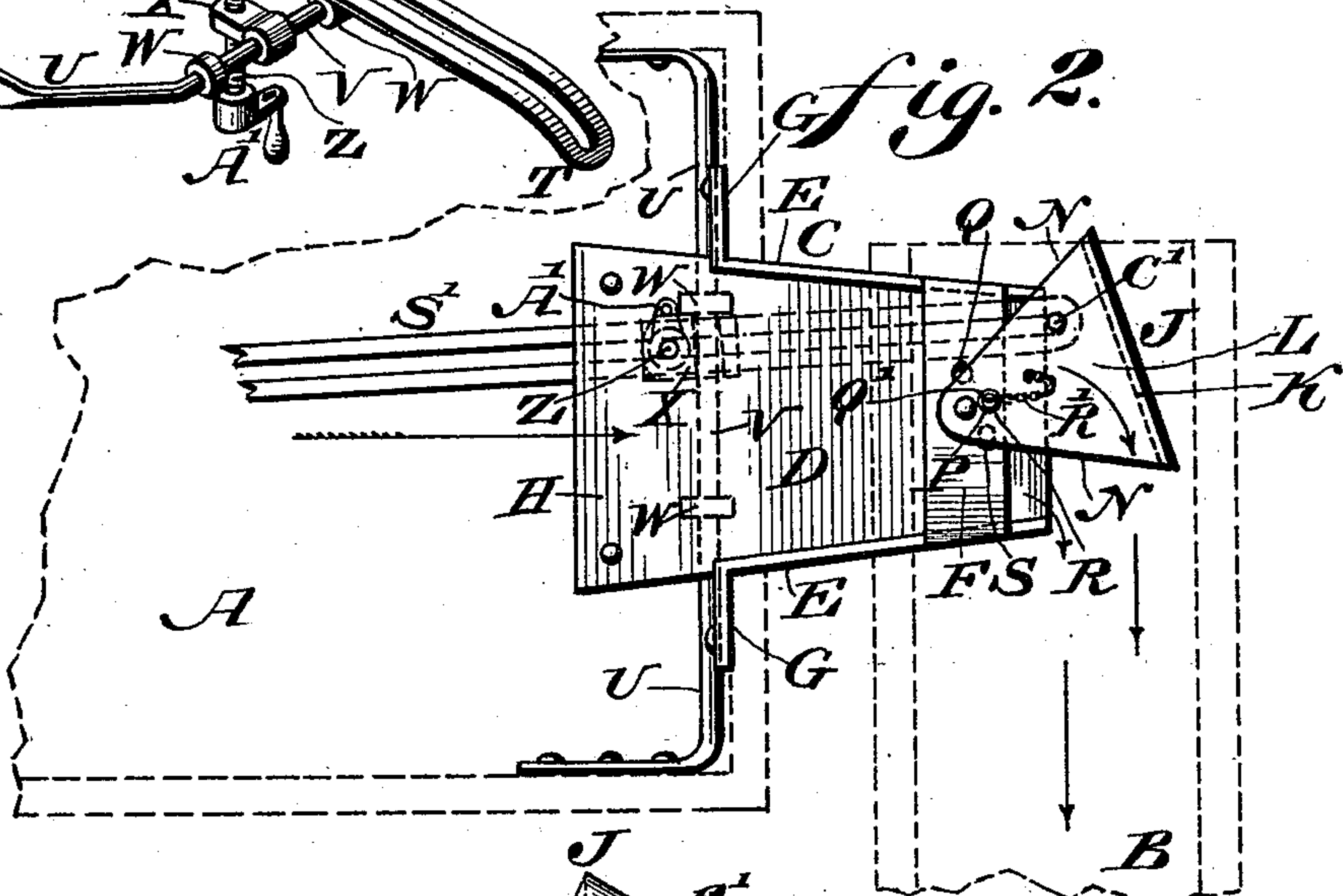
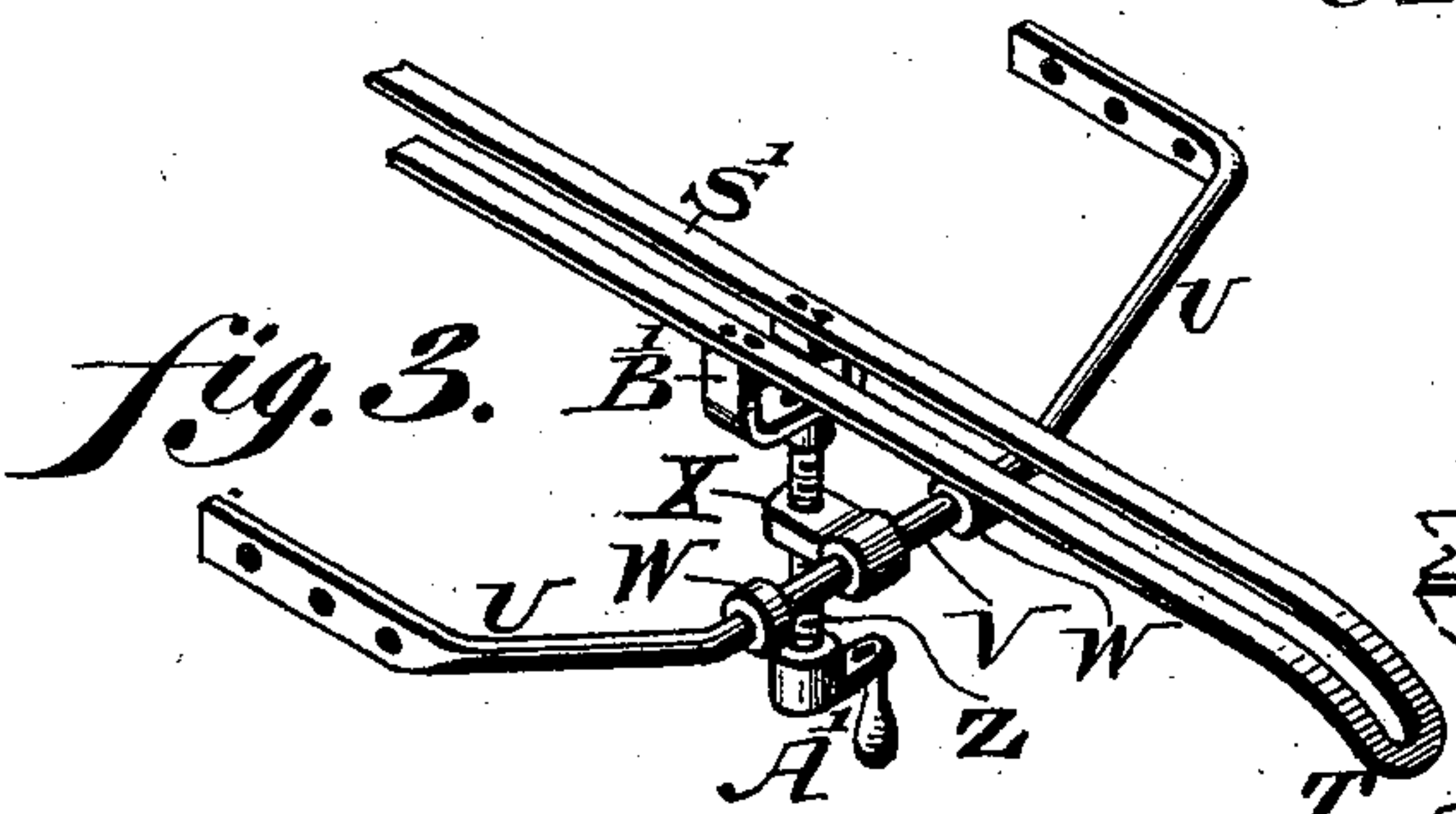
