

(No Model.)

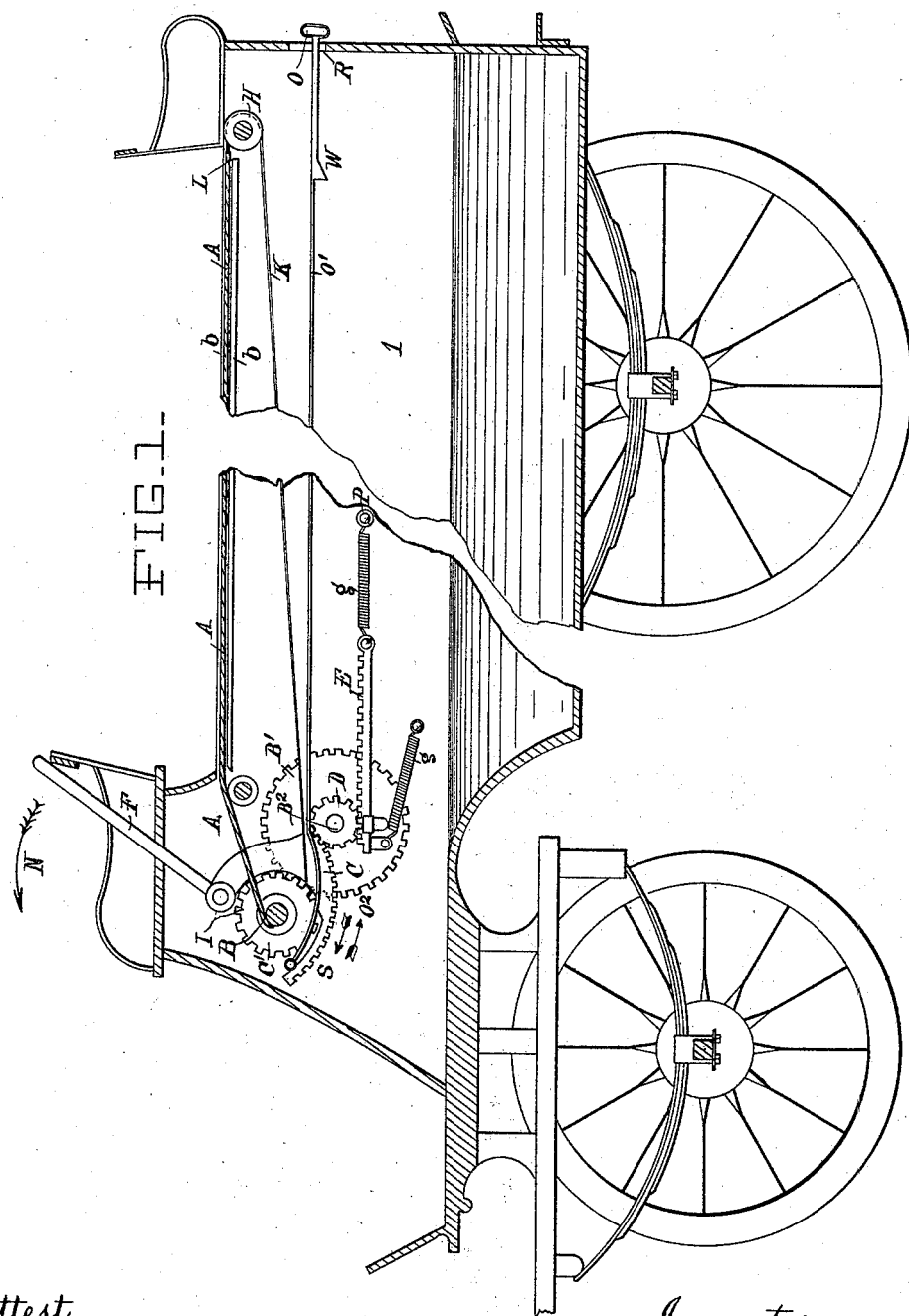
2 Sheets—Sheet 1.

H. MÜHLBERG.

SELF CLOSING ROLLER TOP FOR TRANSPORT WAGONS.

No. 526,324.

Patented Sept. 18, 1894.



Attest.

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Geo. C. Cline

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Hugo Mühlberg.

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2 Sheets—Sheet 2.

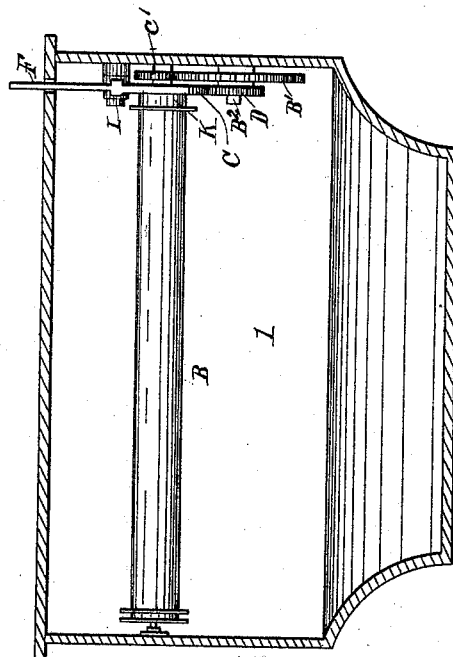
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FIG. 2.



