

(No Model.)

D. W. STORMS.
CONVEYER BELT FOR HARVESTERS.

No. 503,014.

Patented Aug. 8, 1893.

Fig. 1.

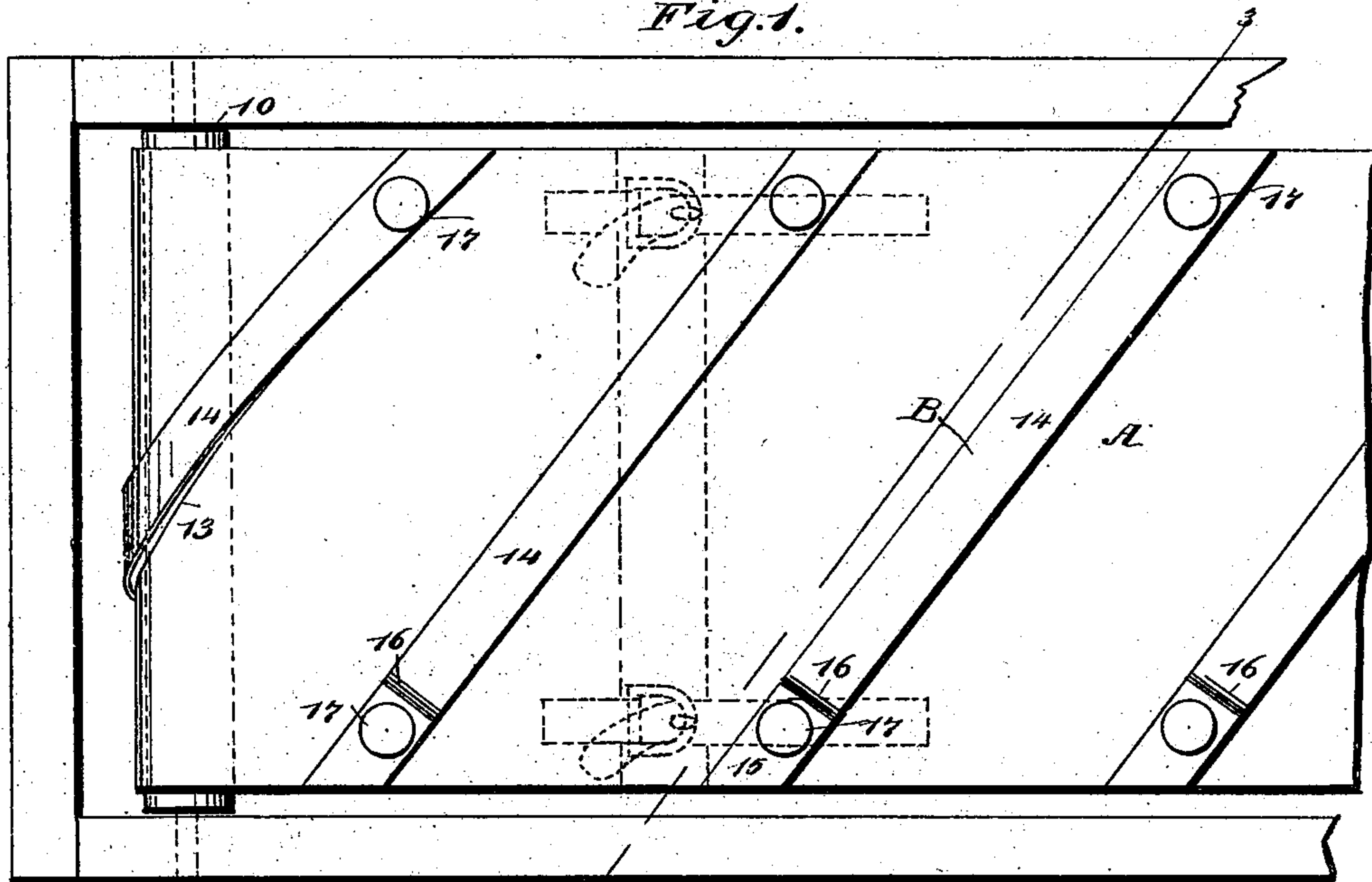


Fig. 2.