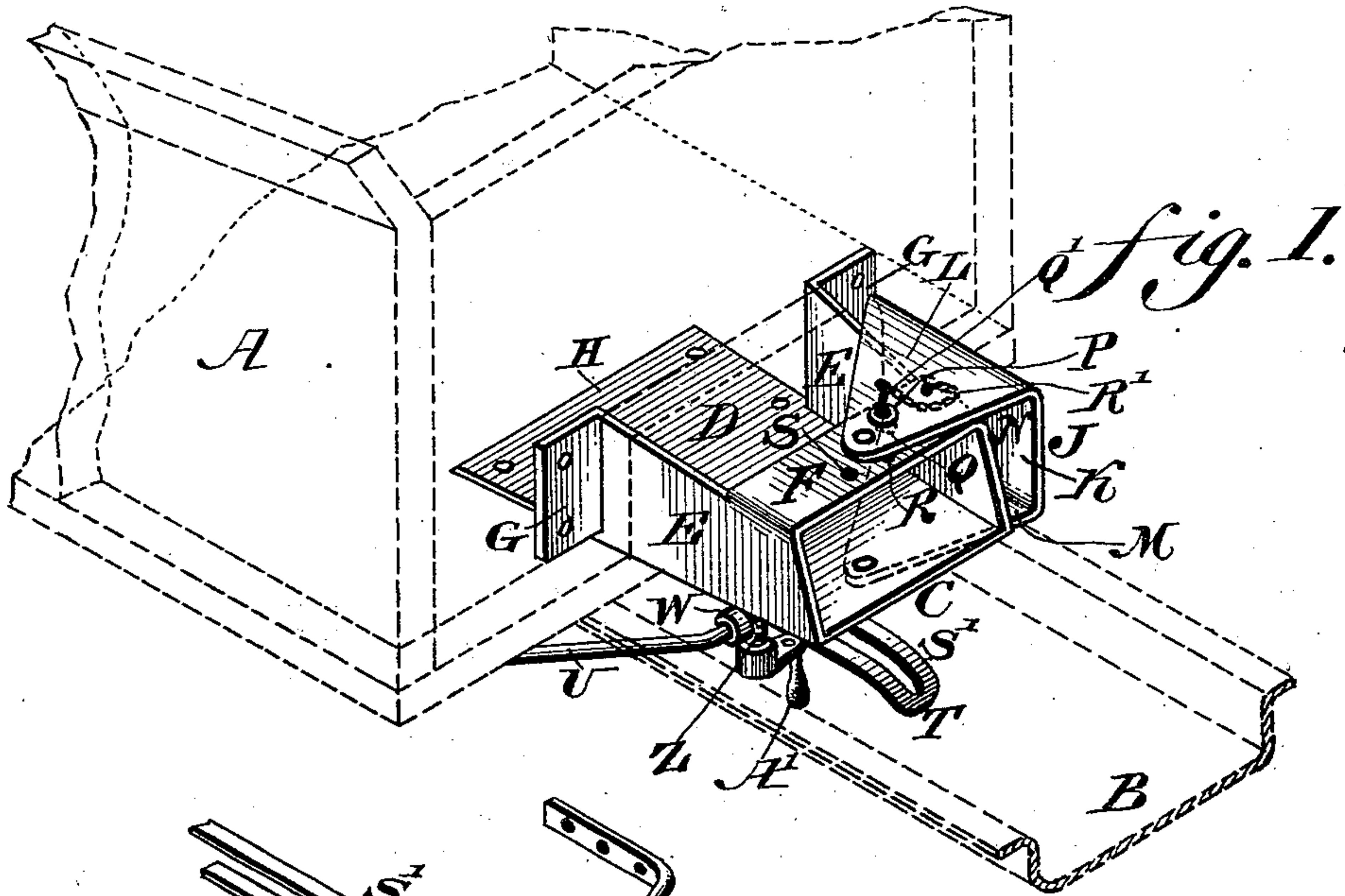


