

(No Model.)

H. REID.
CAR COUPLING.

No. 305,634.

Patented Sept. 23, 1884.

Fig. 1.

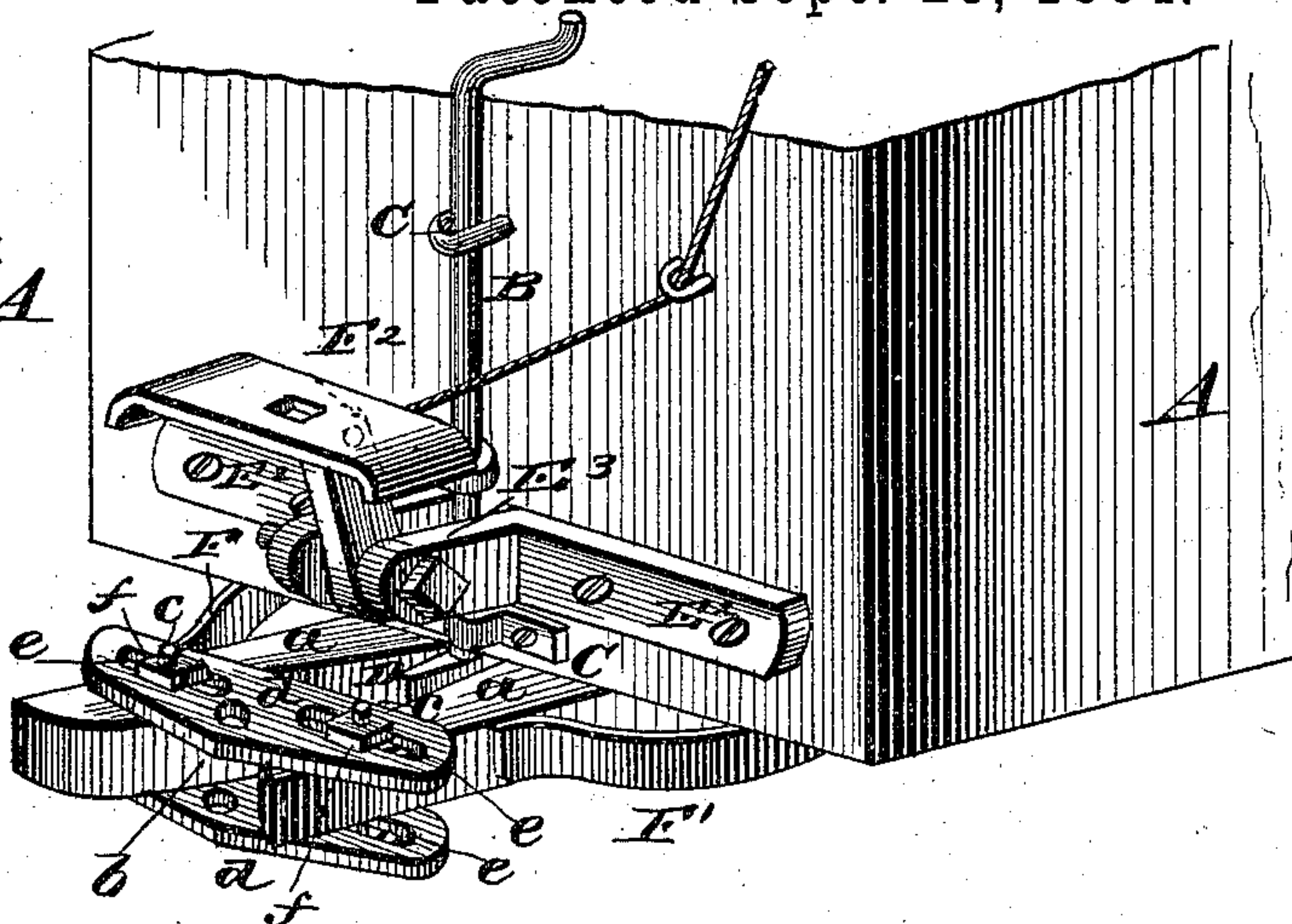


Fig. 2.

