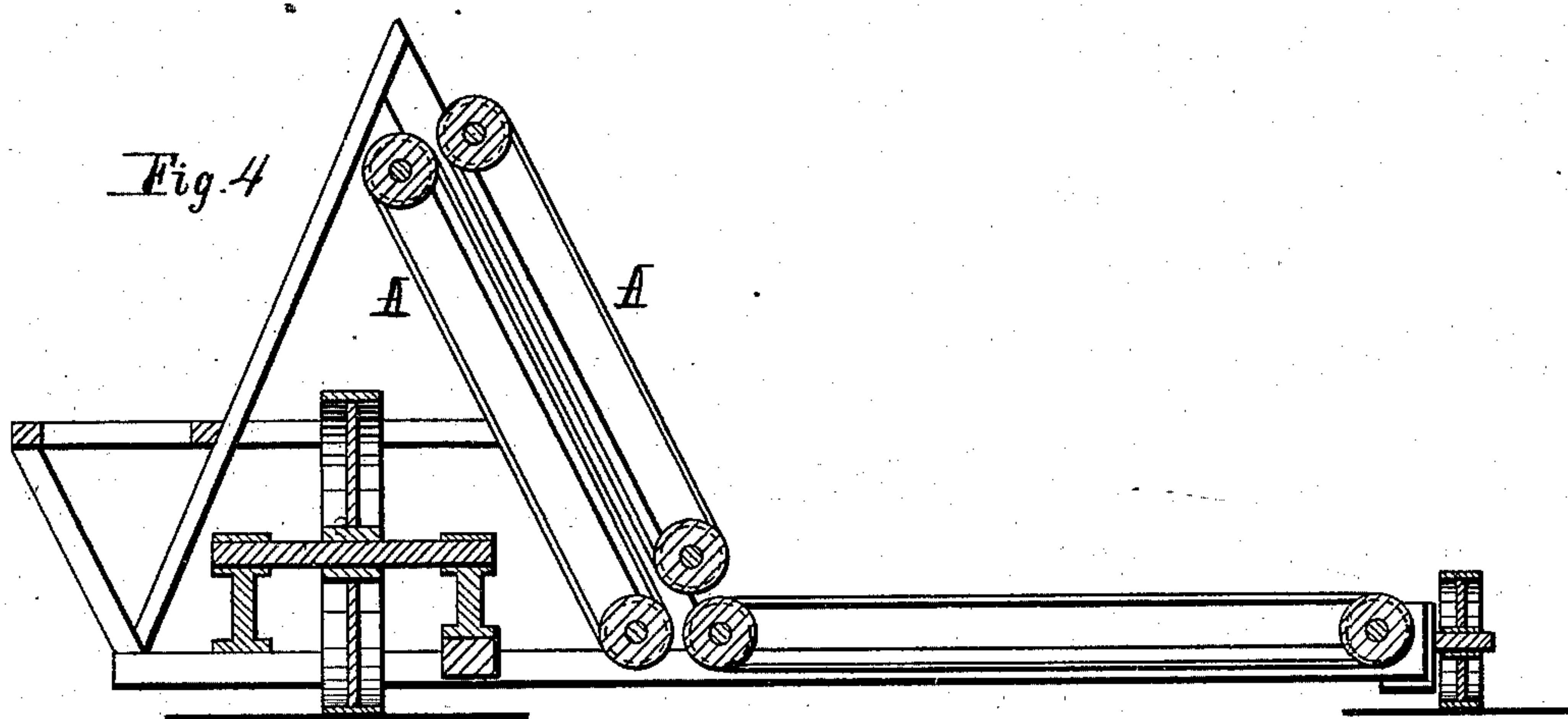
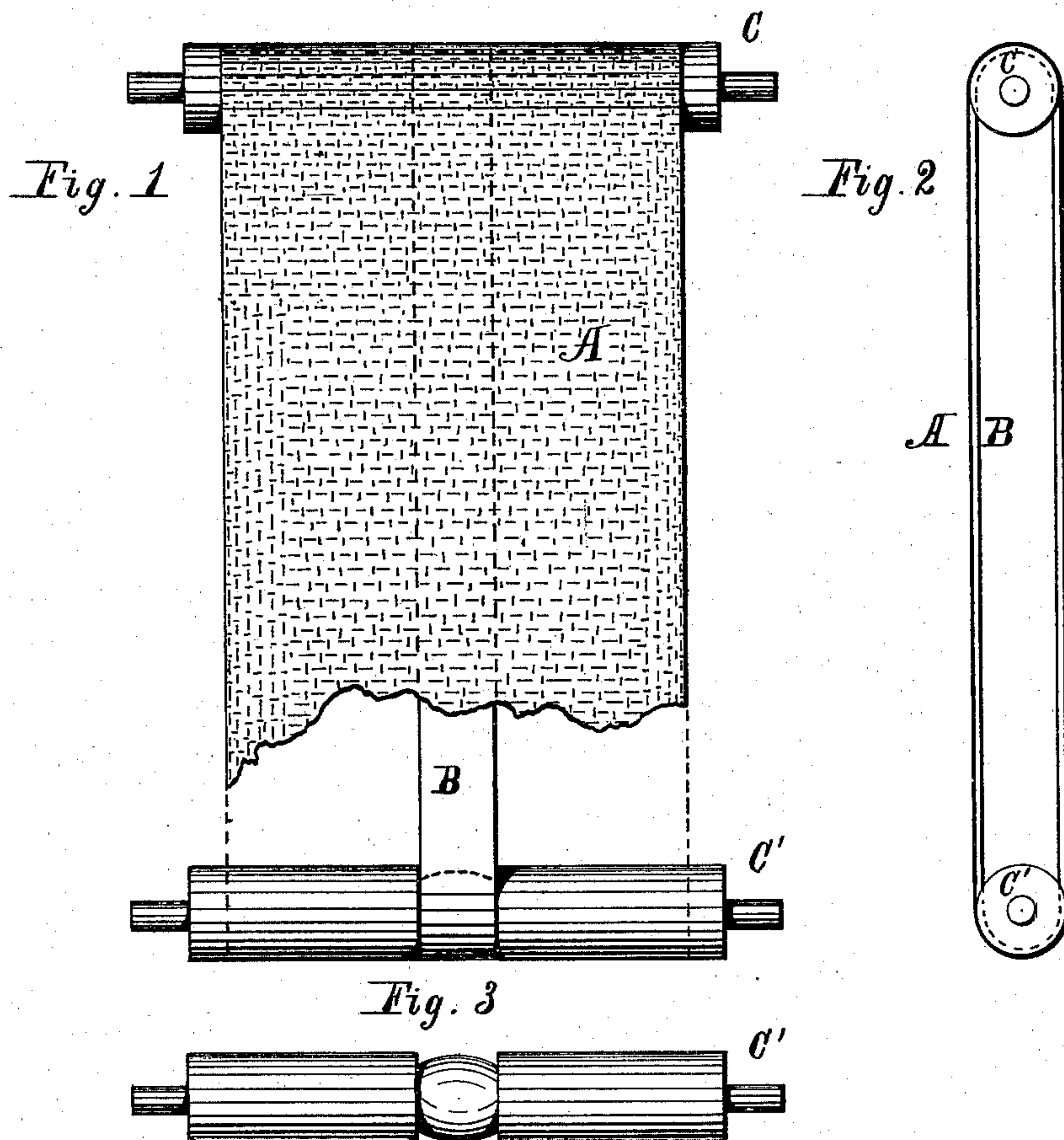