(No Model.)

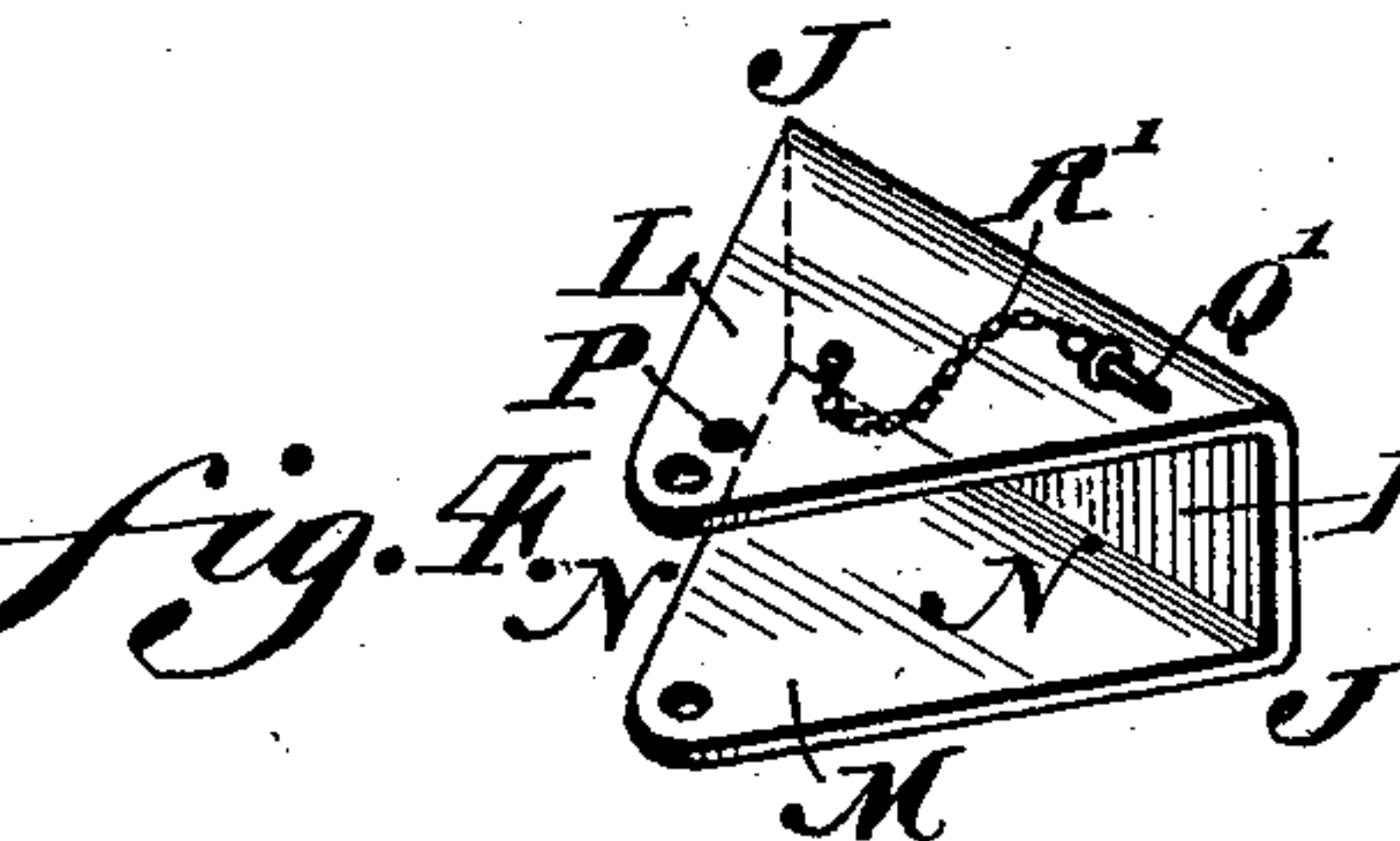
L. RODENHAUSEN.  
DISCHARGE ATTACHMENT FOR WAGONS.

