

(No Model.)

W. S. THAYER.
CAR COUPLING.

No. 286,745.

Patented Oct. 16, 1883.

Fig. 1.

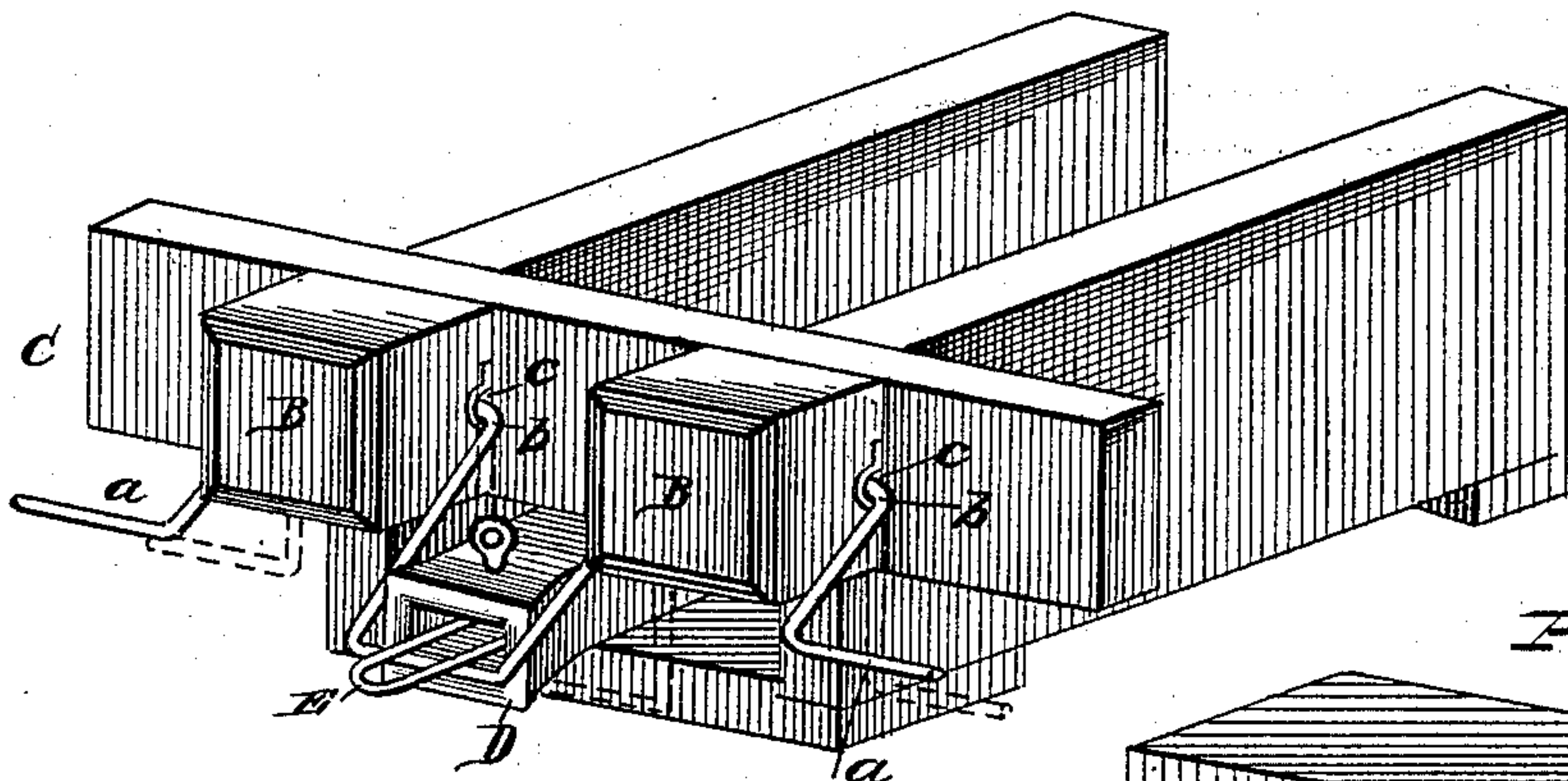


Fig. 2.