(No Model.)

G. H. RAYMOND.  
Elevator Belt for Harvesters, &c.

No. 229,275.

Patented June 29, 1880.



Witnesses:  
W. M. Ebersole, Jr.  
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# UNITED STATES PATENT OFFICE.

GEORGE H. RAYMOND, OF BROCKPORT, NEW YORK.

## ELEVATOR-BELT FOR HARVESTERS, &c.

SPECIFICATION forming part of Letters Patent No. 229,275, dated June 29, 1880.

Application filed April 5, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE H. RAYMOND, of Brockport, Monroe county, New York, have invented an Improvement in Elevator-Belts for Grain-Harvesters, and for other purposes, of which the following is a specification, reference being had to the annexed drawings, in which—

Figure 1 is a plan view of my improved elevator-belt. Fig. 2 is a side elevation of the same. Fig. 3 represents the roller. Fig. 4 represents the application of my improved elevator-belt to grain-harvesters.

My invention relates to an improvement in the canvas elevator-belts which are used for conveying and elevating the grain in grain-harvesting machines, and for other purposes.

The object of my invention is to obviate the difficulties now encountered in making the canvas belt travel properly on the pulleys which support it, and it is applicable to any class of machinery in which canvas elevating or conveying belts are employed.

My invention consists in combining with the canvas belt an inner narrower belt which runs over a crowning portion of the carrying-roller and operates to guide and control the canvas.

My invention is represented in the accompanying drawings, in which—

A, Figs. 1 and 2, is the canvas, B the inner leather belt, and C C' the carrying-rollers.

The belt A may be of any desired width or length, according to the purpose for which it is to be employed, and it may be of canvas or other suitable material.

The inner belt, B, which may be of leather, rubber, or other suitable material, is attached to the belt A by sewing or riveting, and the ends of the belts are connected together by laces, buckles, or hooks, or in any other preferred manner. The inner belt should be placed centrally or nearly centrally, in order to permit the requisite freedom of motion in the margins of the canvas belt.

The carrying-rollers C and C' should be made with a convex surface, in order to properly guide the inner belt. Where it is desired to give an even surface to the outer belt the portions of the rollers C and C' over which the inner belt travels may be slightly reduced in size.

In Fig. 4 I have represented my improved elevating or conveying belts as applied to a grain-harvester of that class in which the grain, after being cut, is carried over the driving-wheel in order to be bound.

My invention is, however, applicable to all classes of machinery in which wide cloth belts are used, and more particularly to those in which such belts or aprons, from exposure to moisture or atmospheric influences, are liable to changes of shrinking or stretching, which prevent their proper operation.

I am aware that it is not new to provide a canvas belt with welts or ribs at each side, and such I do not claim. The superiority of my arrangement is that when one side of the canvas belt becomes wet from dew or rain it contracts, and has a great tendency to cause the canvas to run off the end of the roller. Welts or ribs at the side of the canvas will only increase this tendency, and they do not prevent the canvas from running off the end of the roller. The arrangement devised by me entirely removes this difficulty and causes the canvas to run perfectly straight when all or only one side of the canvas is wet.

I claim—

In combination with the outer cloth belt, A, having free marginal edge, and the inner narrower guiding-belt, B, attached thereto, the rollers C C', provided with crowning portions to receive the guiding-belt B, substantially as and for the purposes set forth.

GEO. H. RAYMOND.

Witnesses:

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