No. 539,646.

Patented May 21, 1895.



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# UNITED STATES PATENT OFFICE.

LEONHARD RODENHAUSEN, OF PHILADELPHIA, PENNSYLVANIA.

## DISCHARGE ATTACHMENT FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 539,646, dated May 21, 1895.

Application filed December 14, 1894. Serial No. 531,766. (No model.)

*To all whom it may concern:*

Be it known that I, LEONHARD RODENHAUSEN, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Discharge Attachments for Coal or other Wagons, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists in providing the discharge spout of a coal or other wagon or cart with a deflector, as hereinafter set forth which is adapted to direct the coal or contents of the wagon from said spout either to the right or left, the same being more especially designed when a chute is to be employed in a narrow street or contracted place, and the wagon is placed parallel with the curb or sidewalk.

It also consists of a novel support and guide for the chute, the same being adjustable to the right or left.

It also consists of means for tightening said support or guide against the chute, and thus holding the latter in position under the body of the wagon.

Figure 1 represents a perspective view of a discharge-spout and deflector for a coal-wagon embodying my invention. Fig. 2 represents a plan view of the same, having the chute and deflector in a different position from that in Fig. 1. Fig. 3 represents a perspective view of the adjustable support and guide for the discharge-chute. Fig. 4 represents a perspective view of the deflector detached.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a portion of the body of a wagon, and B a portion of the chute thereof, said parts being shown in dotted lines.