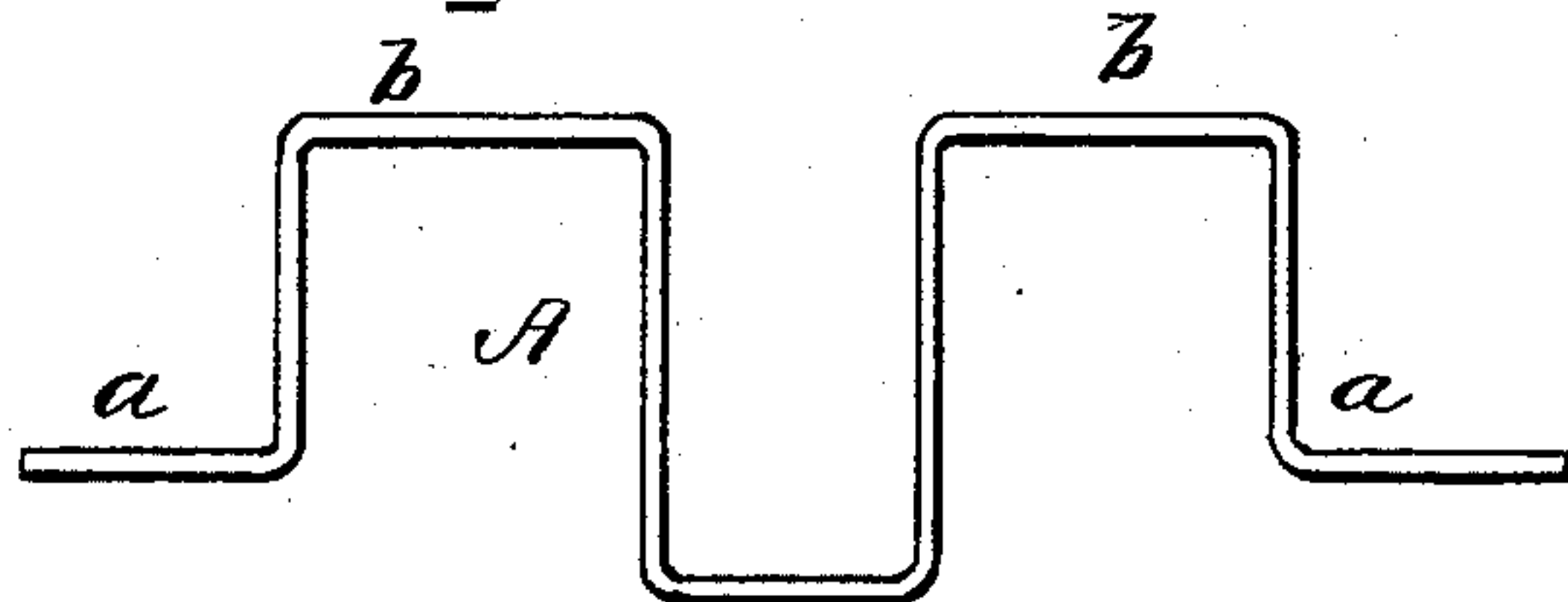


Fig. 3.

