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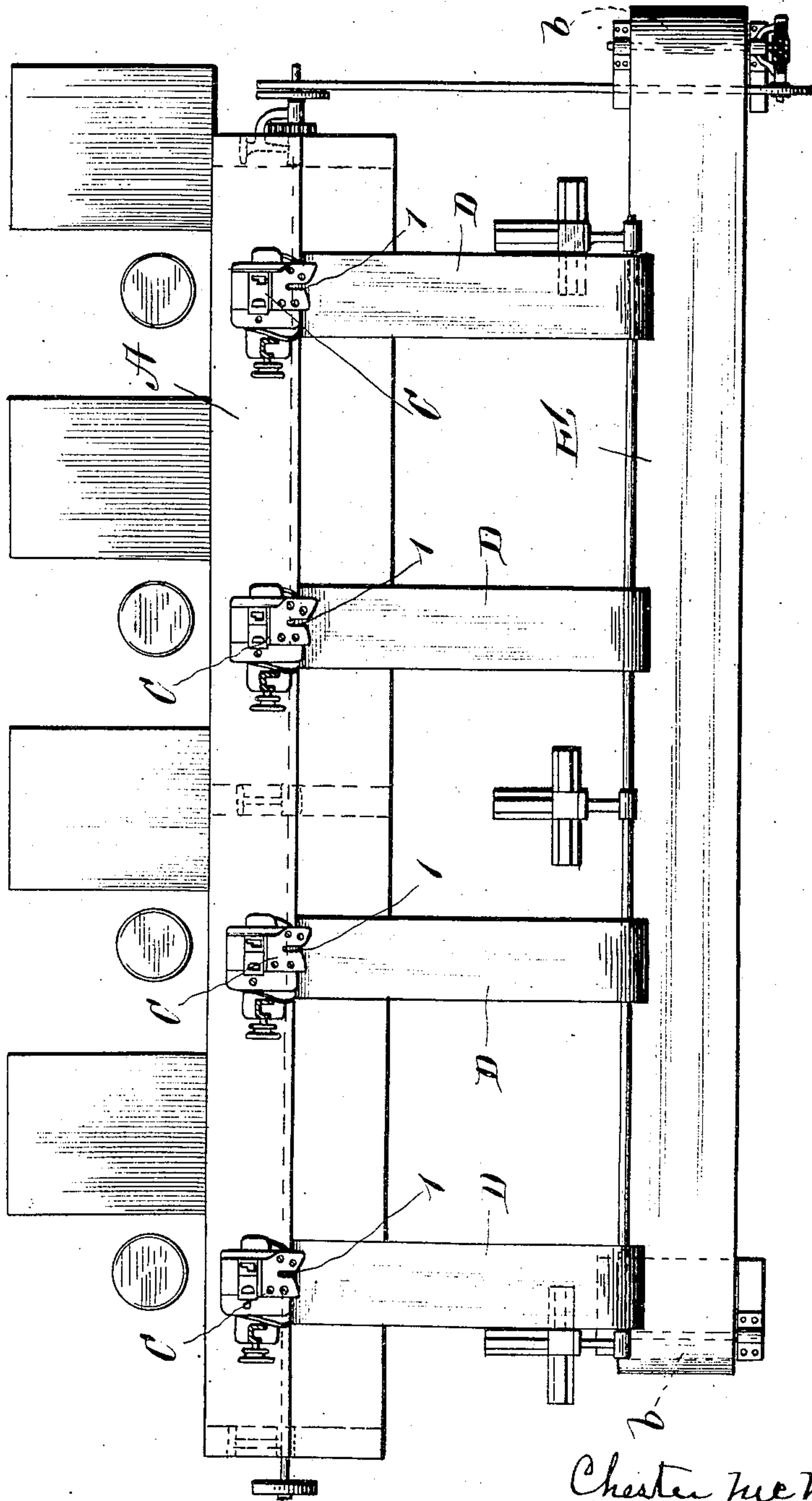
PATENTED DEC. 31, 1907.

C. McNEIL & D. S. SEYMOUR.

BAG SEAMING, CUTTING, AND CONVEYING APPARATUS.

APPLICATION FILED NOV. 21, 1905.