C designates a discharge spout which is attached to the tail board, or other suitable portion of a wagon, and consists of the base portion D, and the sides E attached thereto. The said spout is preferably open at the top, and has the cross piece F extending across the sides, near its mouth. The spout is secured to the wagon in any suitable manner, in the present instance by means of the flanges G, which are attached to the tail board, and the rearward extension H of the base D, which may be secured to the floor of the wagon.

J designates a deflector, the same consisting of the outer vertical wall K, and the top and bottom ears L and M, the latter being pivotally attached to the spout, it being noticed that the opposite sides of the deflector are open as at N. The top ear L of the said deflector has a hole P therein, which is adapted to register with either the holes Q, R, or S in the cross piece F, according as the deflector is in inoperative position, as seen in Fig. 1, or in operative position as seen in Fig. 2, or in the position opposite to that seen in said Fig. 2, the deflector being locked in the desired position by means of the pin Q', which may be attached to the deflector by the chain R'.

S' designates a slotted guide, which is best seen in Fig. 3, and serves as a support for the chute B, which rests upon it, the end T of the guide being curved downwardly to allow the inclination of the chute to be varied.

U designates a bent rod whose ends are attached to the under side of the wagon body, while the central portion V of said rod is straight, and provided with the collars W, between which is located the block X, which has an eye which is fitted freely on said straight portion V of the rod.

Z designates a threaded stem or screw, which is fitted in a threaded opening in said block X, and has one end provided with the crank handle A', the other end engaging with the yoke B', which is attached to the guide S'.

C' designates a pin in the under side of the chute B, which freely enters the slot of the guide S'.

The operation is as follows: When it is desired to unload the wagon, say in a contracted space or in a narrow street, &c., the wagon is placed parallel to the curb, instead of at a right angle thereto, and the chute B is turned as seen in Fig. 2. The deflector is adjusted so that the hole P registers with the hole R, and is then locked in position by the pin Q' and the material to be unloaded will take the course indicated by the arrows in Fig. 2, the deflector J guiding the material to the chute through the proper open side of said deflector, and also preventing any of the material from falling over the upper end of the chute. When it is desired to unload the wagon in the opposite direction, the chute B is turned in the direction opposite to that seen in Fig. 2. The



deflector is turned so that the hole P registers with the hole S in the cross piece F, and is then locked by the pin Q' as before. When there is ample room to unload the wagon, the chute is arranged longitudinally thereto, and the deflector is swung to one side and locked in inoperative position, as seen in Fig. 1. When the chute is in the position seen in Fig. 2, it is desirable that the support for the same should be as near its upper extremity as possible, and in order to provide for this, the block which carries the slotted guide S' is moved against one of the collars W, as seen in Fig. 2, so that the extremity of the chute will be held as near to the wall K of the deflector as possible, so that no coal can fall to the ground. In like manner when the chute is turned in the opposite direction to that seen in Fig. 2, the slotted guide S is moved against the opposite collar W, the effect of which will be evident. When the chute is returned on the guide S', between the bottom of the body and spout and the guide S', the latter is raised by proper operation of the screw Z, whereby said guide is forced against the chute and the latter held against the spout, so as to be prevented from displacement.

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

1. The combination with a discharge spout of a wagon, of a swinging deflector formed of a vertical plate, and horizontal ears thereon, with the opposite sides open, said deflector being adapted to be placed at different angles on the right and left of the rear end of said spout, or entirely at the side thereof, substantially as described.

2. A slotted guide, a rod, a block adjustable on said rod, and a threaded rod rotatable in said block and supporting said guide, said parts being combined substantially as described.

3. A guide, a rod adapted to be secured to a fixed support, a block adjustable on said rod, a threaded stem rotatable in said block and supporting said guide and a chute with a depending pin in said guide, said parts being combined substantially as described.

4. A guide for the discharge chute of a wagon, and a screw fitted in a block supported on a wagon, said screw being adapted to engage said guide for raising the same, substantially as described.

5. The combination with a discharge spout of a wagon, of a swinging deflector formed of a vertical plate, and horizontal ears thereon, with the opposite sides open, said deflector being adapted to be placed at different angles on the right and left of the rear end of said spout, or entirely at the side thereof, and being provided with a device for locking said deflector in either of said positions, substantially as described.

6. The combination with a discharge spout of a wagon, and an adjustable deflector thereon, of a slotted guide secured to the wagon, and a chute having the pin which enters the slot of said guide, whereby the chute is connected with said guide and adjustable to the right and left of the wagon, substantially as described.

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Witnesses:

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