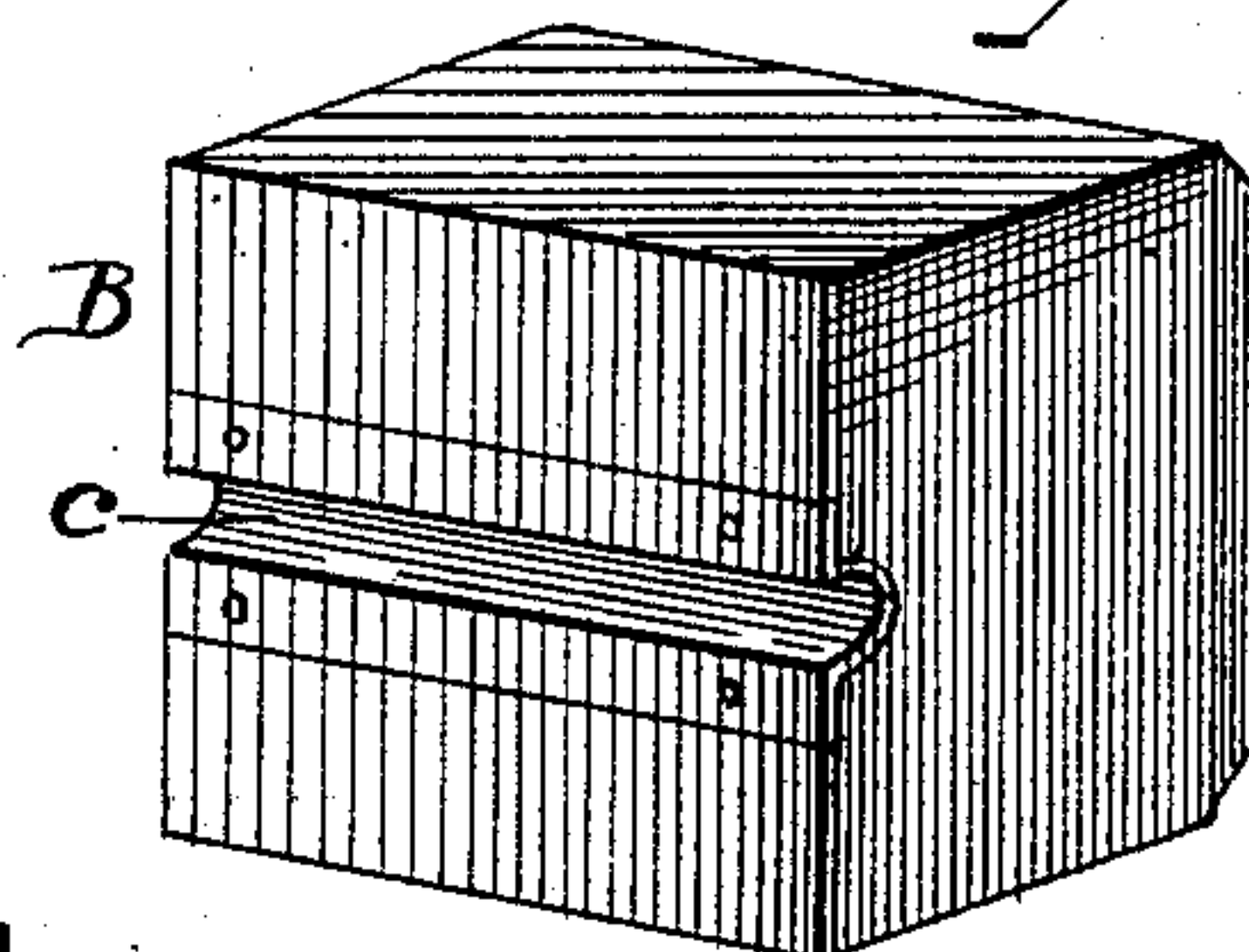
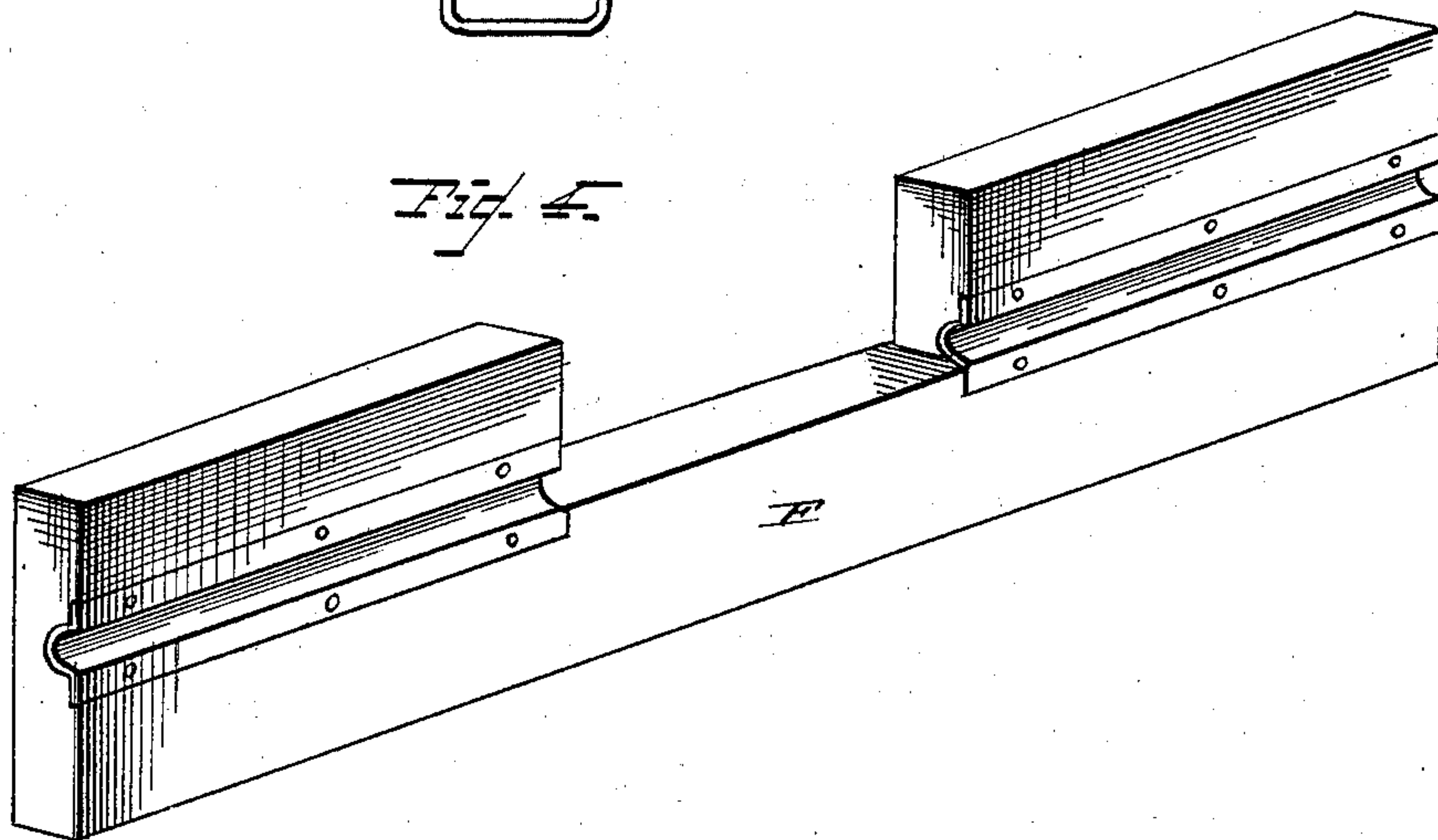


