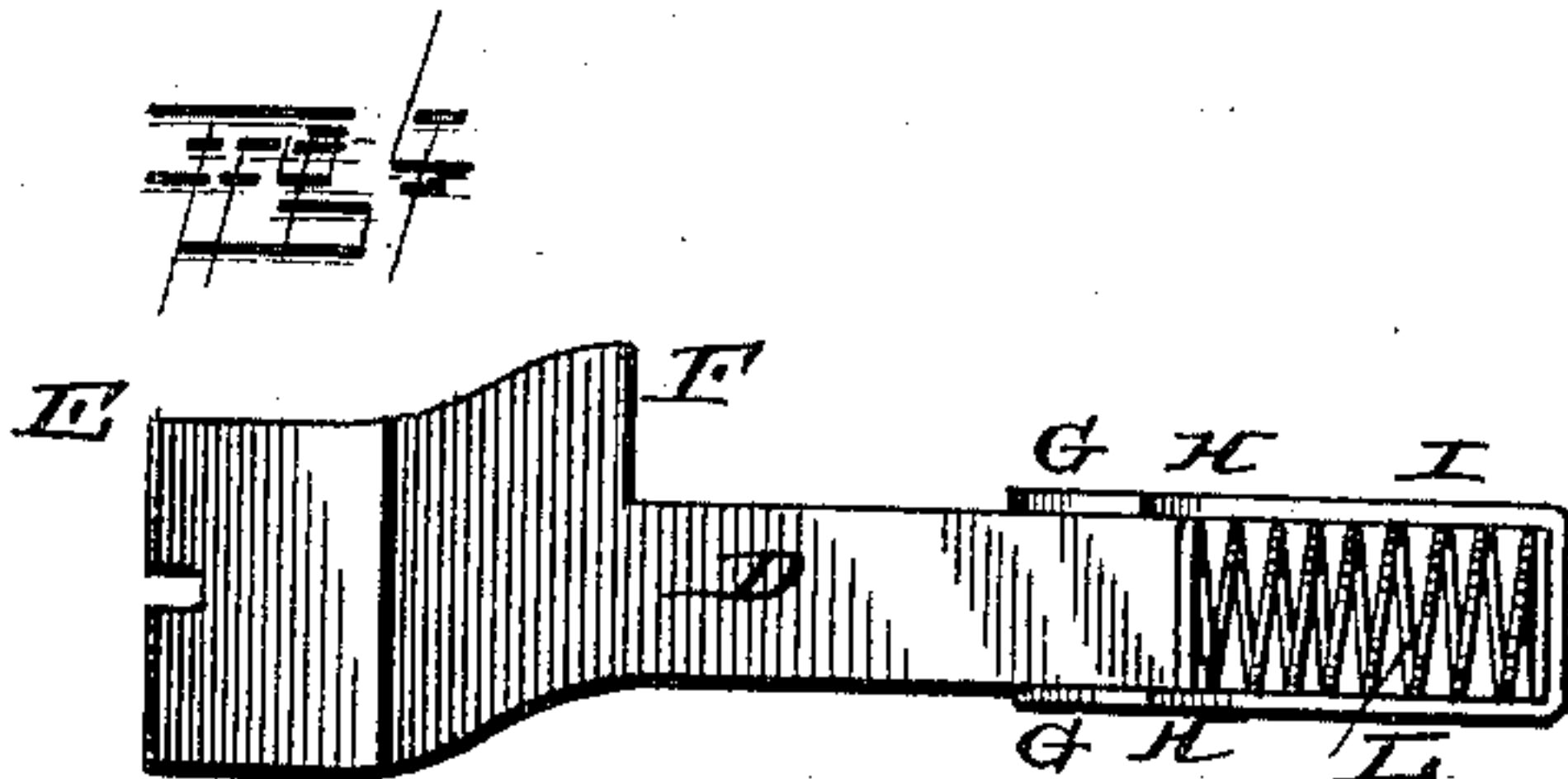