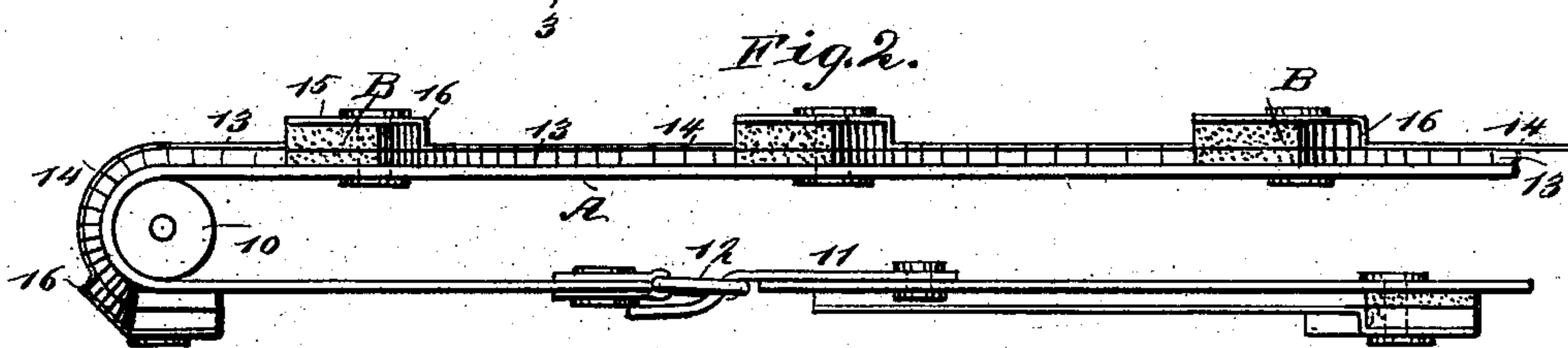
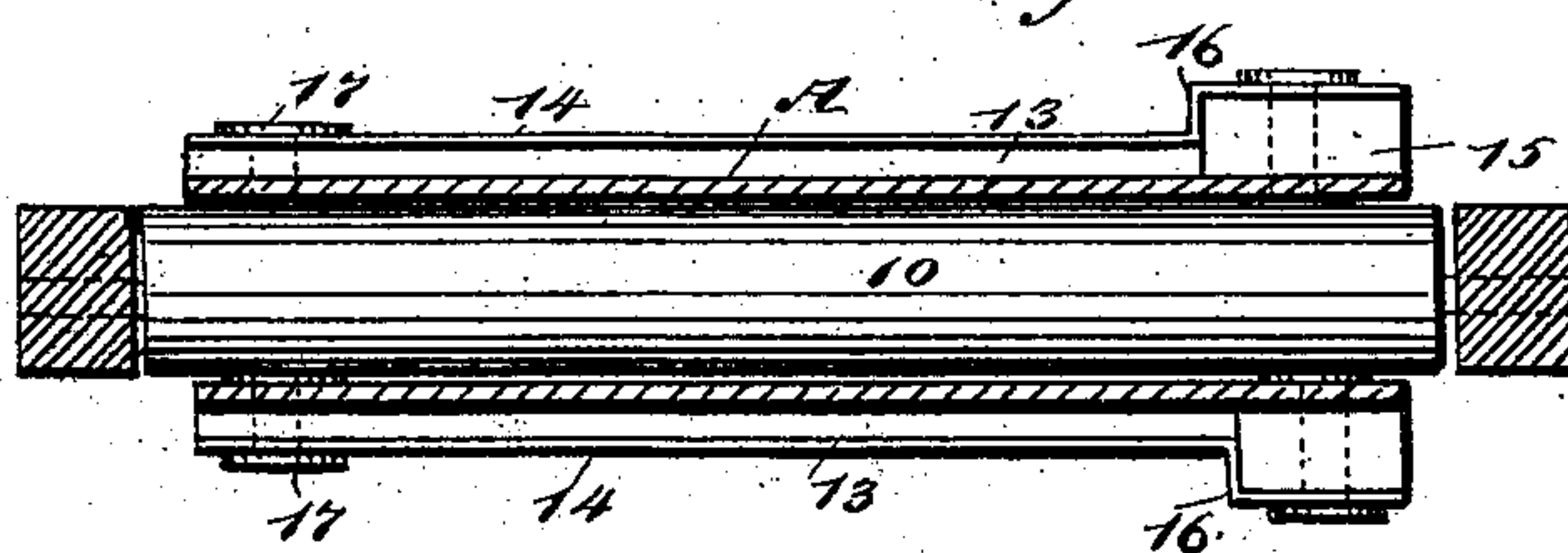


Fig. 3.



WITNESSES:

J^r M^r Arde.
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UNITED STATES PATENT OFFICE.

DELOS WARREN STORMS, OF WESTERN, NEBRASKA.