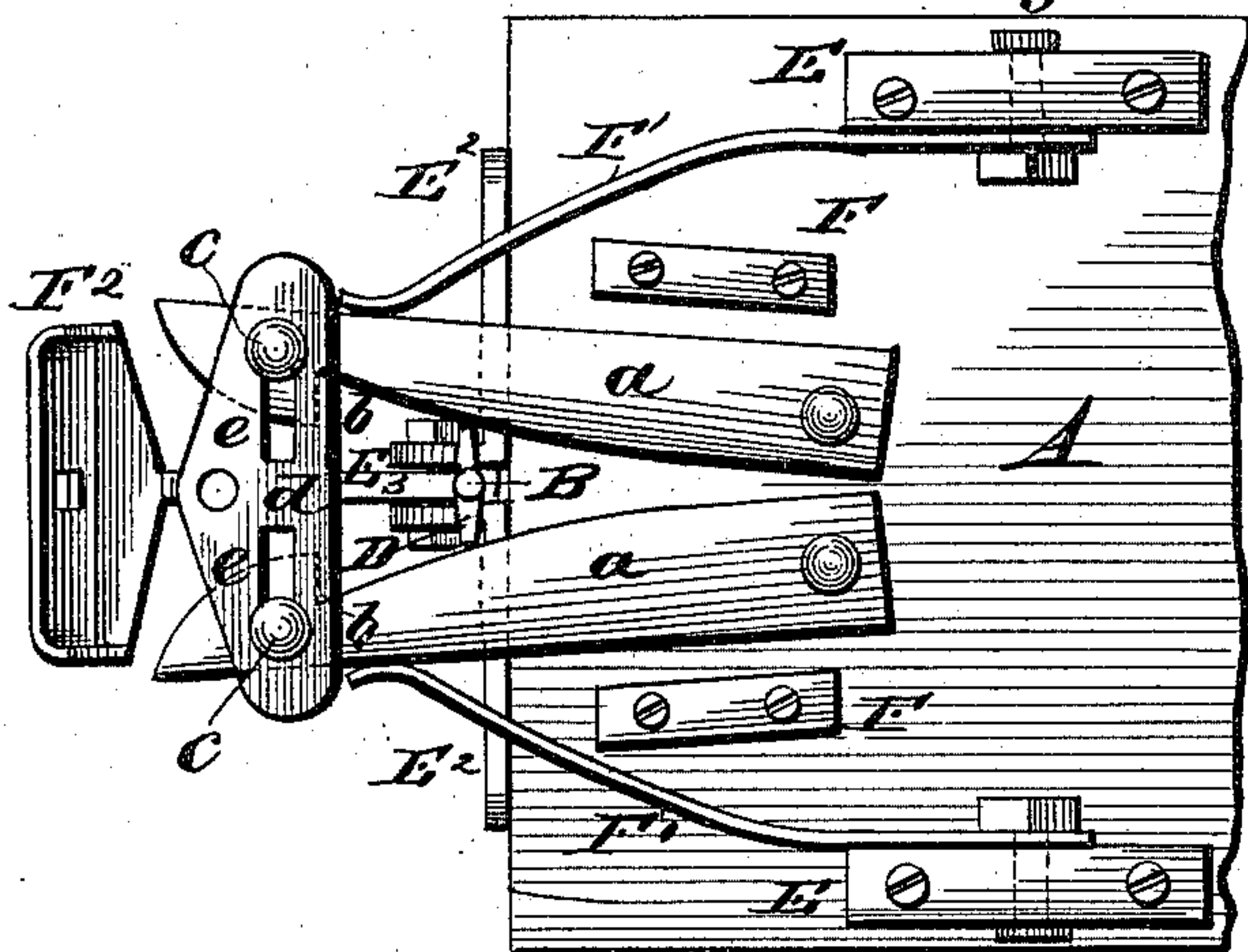


Fig. 3.