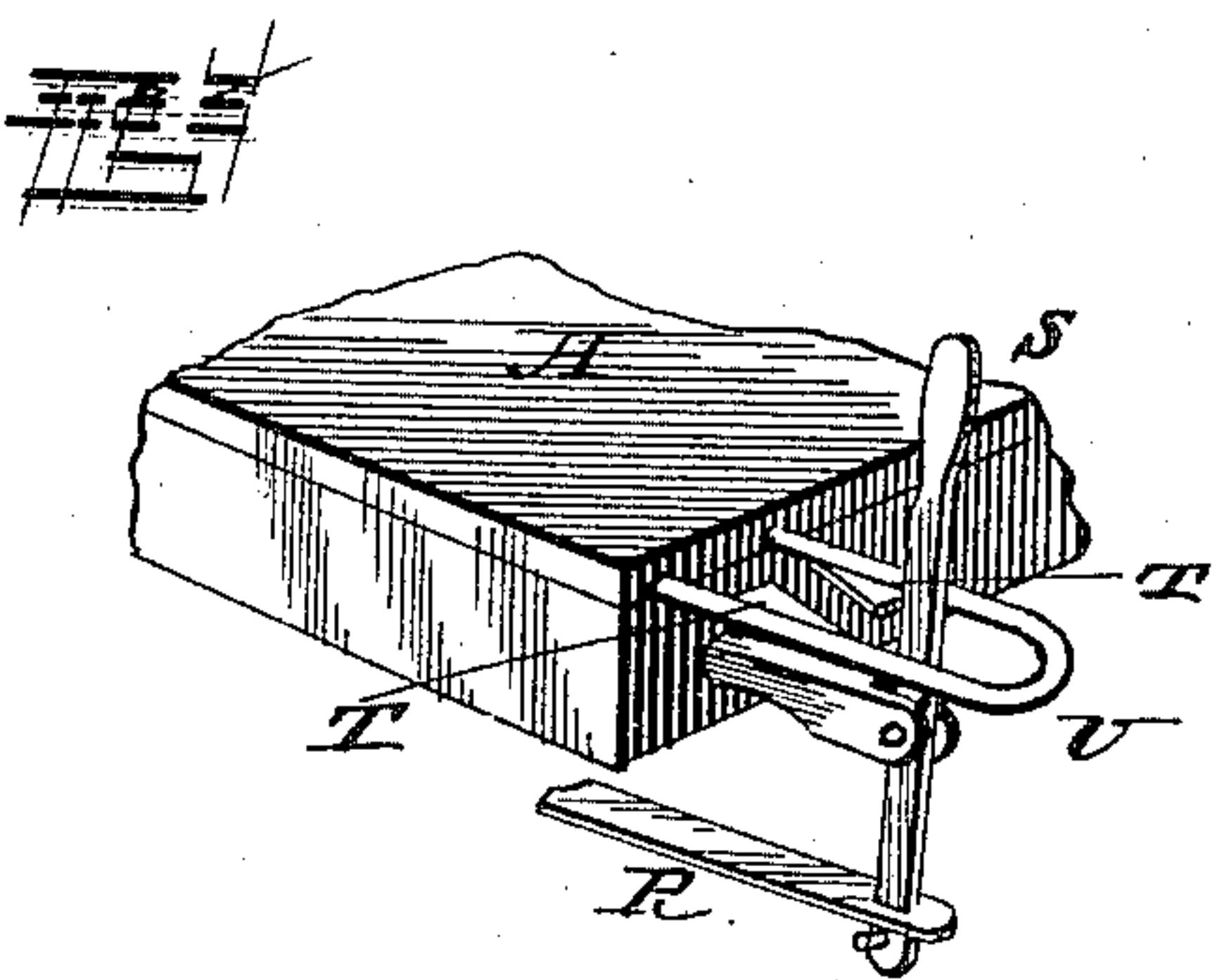
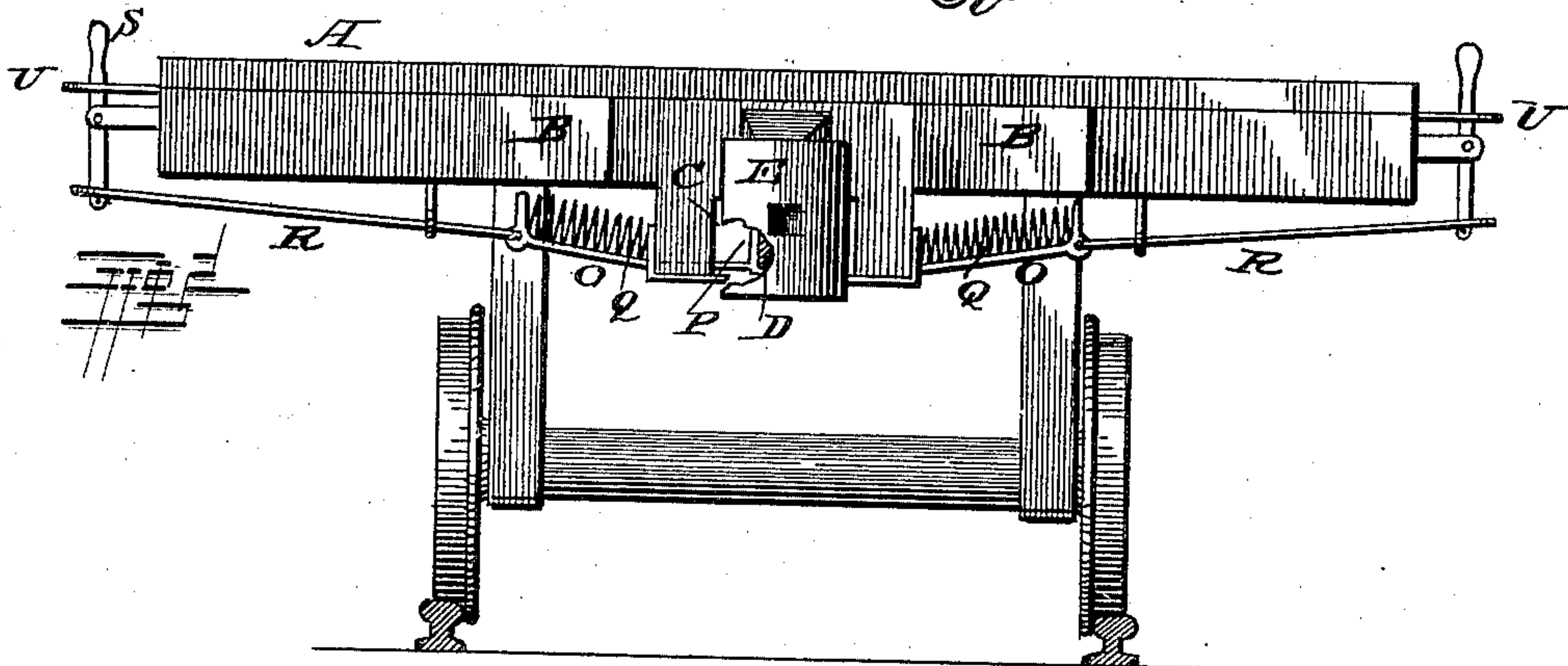