3 SHEETS—SHEET 1.



Witnesses

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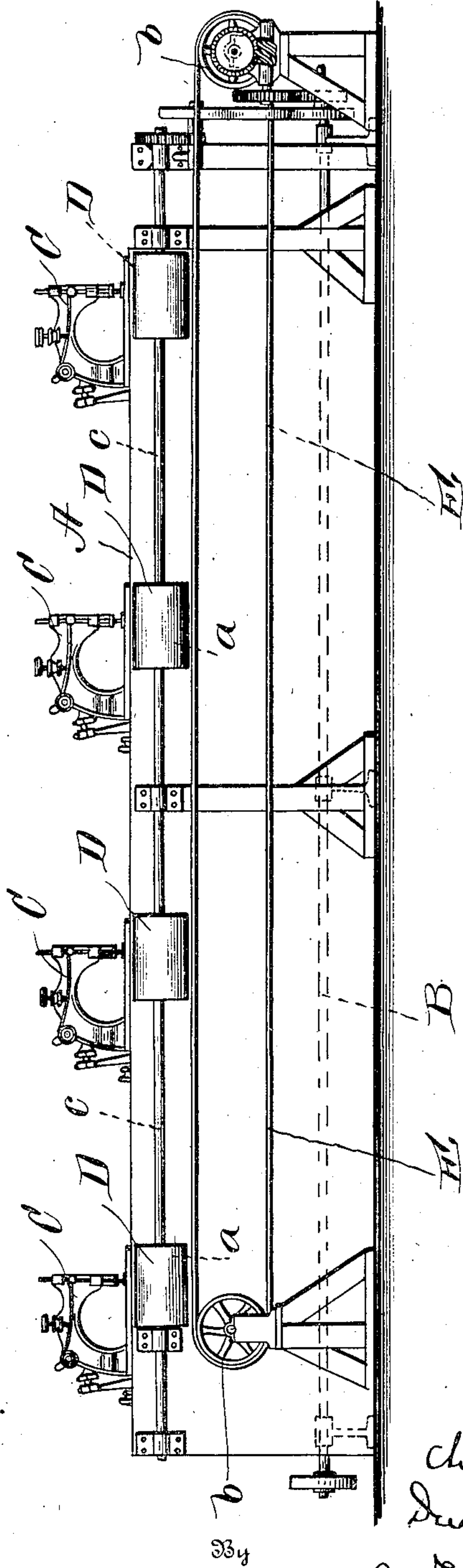
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Fig. 2.



