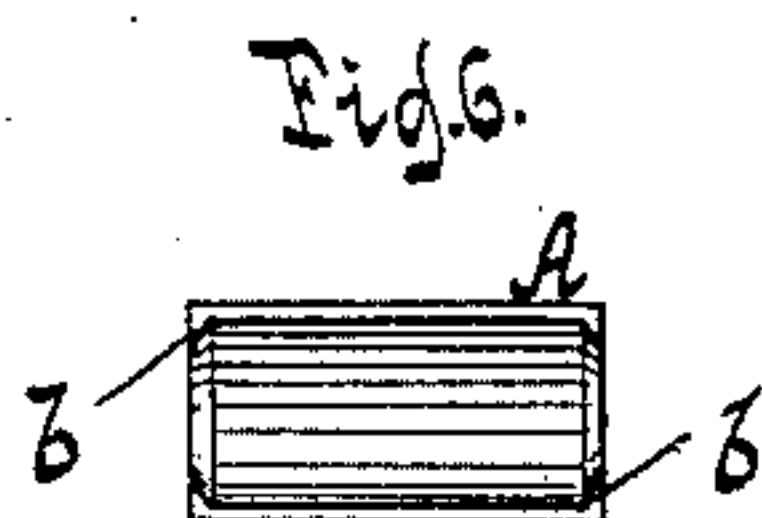
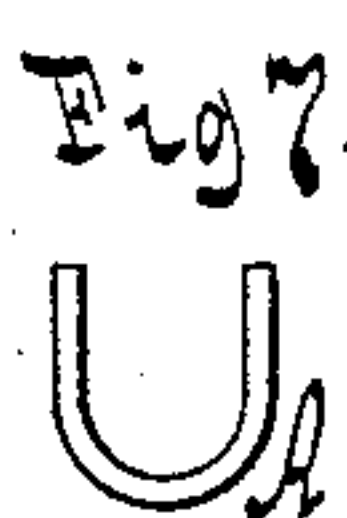
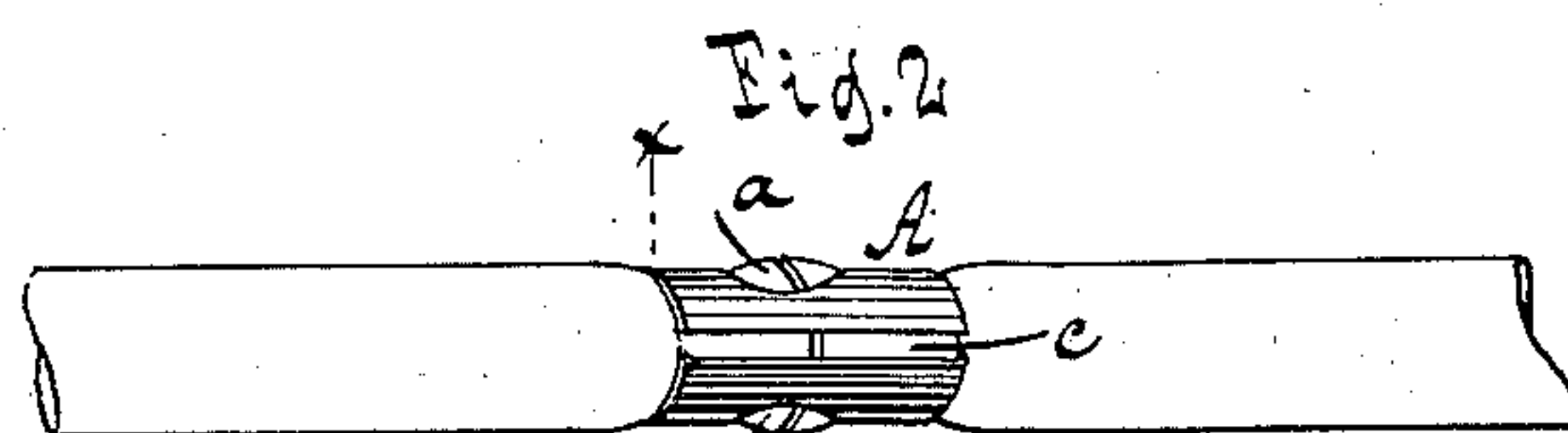
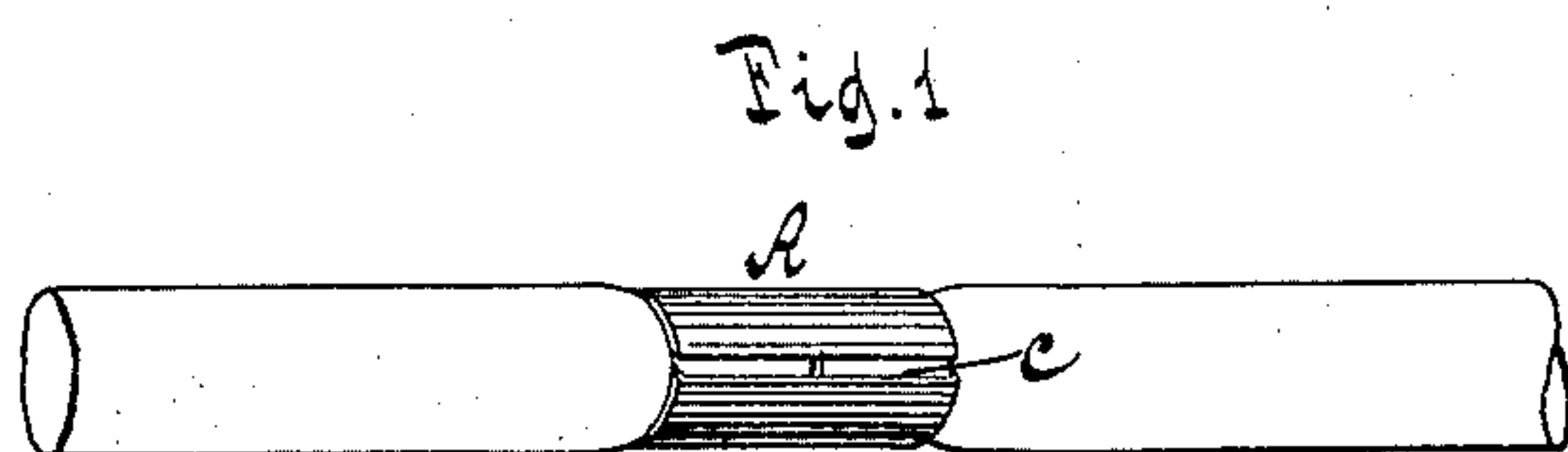
(No Model.)