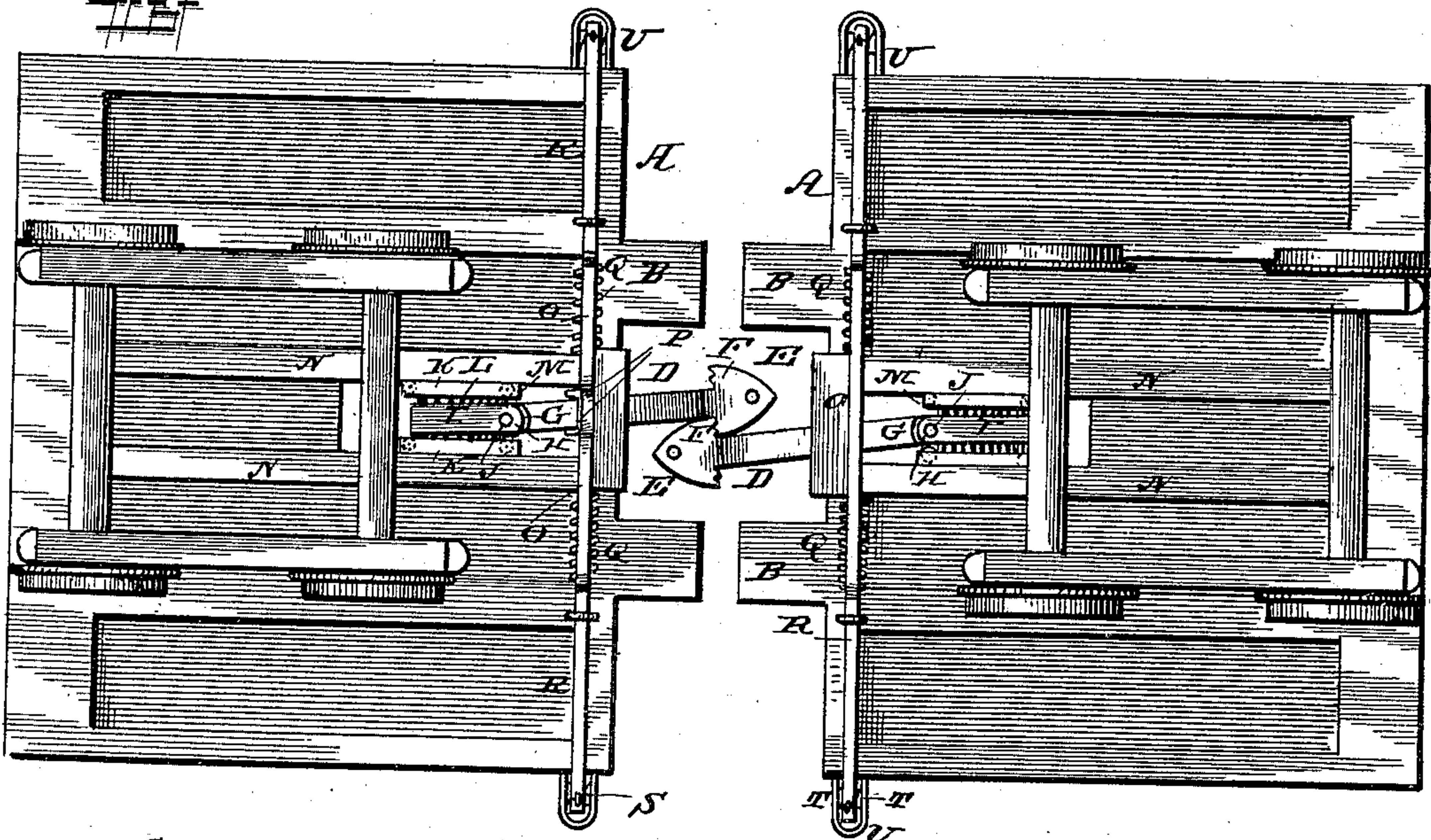