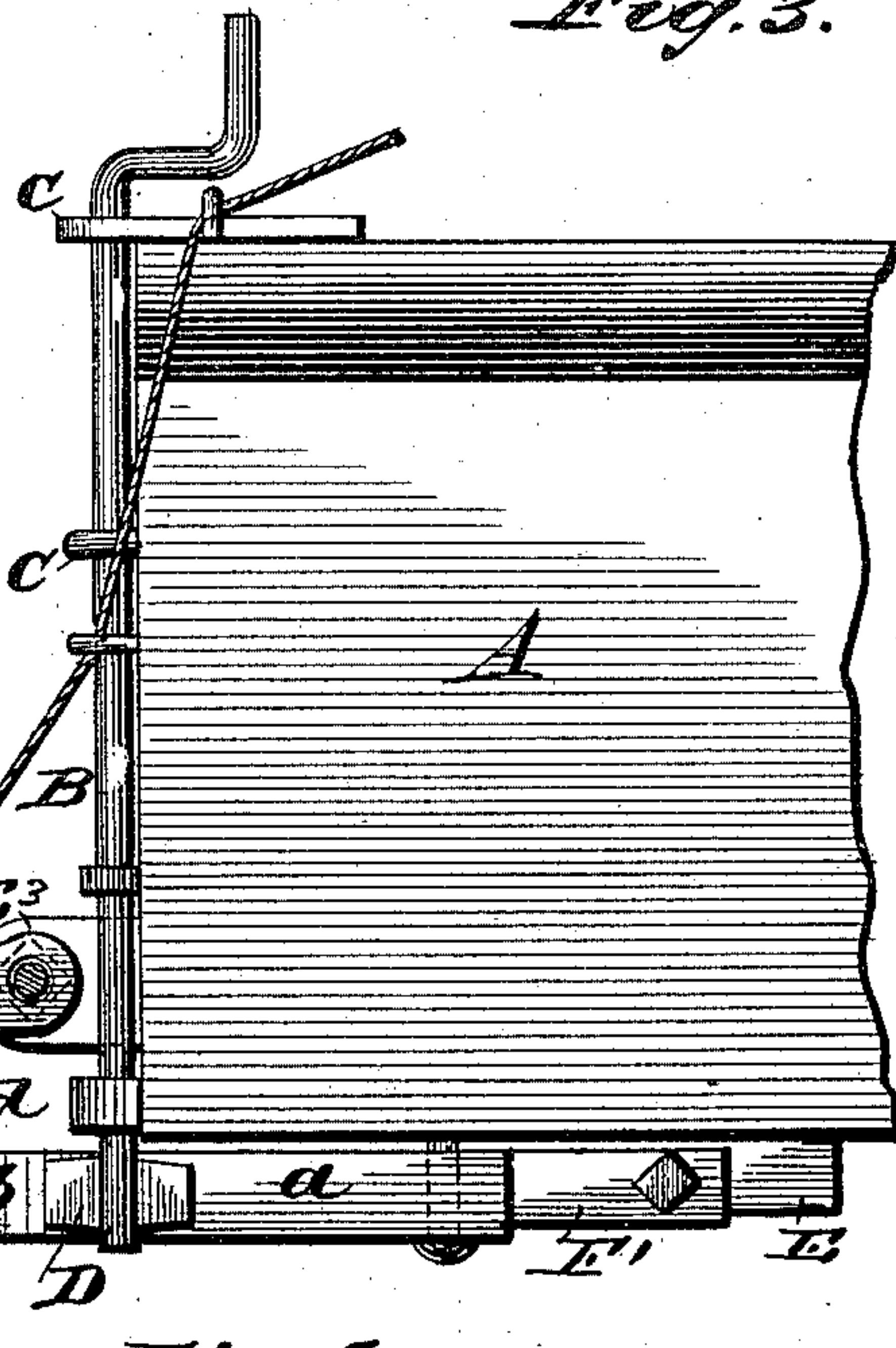


Fig. 4.

