

No. 765,069.

PATENTED JULY 12, 1904.

J. M. DODGE.
CONVEYER.

APPLICATION FILED APR. 1, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

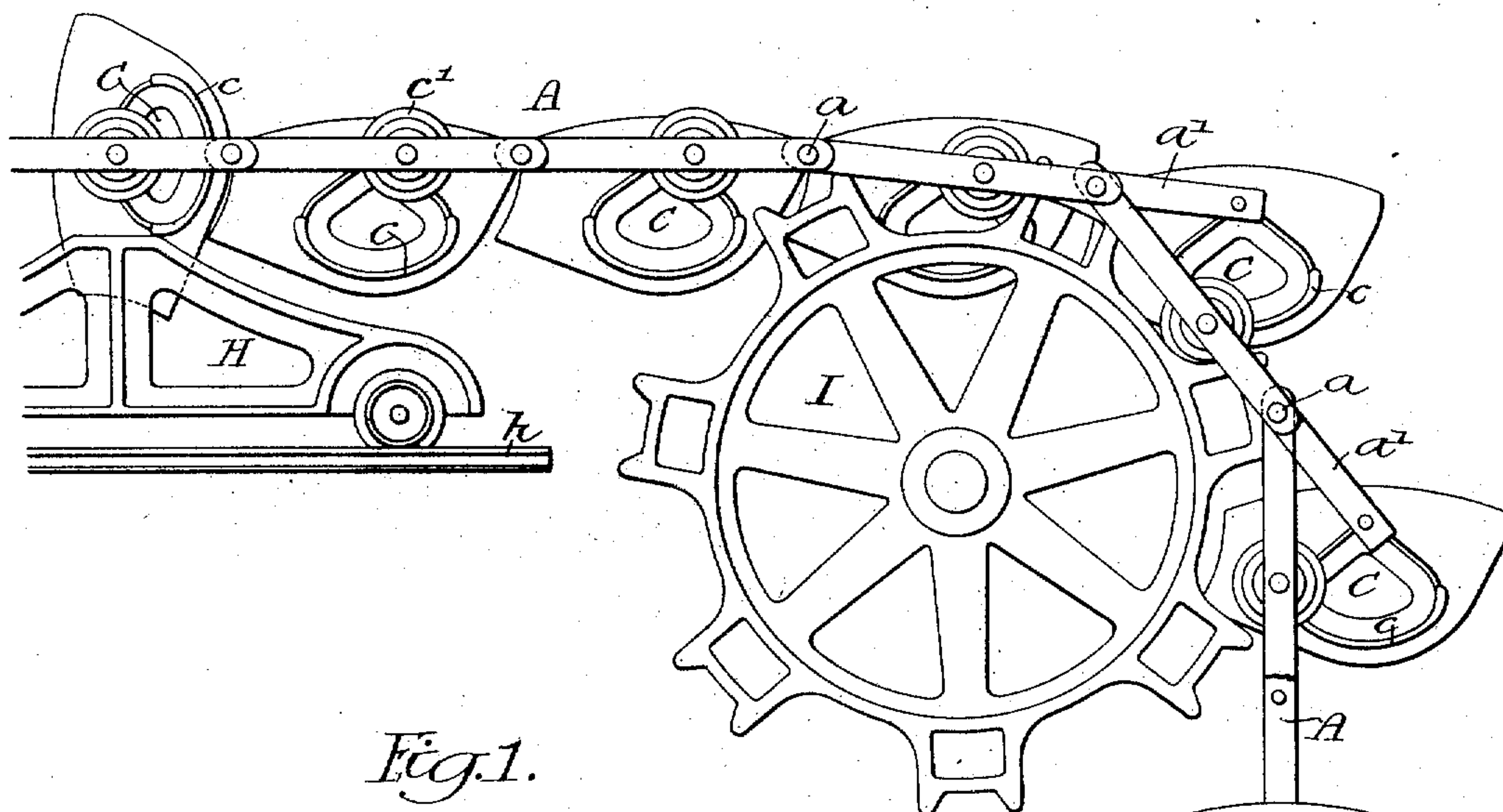
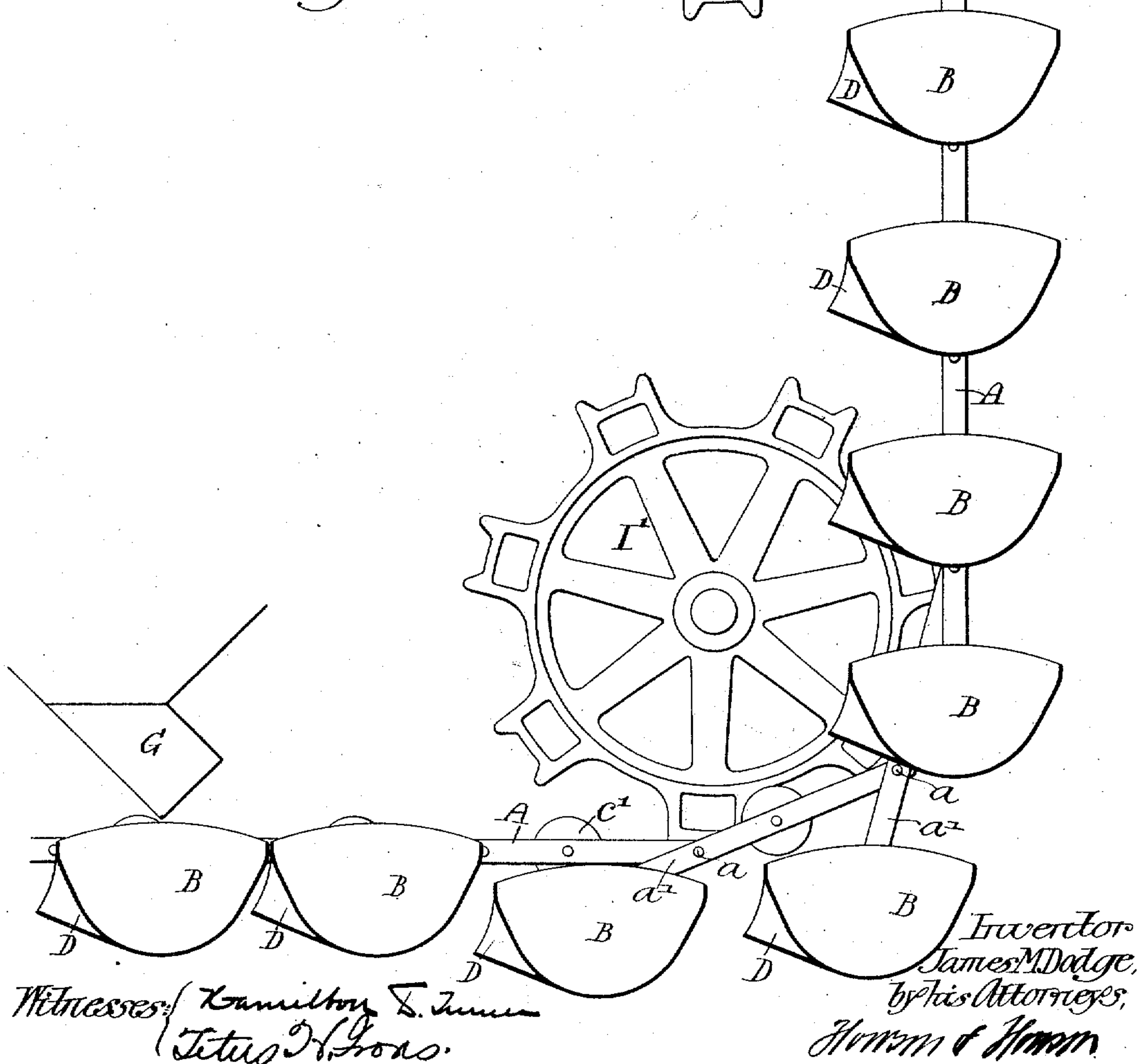