CONVEYER-BELT FOR HARVESTERS.

SPECIFICATION forming part of Letters Patent No. 503,014, dated August 8, 1893.

Application filed March 7, 1893. Serial No. 464,996. (No model.)

To all whom it may concern:

Be it known that I, DELOS WARREN STORMS, of Western, in the county of Saline and State of Nebraska, have invented a new and Improved Conveyer-Belt for Grain-Binders, of which the following is a full, clear, and exact description.

My invention relates to a conveyer belt for harvesters or grain binders, and it has for its object to provide a belt so constructed that the grain will not be wasted therefrom, and whereby further the grain will be delivered to the elevator or the various packers of the binder straight, or in such manner that they will take such hold upon the grain as to insure the latter being bound without waste.

A further object of the invention is to construct the belt in an economical, durable and simple manner.

The invention consists in the novel construction and combination of these several parts, as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the belt. Fig. 2 is a partial side elevation thereof; and Fig. 3 is a transverse section taken essentially on the line 3—3 of Fig. 1.

There is a fault common to all binders, that is, if the grain is short and thin it will not bind without wasting to a great extent at each end of the binder. The main reason for this waste consists in the fact that as the grain is cut and as it falls upon the platform or belt, the heads being heavier than the butts the heads will travel faster than the butts, and by the time the grain arrives at the elevator apron it is located endwise or longitudinally upon the belt or platform; in fact, the grain will present itself to the elevator apron head first, and the beaters or packers in the binder cannot obtain sufficient hold of the grain to carry it farther or cause it to be properly packed; therefore the grain will fall out at each end of the binder and is lost.

The prime object of this invention is to so

construct the conveyer belt that the grain will be at all times delivered in proper shape to the elevator belt, and consequently avoid loss of grain.

In carrying out the invention the body of the belt A, is constructed of canvas or any other suitable material, and is passed over rollers 10 in the usual manner, the ends of the belt being connected by straps and buckles 11 and 12, or by any other approved means. The slats B of the belt are located diagonally thereof, and extend from side to side, and preferably the slats are so placed that they are at an angle of about fifty-two degrees from a line transversely across the belt.

Each slat is constructed in the following manner: The body 13, of a slat consists of one or more strips of leather, and the said body is covered by a strip 14 of tin or sheet metal of any description. The grain end of each slat is made considerably thicker than the remaining portion thereof, as shown at 15 in the drawings; and preferably the inner surface of the slat is somewhat straight, forming thereby a shoulder 16, and this shoulder is adapted to catch or engage with the butt of the grain so as not to let the grain slip off or over the belt. It will be observed that as the slats are of a yielding character they will readily pass over the rollers 10 of the belt; and preferably the slats are secured to the belt by means of rivets 17, located at proper intervals throughout the length of the slat, the rivets passing through the entire slat and through the belt, as shown in Fig. 2. The flexible straps being placed diagonally upon the belt, as the grain gathers upon the latter the front or enlarged ends of the slats engage with the butts of the grain before the heads are brought to an engagement with the belts, and will therefore carry the grain up straight to the elevator, which will deposit it in proper shape in the binder; therefore, no grain is lost, and the device binds a smooth sheaf. Furthermore, as the slats are made more or less flexible they cannot be broken as often happens with wooden slats, and they are not so apt to be torn off as wooden slats, since the latter are simply tacked to place while the improved slats are securely riveted upon the belt.

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Having thus described my invention, I claim as new and desire to secure by Letters Patent—

- 5 1. A conveyer belt for binders, having flexible slats diagonally located thereon, substantially as shown and described.
2. A conveyer belt for binders, provided with flexible slats located diagonally thereon, and of greater thickness at the grain end than
10 at any other point throughout their length, as and for the purpose set forth.
3. In a conveyer belt for binders, the combination, with the belt, of slats located diagonally thereon, the said slats consisting of a
15 body of leather and a capping of sheet metal, as and for the purpose set forth.
4. In a conveyer belt for binders, the com-

bination, with a belt, of slats secured upon the belt, of greater thickness at their grain end than at any other point throughout their
20 length, as and for the purpose specified.

5. In a conveyer belt for grain binders, the combination, with a belt, of slats located diagonally thereof, the said slats being of greater thickness at their grain ends than at any
25 other point throughout their length, said slats being also constructed of a leather body and a capping or covering of sheet metal, as and for the purpose specified.

DELOS WARREN STORMS.

Witnesses:

W. D. AKINS,
A. J. STORMS.