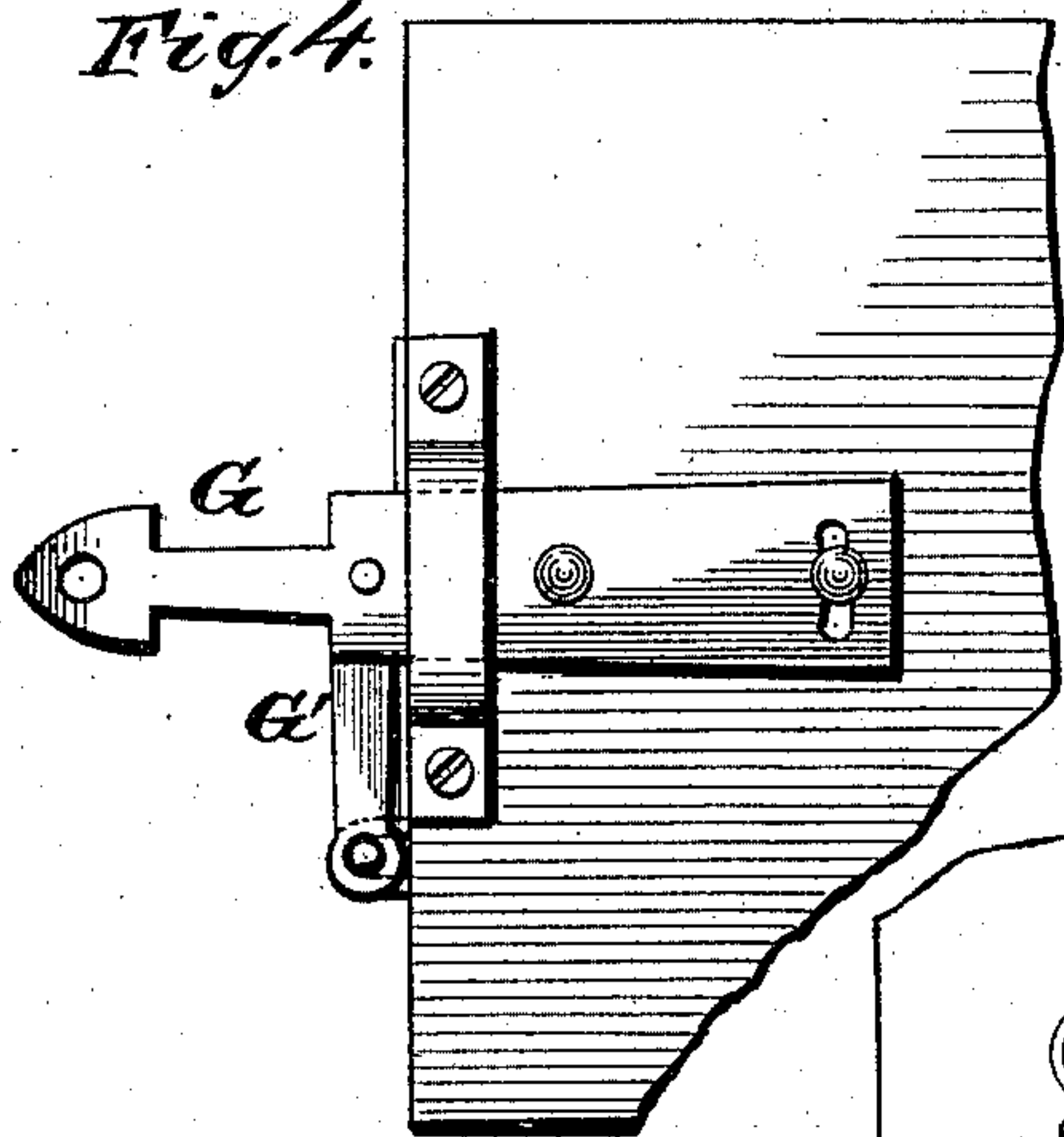
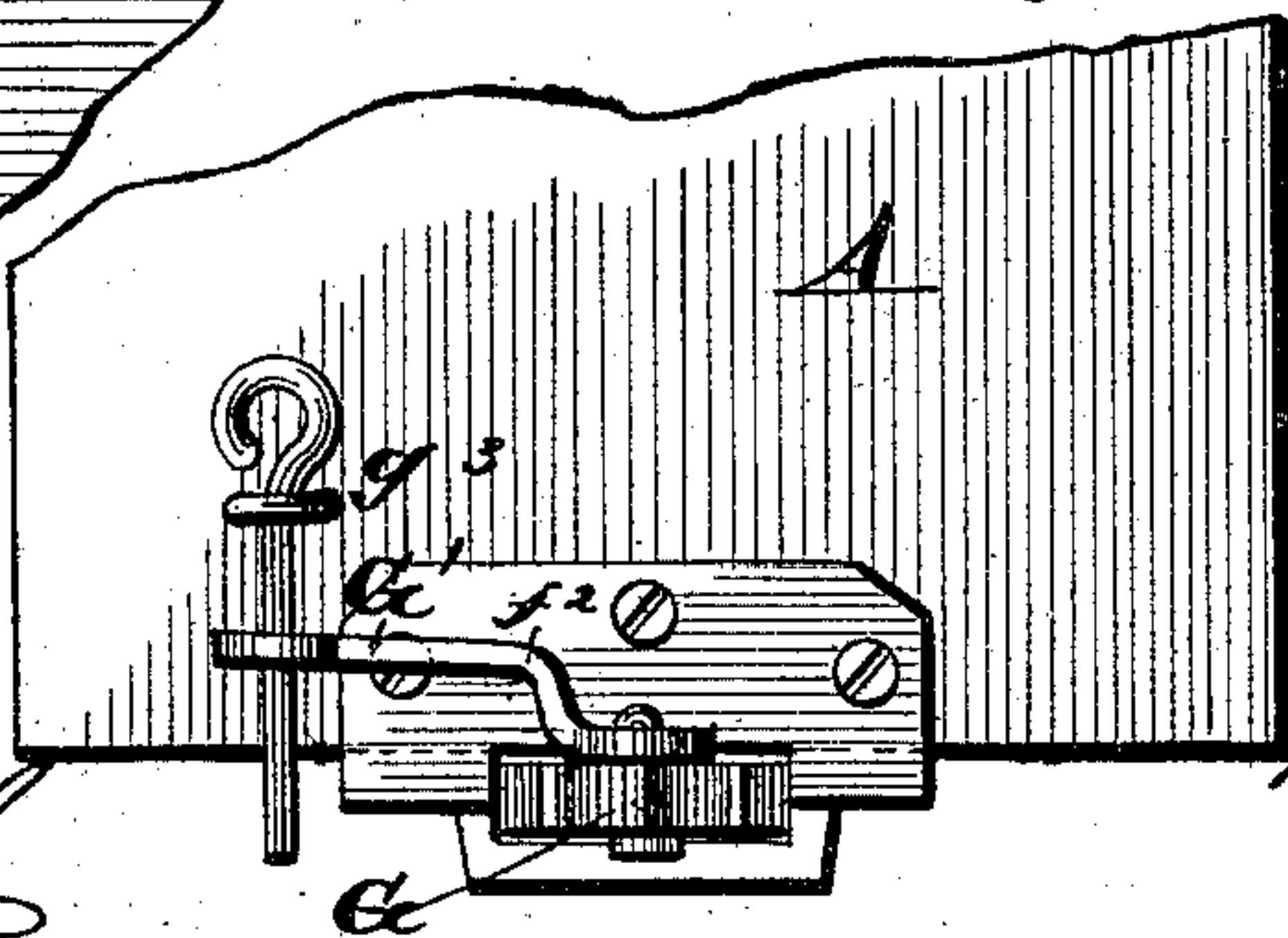