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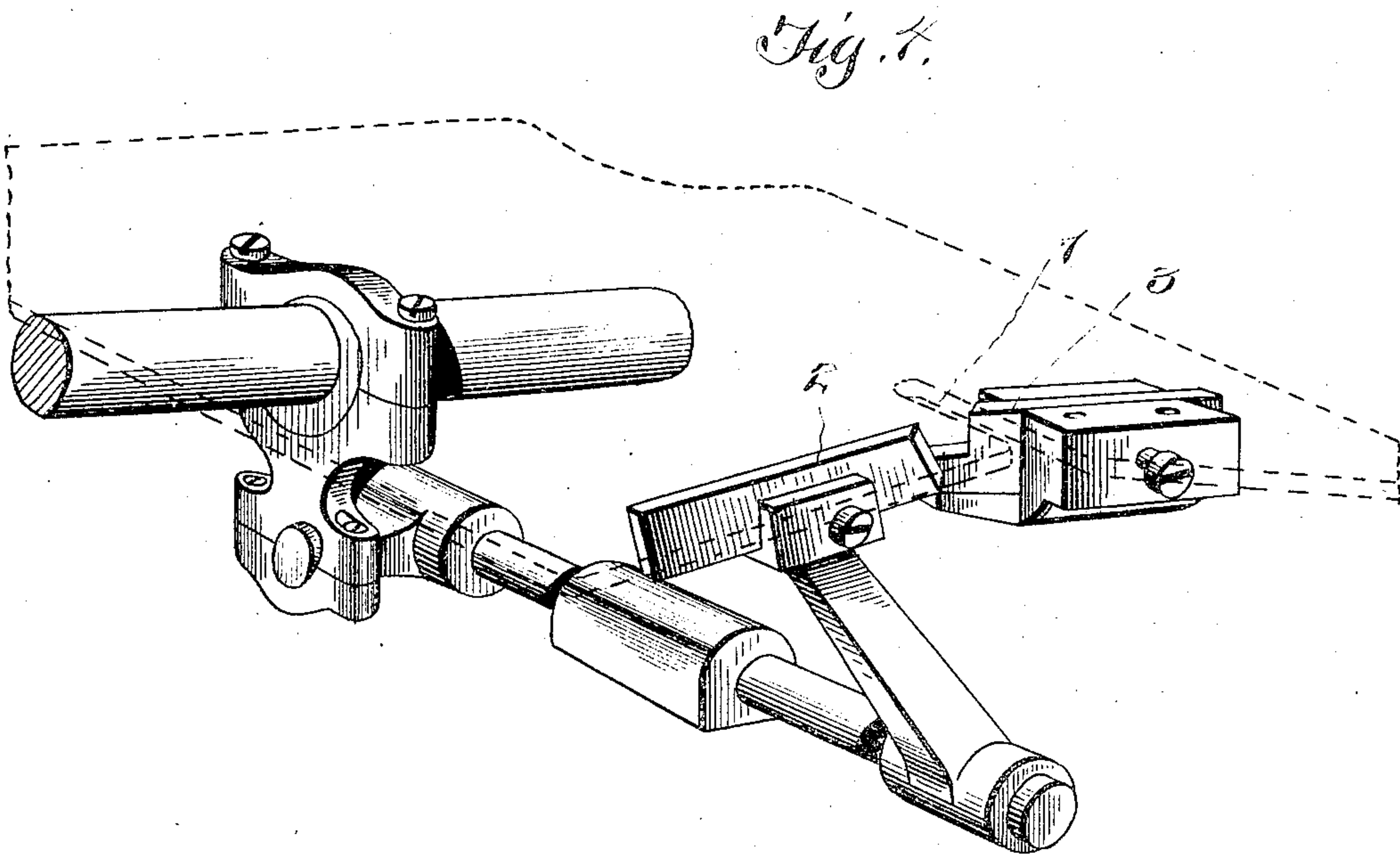
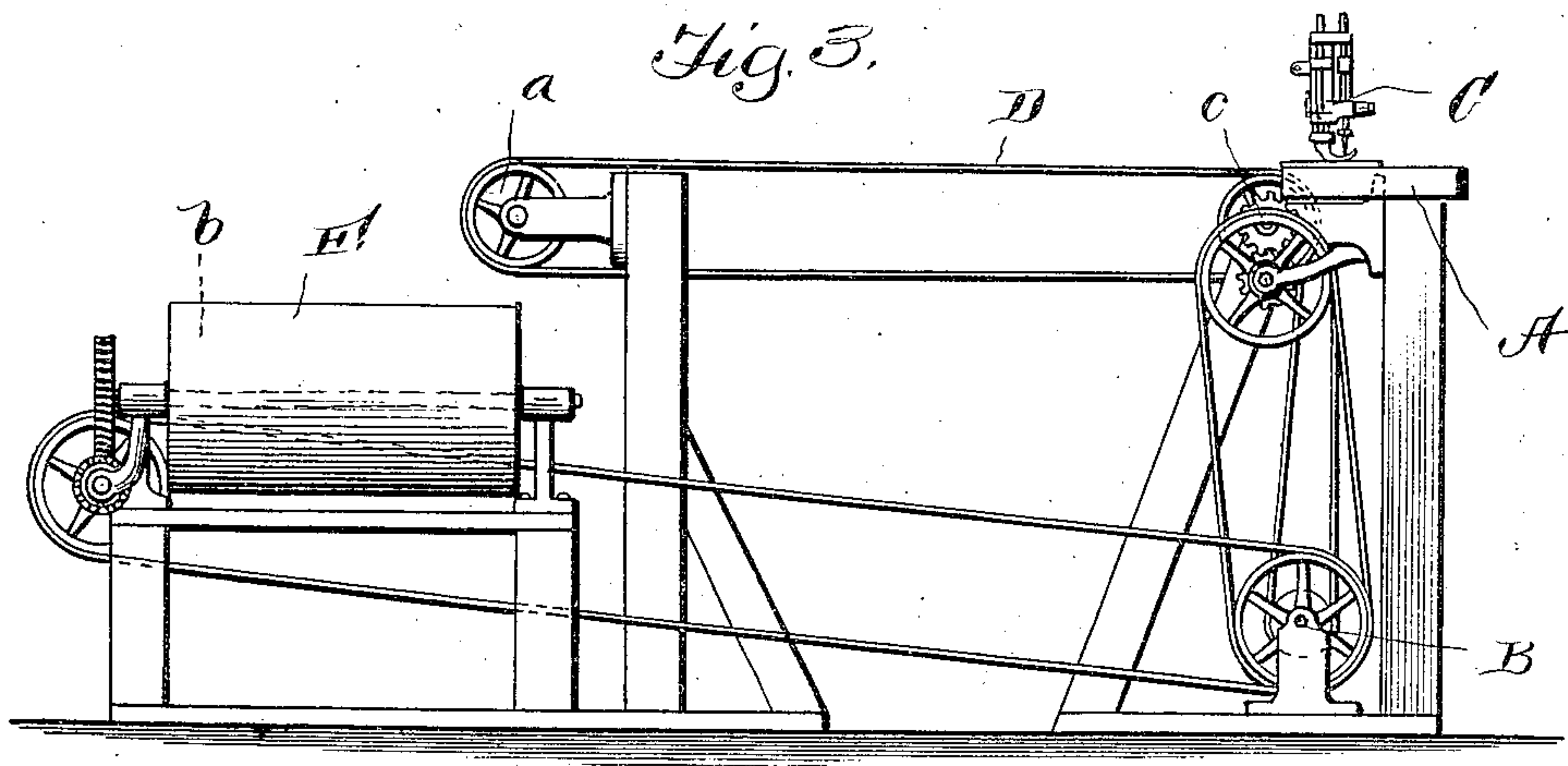
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3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