Fig. 1.



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Tetus D. Gross.

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2 SHEETS—SHEET 2.

Fig. 3.

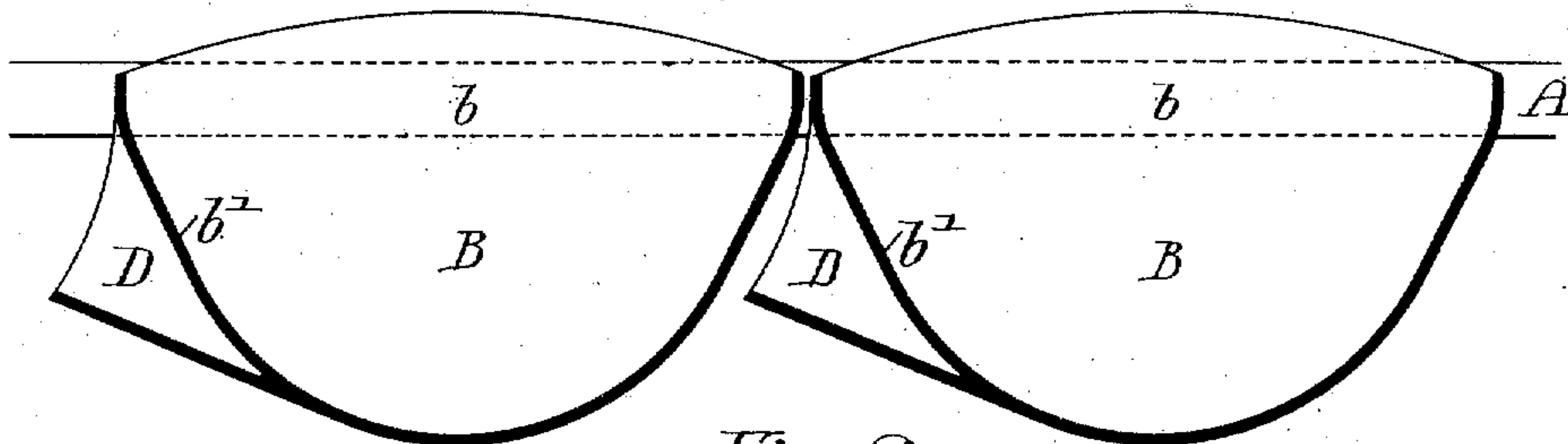


Fig. 2.