A. JOHNSTON.

BELT COUPLING.

No. 280,186.

Patented June 26, 1883.



WITNESSES:

Otto Hufeland
William Miller

INVENTOR

Abner Johnston

BY Van Santvoord & Hauff

ATTORNEYS

UNITED STATES PATENT OFFICE.

ABNER JOHNSTON, OF CORNWALL, ASSIGNOR OF TWO-THIRDS TO NELSON SECOR, OF NEW YORK, N. Y.

BELT-COUPLING.

SPECIFICATION forming part of Letters Patent No. 280,186, dated June 26, 1883.

Application filed May 9, 1883. (No model.)

To all whom it may concern:

Be it known that I, ABNER JOHNSTON, a citizen of the United States, residing at Cornwall, in the county of Orange and State of New York, have invented new and useful Improvements in Belt-Couplings, of which the following is a specification.

This invention relates to a belt-coupling which is intended for belts of a circular, square, or triangular cross-section; and it consists of a clasp composed of a U-shaped piece of sheet metal provided with holes in its sides, all of which will be more fully hereinafter described in detail.

In the accompanying drawings, Figure 1 represents a side view of my belt-coupling without the holes. Fig. 2 is a similar view of the same with the holes. Fig. 3 is a transverse section of the same in the plane xx , Fig. 2. Fig. 4 is a longitudinal section of the same. Figs. 5, 6, and 7 are different views of the clasp when detached.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates my clasp, which is made of sheet metal, sheet-iron being used by preference, and which is bent to a U shape, as shown in Fig. 7. In the sides of this clasp, at about the middle of its length, are two holes, $a a$, (see Figs. 2, 4, and 5,) the object of which will be presently explained.

On the ends of the clasp are formed retaining devices $b b$, which, in the example shown in the drawings, consist of sharp-edged flanges projecting inwardly, as shown in Figs. 4 and 6; but, instead of using continuous flanges, I can also use detached spurs formed at or near the edges of the clasp.

In order to couple the ends of a belt, I place these ends into the bite of the clasp A, and then I bend the clasp around the belt, so as to take a firm hold of its ends and to retain the same securely in position. In order to give to the clasp a firm hold on the ends of the belt and to allow of opening the clasp whenever it is requisite, the capacity of said clasp must be such that when it is clamped around the belt a gap, c , is left between its edges, as shown in Figs. 1, 2, and 3 of the drawings. It is also desirable that the clasp shall be compressed to such an extent that its diameter be-

comes somewhat less than the diameter of the body of the belt outside the clasp, so that when the belt passes over a pulley the injurious effect of the clasp will be reduced. The clasp being provided with holes $a a$ in its sides, when it is clamped round the ends of the belt, as shown in Figs. 2 and 4, said ends protrude through said holes and the grip of the clasp on the belt is strengthened, while at the same time the protruding ends of the belt prevent the metallic clasp from coming in contact with the pulley over which the belt runs.

The grip of my belt is still further improved by the retaining devices $b b$, which, when the clasp is clamped around the ends of the belt, bite into the same, as shown in Fig. 4, and by these means said ends are firmly retained, so that they are not liable to become detached by the strain to which the belt may be exposed.

When it is desired to open the clasp for the purpose of shortening the belt, or for any other purpose, the tip of a screw-driver or other tool of a similar nature is placed into the gap c , and by turning the tool the edges of the clasp are forced apart, so that the ends of the belt can be withdrawn. When the belt has been cut, its ends are fastened again in the same clasp.

From this description it will be seen that my belt-coupling is exceedingly simple in its construction. It can be applied with great facility, and it can be manufactured at a very small cost.

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

1. A belt-coupling consisting of a U-shaped piece of sheet metal provided with holes in its sides, substantially as shown and described.

2. A belt-coupling consisting of a U-shaped piece of sheet metal provided with holes $a a$ in its sides, and with retaining devices $b b$, substantially as shown and described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

ABNER JOHNSTON. [L. S.]

Witnesses:

E. F. KASTENHUBER,
D. VAN SANTVOORD.