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# UNITED STATES PATENT OFFICE.

HUGO MÜHLBERG, OF LEIPSIK, GERMANY.

## SELF-CLOSING ROLLER-TOP FOR TRANSPORT-WAGONS.

SPECIFICATION forming part of Letters Patent No. 526,324, dated September 18, 1894.

Application filed December 4, 1893. Serial No. 492,788. (No model.) Patented in Germany February 12, 1893, No. 71,640.

*To all whom it may concern:*

Be it known that I, HUGO MÜHLBERG, manufacturer, a subject of the King of Saxony, and a resident of Leipsic, in the Kingdom of Saxony, German Empire, have invented certain new and useful Improvements in Self-Closing Roller-Tops for Transport-Wagons, (for which I have obtained German patent, dated February 12, 1893, No. 71,640,) of which the following is a specification.

My invention relates to an automatically closing top for wagons and carts, and it consists essentially of a roller-top, of wood or other suitable material, and of any suitable means for opening and automatically closing the said top, and my invention further consists of certain features of novelty that will be hereinafter fully described and specifically pointed out in the claims.

In order that my invention may be more fully understood I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a longitudinal section of a wagon with my improvements applied thereto, and Fig. 2 is a transverse section of the same.

In the said drawings I represents the body of the wagon, and A the roller-top applied thereto, and which may be of any suitable material such as wood, canvas, leather or asbestos-cloth, &c. This top is adapted to be wound around a roller B placed at one end of the wagon, and is guided thereon by means of the strips or guides *b b* placed on each side of the wagon body.

K represents straps or cords which pass around the rollers B and H, the latter being placed at the opposite end of the cart, and they are secured to the top A at L.

The mechanism for opening or closing the top is as follows:—C represents a cog-segment pivoted to the side of the wagon at I and provided with the operating handle F. This segment engages with a pinion D on a cog-wheel B' which is also journaled to the side of the wagon at B<sup>2</sup>. This cog-wheel B' in turn engages with a pinion C' mounted on the roller B.

E represents a rack-bar mounted at the sides of the wagon and adapted to be engaged by the pinion D. This rack-bar is provided with the springs *g g* for returning the rack

to its normal position after it has been moved by the pinion D.

O' represents a rod secured at one end to the cog-segment C and provided at its other end with an operating handle O.

W represents a lug or projection formed on the said rod and it is adapted to engage the tail gate at R, when the rolling top is in its open position.

The operation of my device is as follows:—When it is desired to open the top, the handle F is moved in the direction of the arrow N, and the cog-segment C moved in the direction of the arrow O<sup>2</sup> and the bar O' forced backward to allow the catch W to engage with the tail board R. By this movement the pinion D, moves the rack-bar E in the direction of the arrow S, and the cog-wheel B' which is moved with the pinion D engages with the pinion C on the roller B, causing the said roller to revolve and wind upon it the top A. When the cover is to be closed the catch W is disengaged from the tail gate R which allows the springs *g g*, to draw the rack-bar E back and the engaging parts to their normal positions. During this movement the top is being unwound from the roller B and drawn over the top of the wagon in the guides *b b* by means of the straps K as above referred to.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. In combination with a vehicle, a roller-top adapted to be wound upon a roller by suitable mechanism consisting of a cog-segment provided with an operating handle and adapted to engage a pinion on a cog-wheel which in turn engages with a pinion on the roller shaft, substantially as shown and described.

2. In combination with a vehicle, a roller adapted to be wound upon and automatically unwound from a roller, by suitable mechanism consisting of a cog-segment provided with an operating handle, and adapted to engage with a pinion D on a cog-wheel, said cog-wheel in turn adapted to engage a pinion on the roller, and a rack-bar adapted to be engaged by the pinion D, and provided with the springs *g g*, substantially as set forth.

3. In combination with a vehicle, the roller

top adapted to be wound upon and automatically unwound from a roller by suitable mechanism, consisting of the cog-segment provided with an operating handle and adapted  
5 to engage with a pinion D on a cog-wheel, said cog-wheel in turn adapted to engage a pinion on the roller, a rack-bar adapted to be engaged by the pinion D, provided with the springs *g g* and the bar O' provided with the  
10 catch W, substantially as shown and described.

4. In a roller-top for vehicles, &c., the combination of the top A the guides *b b* for said

top, the roller B, the straps K secured to the top A and passed around said roller on which  
15 said top is wound, the cog-segment, the pinion D and cog-wheel B', the rack-bar E provided with the springs *g g* and the rod O' provided with the catch W, substantially as shown and  
20 described.

In witness whereof I hereunto set my hand in presence of two witnesses.

HUGO MÜHLBERG.

Witnesses:

MAX PÖTZSCH,  
CARL BORNGRAEBER.