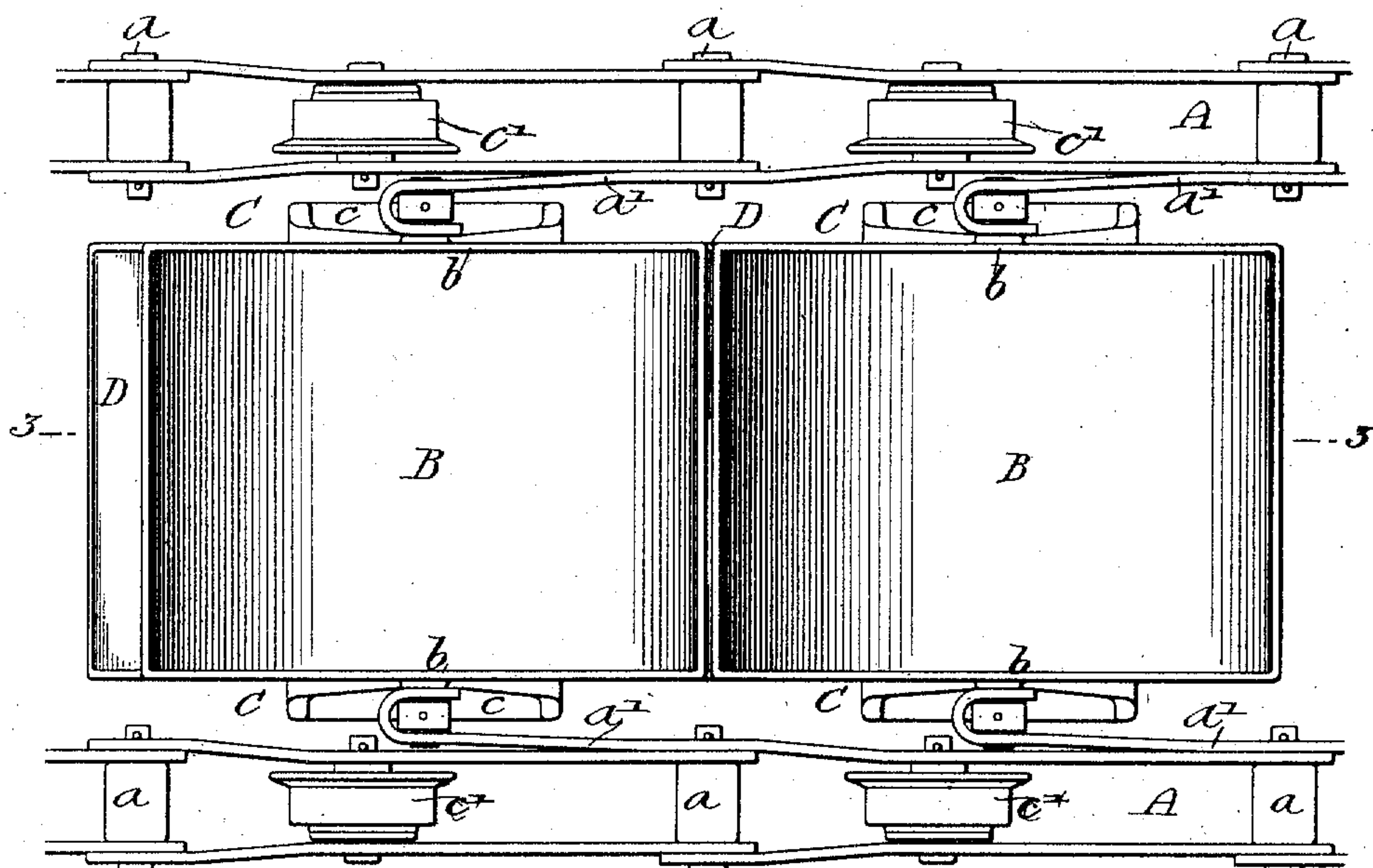
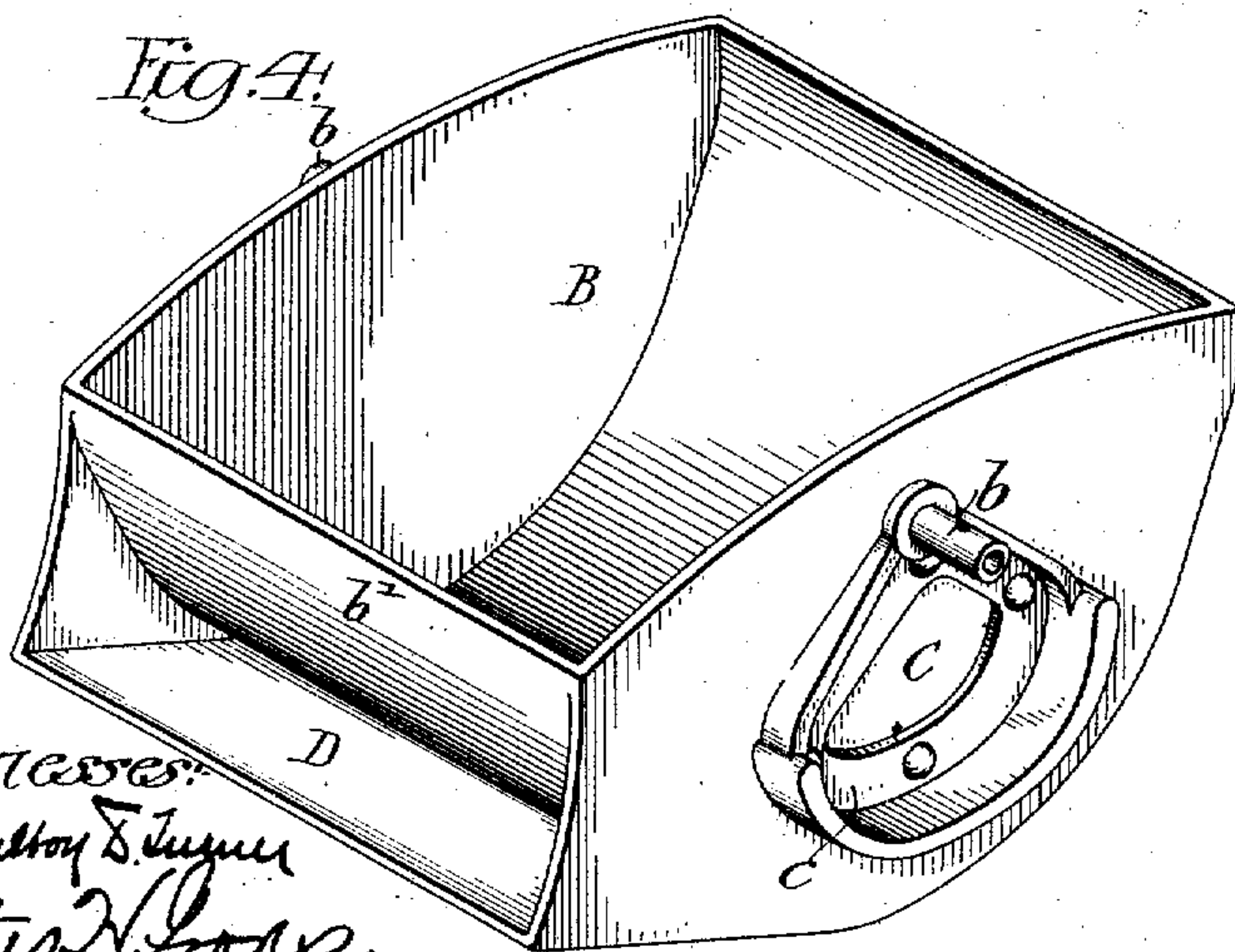