CHESTER McNEIL AND DUDLEY S. SEYMOUR, OF CHICAGO, ILLINOIS, ASSIGNORS TO UNION SPECIAL MACHINE COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

BAG SEAMING, CUTTING, AND CONVEYING APPARATUS.

No. 875,590.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed November 21, 1905. Serial No. 288,465.

To all whom it may concern:

Be it known that we, CHESTER McNEIL and DUDLEY S. SEYMOUR, citizens of the United States, residing at Chicago, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Bag Seaming, Cutting, and Conveying Apparatus, of which the following is a description, reference being had to the accompanying drawing and to the letters and figures of reference marked thereon.

The invention relates to an improvement in apparatus for use in connection with the seaming and delivering of bags.

As herein shown, the apparatus includes a supporting table or framework, a series of sewing machines for seaming bags mounted thereon, a conveying belt leading away from each machine, and a single endless conveying belt extending beneath the ends of the other belts to receive from said belts the sewed bags and deliver them to a suitable point.

The invention also includes cutting apparatus for severing the chain of stitching between successive bags, the severing taking place between the sewing and delivering operation.

The invention consists in the matters hereinafter described and referred to in the accompanying claims.

The invention is illustrated in the accompanying drawings, in which

Figure 1 is a plan view of an apparatus embodying the invention; Fig. 2 is a front elevation; Fig. 3 is an end elevation; and Fig. 4 is a detail view, illustrating a form of cutting mechanism used in connection with the sewing heads to sever the chain of stitching between any two successive bags.

In these drawings, A represents a suitable framework or table, upon which are supported a number of bag seaming machines C, operated from the line shaft B.

As shown in Fig. 4, I use in connection with each sewing machine a cutting apparatus for severing the chain of stitching between any two successive bags. This cutting apparatus comprises, as herein shown, a continuously running knife member operated from the main shaft of the sewing machine in any suitable manner, and cooperating with a stationary member. The cloth plate of the sewing machine has in rear of the needle and feeding mechanism, an elongated slot, so arranged that when a bag is fed off

from the machine, the chain of stitching between it and the succeeding bag will be drawn into the slot 1 in the cloth plate and into the path of movement of the knife blades 2, 3, the knife blade operating to sever the chain. This particular form of cutting itself forms no part of the present invention, but is simply shown by way of illustration, and as forming an important feature in the combination. It is, however, shown, described and claimed in an application filed by Dudley S. Seymour, Jan. 2, 1906, Serial No. 294,255.