Fig. 5.



WITNESSES

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HENRY REID, OF SHERMAN, TEXAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 305,634, dated September 23, 1884.

Application filed June 20, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY REID, of Sherman, in the county of Grayson and State of Texas, have invented certain new and useful
5 Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

10 My invention relates to car-couplings; and it has for its object to provide improved devices whereby the cars may be automatically coupled; and, further, to provide improved devices for this purpose which shall be simple
15 in construction and thoroughly effective in operation.

With these ends in view the invention consists in the improved construction and combinations of parts, hereinafter fully described,
20 and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a car having my improved coupling applied thereto. Fig. 2 is a bottom view of the same. Fig. 3 is a longitudinal section. Fig.
25 4 is a bottom view of the car, carrying the coupling-hook; and Fig. 5 is an end elevation.

In the accompanying drawings, in which like letters refer to corresponding parts throughout the several figures, A represents a car, to
30 the under side of which are pivoted two bars, *a*, which form the coupling-latch, and which extend forwardly and project a short distance beyond the front end of the car. These bars *a* are formed on their inner sides and near
35 their front ends with notches *b*, which, when the coupling-hook is inserted, securely retain the same. These bars *a* are also beveled on their inner front faces to facilitate the passage of the coupling-hook and prevent any undue
40 catching of the same. Upon the front ends of the bars *a* are provided perforations or openings, through which pass bolts *c*. Upon the upper and lower sides of the bars are provided links *d*, which are formed with longitudinal
45 slots or openings *e*. The links *d* are held in position upon the coupling-latch by means of the heads of the bolts upon the under side, and the nuts *f* upon the upper ends, of the bolts. By the use of these links it will be ob-
50 vious that lateral movement further than to

allow the entrance and withdrawal of the coupling-hook is prevented. These links also serve to prevent the coupling-hook from becoming disengaged from the bars *a*, preventing any vertical play of the coupling-hook.