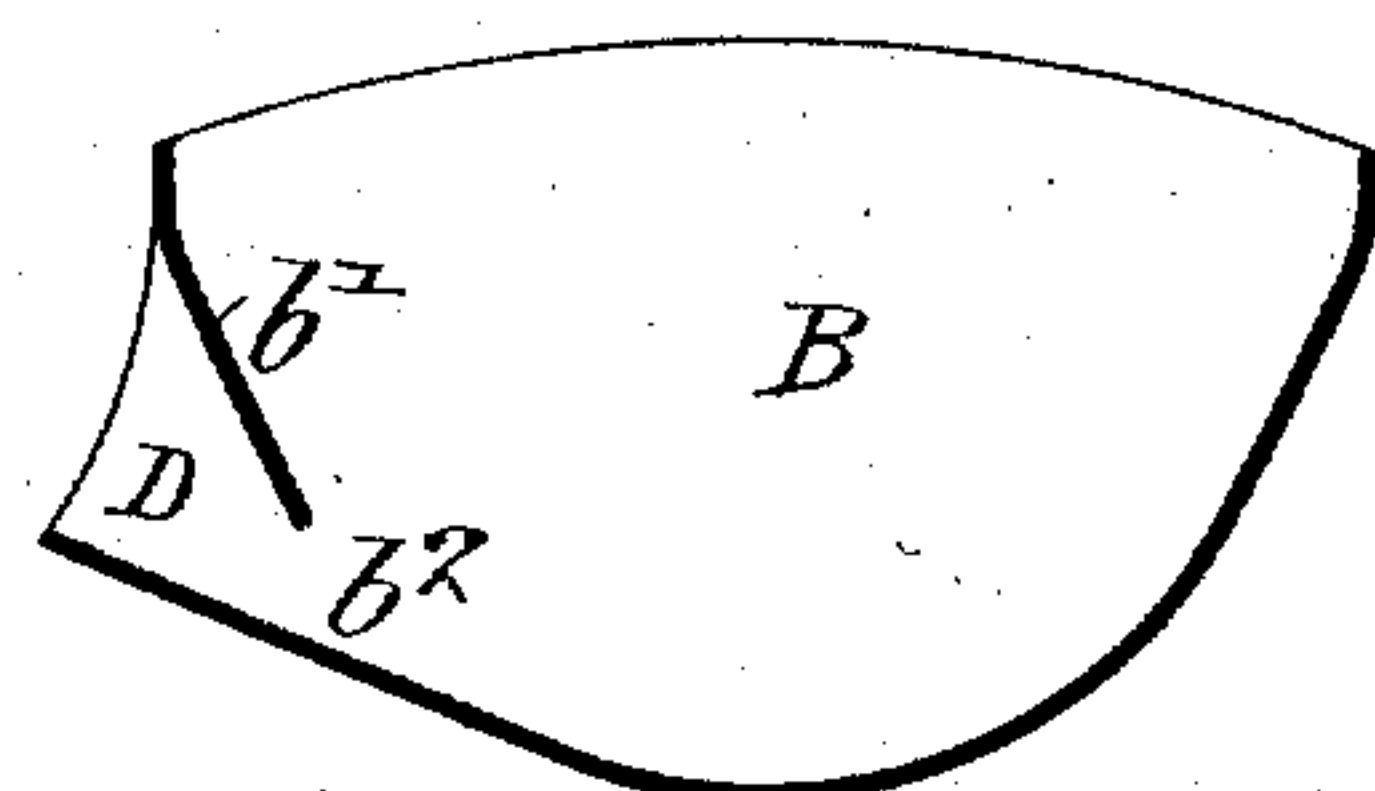