Upon the framework in rear of each machine is a conveying belt D, trained over rollers a on the shaft c, and operated by connections with the line shaft. These conveying belts D are so arranged with respect to the bed plate of each machine that when the bags are seamed, they are carried by the belts D toward the rear of the apparatus and there delivered upon an endless conveyer E, trained over rollers b on the framework, and extending along the entire length of said frame. This endless conveyer E is also operated from the line shaft by suitable connections.

It will be understood that the speed of the first conveying belt must be properly proportioned with relation to the speed at which the bags pass over the cloth plate of the sewing machine, so that there will be no amount of strain or pull upon the bags by the conveyer belt before they have passed from under the influence of the stitch-forming mechanism. This belt should preferably travel at a speed greater than the feed of the sewing machine, which feeds the bag forward. If this conveying belt should run at a rate of speed slower than the rate of travel of the sewing machine feed, one bag would be piled upon another upon the conveying belt as said conveying belt would not be able to take the bags away as fast as they are finished. If, on the other hand said belt is given a speed equal or greater than the rate of speed of the feed of the sewing machine, then as soon as the bag is fed on to the conveying belt, said belt would carry the bag along at the same speed or a little faster than it is carried through the sewing machine by the feed of said machine. Of course, said bag could not move faster than the feed of the machine until after the bag is completely stitched and the same passes from beneath the presser foot and feed. As soon how-

ever, as the bag is completed and the feed of the machine has carried the same from beneath the presser foot, the conveyer belt would then carry the bag along at a speed
 5 equal to or a little faster than said bag was carried through the machine. The result of this movement of the bag by the conveyer belt, would be to hold the chain of stitches between the bags being sewed taut and as
 10 soon as the bag is moved completely from the machine table, the rear side thereof, would drop by its own weight and on to the belt and carry the chain of stitches into the cutter. If the chain of stitches was not
 15 drawn taut between the bags, the falling of the bag upon the belt by gravity would not carry the chain of stitches into the cutter.

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

1. In an apparatus for making bags, a suitable supporting framework, a sewing mechanism supported thereon and upon which the bags are sewed, a conveyer arranged substantially at right angles to the
 25 said supporting framework and adapted to receive the bags from the cloth plate of the sewing mechanism, and a second conveyer arranged to receive the bags from the first
 30 conveyer; substantially as described.

2. In a bag seaming and conveying mechanism, a suitable supporting framework, a sewing mechanism supported thereon, a conveyer for carrying the seamed bags
 35 away from the machine, said conveyer extending substantially at right angles to the supporting framework and to a position adjacent the rear edge thereof, whereby the
 40 seamed bags as they are fed from the sewing mechanism are delivered to said conveyer and a second conveyer arranged to receive the bags from the first conveyer; substantially as described.

3. In a bag seaming and conveying mechanism, a suitable supporting framework, a sewing mechanism supported thereon, a conveyer for carrying the seamed bags
 45 away from the machine, said conveyer ex-

tending substantially at right angles to the supporting framework and to a position adjacent the rear edge thereof, whereby the
 50 seamed bags as they are fed from the sewing mechanism are delivered to said conveyer, and a second conveyer arranged to receive the bags from the first conveyer, and a device
 55 for severing the chain of stitching between successive bags arranged between the sewing mechanism and the first conveyer belt; substantially as described.

4. In a bag seaming and conveying mechanism, a suitable supporting framework, a series of sewing mechanism supported thereon, a bag conveyer for each machine, said
 60 conveyer extending substantially at right angles to the supporting framework and to a position adjacent the rear edge thereof, whereby the seamed bags as they are fed
 65 from the sewing mechanism are delivered to said conveyer, and a single conveyer in such relation to all such conveyers as to receive
 70 the bags therefrom; substantially as described.

5. In a bag seaming and conveying mechanism, a suitable supporting framework, a sewing mechanism supported thereon, a
 75 conveyer for carrying the seamed bags away from the machine, said conveyer extending substantially at right angles to the supporting framework and to a position adjacent the rear edge thereof, whereby the
 80 seamed bags as they are fed from the sewing mechanism are delivered to said conveyer, and an automatic cutter for severing the chain of stitching between the sewing mechanism and the first conveyer, and a second
 85 conveyer arranged to receive the sewed bags from the first conveyer; substantially as described.

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

CHESTER McNEIL.
 DUDLEY S. SEYMOUR.

Witnesses:

CHAS. RATCLIFFE,
 F. J. MACK.