B represents the lever or rod for uncoupling
55 the cars, the same being mounted in suitable brackets, C, secured to the front of the car. This rod or lever B extends downwardly between the bars *a*, forming the coupling-latch, 60 and is provided at its lower end with a cross piece or bar, D, which, when in its normal position, is located longitudinally with relation to the car; but when the cars are to be uncoupled the rod is turned and the bar D serves
65 to spread apart or open the bars *a* and allow of the ready withdrawal of the coupling-hook.

Upon the under side of the car, adjacent to the rear ends of the bars *a*, are secured strips or blocks F, which, if the links upon the front
70 ends of the bars *a* break, would prevent lateral movement further than to allow of the passage and ready withdrawal of the coupling-link. They also prevent the lateral movement of the said bars in turning curves.

Upon the under side of the car, near the front
75 end thereof, are secured blocks E. To these blocks E are secured, by means of bolts or equivalent fastenings, the rear ends of springs F'. The front ends of these springs bear against
80 the sides of the coupling bars or jaws and serve to hold the same to prevent the disengagement of the coupling-hook.

E² E² represent metal plates secured to the front side of the car, said plates having their
85 inner ends turned outwardly to form ears or lugs E³, between which is pivoted a hood, F². This hood F² is designed to be lowered over the front end of the coupling-latch, and thus prevent the entrance of the coupling-bar when
90 not intended. A cord or chain may be secured to said hood and extend to the top of the car, from which point said hood may be raised or lowered thereby.

In using the above-described coupler I employ upon the adjacent car a hook, G, which
95 is pivoted at about its center to the under side of the car. The rear end of this hook is provided with a transverse slot, and the lateral movement of the hook is limited by a headed
100

pin secured to the under side of the car and passing through said slot. Upon the hook G is pivoted a plate, G', which is bent upwardly, as shown, to form a shoulder, f^2 . This plate 5 G' is designed to be swung around against the car, to serve as a support for a coupling link and pin, a loop, g^3 , being provided, through which the coupling-pin is passed before engaging the opening in the end of the coupling- 10 hook, thus preventing any movement of said hook. When the ordinary link and pin are employed, this plate is swung out until it is on a line with the hook, and a pin is passed through the opening of the same and the link. 15 It will thus be seen that a ready and convenient means is provided for the support of a link and pin, to be used in the event of the breakage of the automatic coupling.

The operation is as follows: The coupling- 20 hook of the adjacent car strikes the fore ends of the coupling-bars and forces them apart and passes between them, where it is securely held. To uncouple the cars, it is only necessary to turn the rod upon the front of the car, causing 25 the bars or jaws to be opened and allowing the hook to be readily removed.

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

30 1. In a car-coupling, the combination, with two coupling bars or jaws, of links provided

with longitudinal slots secured upon the upper and under side of said bars, and a rod for opening said bars or jaws, substantially as set forth.

2. In a car-coupling, the combination, with 35 pivoted coupling-bars, of slotted links secured upon the upper and lower sides of said bars, springs secured to the under side of the car and adapted to bear against the sides of the bar at their forward ends, and a rod for open- 40 ing said bars, substantially as set forth.

3. The combination, with a car, of a bar pivoted to the under side thereof, its front end being provided with an arrow-shaped hook and its rear end with a transverse slot, and a headed 45 pin secured in said slot, substantially as set forth.

4. In a car-coupling, the combination, with the hook G, of the pivoted plate G', a loop, g^3 , and pin, substantially as set forth. 50

5. In a car-coupling, the combination, with the car, of the ears E^3 , hood F^2 , pivoted between said ears, and an operating-cord, substantially as set forth.

In testimony whereof I have signed this 55 specification in the presence of two subscribing witnesses.

HENRY REID.

Witnesses:

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C. B. RANDELL.