Fig. 4.



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Hamilton S. Taylor
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Fig. 5.



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UNITED STATES PATENT OFFICE.

JAMES M. DODGE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO
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CONVEYER.

SPECIFICATION forming part of Letters Patent No. 765,069, dated July 12, 1904.

Application filed April 1, 1904. Serial No. 201,122. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. DODGE, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Conveyers, of which the following is a specification.

My invention relates to certain improvements in pivoted bucket-conveyers in which the buckets are carried by an endless chain, the buckets being so pivoted that they will always assume an upright position except when being discharged by any suitable discharging mechanism. The buckets are known as "pivoted gravity-buckets."

The object of my invention is to provide buckets of this type with pockets for the reception of material that escapes through the space between the buckets when the buckets are being filled from a hopper or chute (especially a hopper) having a continuous discharge and to collect the spill when the buckets are separated as they pass around a curve, the material collected being finally discharged from the receptacle when the buckets are tipped.

Referring to the accompanying drawings, Figure 1 is a view, partly in section, of sufficient of an endless-chain pivoted-gravity-bucket conveyer to illustrate my invention. Fig. 2 is a plan view showing the buckets and the chains. Fig. 3 is a sectional view on the line 3 3, Fig. 2. Fig. 4 is a perspective view of one of the buckets. Fig. 5 is a view of a modification.

A A are the chains of a pivoted-bucket conveyer. The chains in the present instance are connected together at *a* and have extensions *a'*, in which the pivots *b* of the buckets B are mounted. The buckets are hung between the two chains A A, as clearly shown in Fig. 2, and by pivoting the buckets to the links of the chain, as shown, one bucket draws away from the other when passing around a sprocket-wheel or curve, so as to allow sufficient clearance for one bucket to pass the other.

Ordinarily there must be a space between the two buckets to allow the buckets to move freely on their pivots, and consequently more or less material must pass through this space

when fed to the buckets in a continuous stream. In order to collect the material thus escaping through the space, I form a pocket D on each bucket. This pocket extends from one end of the bucket, as shown in Fig. 3, to such an extent as to project under the space between the buckets and to catch any material that would escape through this space. I can extend this pocket to a point close to the adjoining bucket, and yet one bucket will swing clear of the other when the chain of the construction shown is used with the buckets pivoted to the extensions on the links, as one bucket in passing around a curve will draw away from an adjoining bucket, as mentioned above.

As shown in Fig. 3, the pocket is separated from the body of the bucket B by a partition *b'*, making the pocket independent of the bucket. In Fig. 5 I have shown a modification in which the partition *b'* is discontinued to provide an opening *b''*, which allows the material in the pocket to enter the body of the bucket under certain conditions—for instance, when a reverse tip is given to the bucket the contents of the pocket would not be discharged unless the bucket was turned completely over; but by providing the opening the contents of the pocket will flow directly into the bucket and then will readily be discharged.

Referring to Fig. 1, G is the hopper, which in the present instance continuously feeds the material to the conveyer, and H is an adjustable discharge-carriage mounted on rails *h*, so that it can be moved on the upper run of the conveyer to trip the buckets and discharge the material at any point. Preferably on each side of each bucket are projections *c*, which come in contact with the discharge-carriage. These projections are preferably on a plate C, which carries the bearings *b* of the buckets; but this construction may be modified without departing from my invention, the essential feature of which is the provision of buckets with pockets to receive material escaping through the space between the adjoining edges of the buckets. *c' c'* are wheels car-

ried by the chains A A and arranged to travel on rails which support the conveyer on the horizontal runs. I I' are sprocket-wheels around which the conveyer travels. In the present instance the wheel I is the driving-wheel.

I claim as my invention—

1. As a new article of manufacture, a conveyer-bucket having a pocket extending from one end of the same and below its upper edge, substantially as described.

2. As a new article of manufacture, a conveyer-bucket having a pocket at one end, said pocket extending beyond the end of the bucket and below the upper edge thereof, substantially as described.

3. As a new article of manufacture, a gravity conveyer-bucket having a pocket at one end connected with the body of the bucket below the upper edge thereof, substantially as described.

4. The combination of a conveyer, two buckets pivoted thereto, a pocket on one bucket ex-

tending under the space between the two buckets, so as to receive material escaping therethrough, substantially as described.

5. The combination of a conveyer, buckets pivoted thereto, a pocket formed on one end of each bucket, said pocket extending under the opposite end of the adjoining bucket so as to receive material escaping through the space between the buckets, substantially as described.

6. The combination of a chain made up of a series of links pivoted together, extensions on the links, buckets pivoted to the extensions, each bucket having a pocket projecting under the space between the adjoining edges of the buckets, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES M. DODGE.

Witnesses:

WILL. A. BARR,
JOS. H. KLEIN.