(No Model.)

L. D. HOWE & G. M. GREEN.
CAR COUPLING.

No. 309,463.

Patented Dec. 16, 1884.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LYSTON D. HOWE AND GEORGE M. GREEN, OF STREATOR, ILLINOIS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 309,463, dated December 16, 1884.

Application filed August 9, 1884. (No model.)

To all whom it may concern:

Be it known that we, LYSTON D. HOWE and GEORGE M. GREEN, both residents of Streator, in the county of La Salle and State of Illinois, have invented certain new and useful Improvements in Car-Couplings; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to 5 which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a bottom view of the ends of two 15 railway-cars, showing our improved couplings in use. Fig. 2 is a front view of the car provided with the coupling, and Figs. 3 and 4 are detail views.

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

Our invention has relation to that class of car-couplings which have arrow-headed draw-bars; and it consists in the improved construction and combination of parts of such 25 a coupling, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates the forward sill of a car, upon which 30 side of an aperture, C, through which the draw-bar D passes, and in which it slides. The draw-bar is provided with an arrow-head, E, the shoulders F of which are corrugated, and the inner end of the draw-bar is provided 35 upon its upper and under sides with two segmental lugs or lips, G, which bear against the segmental forward ends, H, of a stirrup I, between the ends of which stirrup the inner end of the bar is pivoted to swing in a horizontal 40 plane, the bolt J, upon which it is pivoted, being in the center of the segmental lips and of the segmental ends of the stirrup. Two cross-plates, K K, are placed transversely in the ends of the stirrup, and a spring, L, is placed between the said plates, and the ends of the 45 plates bear against two pairs of lips or shoulders, M M, secured upon the inner faces of the longitudinal beams N, between which the draw-bar is pivoted and slides in and out.

A bar, O, slides in transverse bearings at the 50 outer ends of the said beams, and is provided with two upwardly-projecting lips, P, which clasp the draw-bar, and springs Q bear against the outer sides of the longitudinal beams and against projections upon the ends of the bar 55 O, forcing it to resume its position when drawn to one side or another. Two bars, R R, are hinged to the ends of the bar O, and slide in suitable bearings under the car to the sides of the platform of the same, where two 60 levers, S S, pivoted upon the sides of the car, are pivoted with their lower ends to the ends of the bars, while their upper ends are formed into handles for operating the levers. The upper handled arms of these levers may 65 be engaged by two shoulders, T T, facing in opposite directions, and projecting from the opposite sides of bails U, in which the handles of the levers are guided. When one of the levers is tilted, the draw-head is thrown 70 to one side, and will thus be disengaged from another draw-head, with which it may be engaged, having the shoulders bearing against each other, and it will be seen that as two cars are brought toward each other the draw- 75 heads will engage each other and hold each other coupled until one or both of the draw-heads are forced to one side by means of one of the levers, when the cars will again be uncoupled. 80

We are aware that it is not broadly new to have a pivoted arrow-headed draw-bar engaged by shoulders upon a transversely-sliding bar serving for the purpose of engaging and disengaging the draw-heads, and we do not 85 claim such construction, broadly; but

We claim—

The combination of the arrow-headed draw-bar having the segmental lips at its inner end, the stirrup having the segmental ends, 90 and having the end of the draw-bar pivoted between its ends, the cross-plates placed in the ends of the stirrup, the spring interposed between the plates, the shoulders projecting in pairs against the ends of the plates, the 95 transversely-sliding bar having the lips clasping the draw-bar, and having the springs forcing it to both sides, the bars hinged to

the ends of the transverse bar, the levers piv-
oted upon the sides of the car, and pivoted at
their lower ends to the ends of the aforemen-
tioned bars, and the bails or staples having
5 the oppositely-facing shoulders upon their
sides, as and for the purpose shown and set
forth.

In testimony that we claim the foregoing as

our own we have hereunto affixed our signa-
tures in presence of two witnesses.

LYSTON D. HOWE.
GEORGE M. GREEN.

Witnesses:

A. S. JACKSON,
H. N. RYON.