Fig. 4.



WITNESSES

J. L. Ourand
N. E. Oliphant

INVENTOR

William S. Thayer
per Chas. H. Fowler
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM S. THAYER, OF OWEGO, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 286,745, dated October 16, 1883.


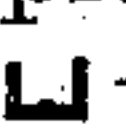
Application filed September 6, 1883. (No model.)

To all whom it may concern:


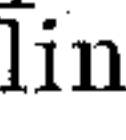
Be it known that I, WILLIAM S. THAYER, a citizen of the United States, residing at Owego, in the county of Tioga and State of New York, have invented certain new and useful Improvements in Car-Couplers; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

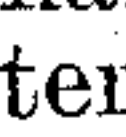
Figure 1 of the drawings is a perspective view of my invention; Fig. 2, a detail view of the rock-shaft or crank-lever; Fig. 3, a similar view of one of the bumpers; and Fig. 4, a detail view of the strengthening-piece, having its ends grooved or corrugated upon their inner sides.

This invention relates to certain new and useful improvements in that class of devices designed to assist in the coupling of railway-cars, so as to render it unnecessary for the brakeman or train-hand to go between the cars for the purpose of adjusting the connecting-link; and the object of the present invention is to provide a device of the above-named character that may be readily attached to cars of the general and ordinary construction, either now in use or in the process of manufacture, with but little additional expense or trouble, and which will at the same time be easy and certain in its operation, while by its use accidents occurring in adjusting the connecting-link of cars by hand may be avoided. These objects I attain by the construction substantially as shown in the accompanying drawings and hereinafter more fully described.

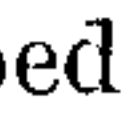
In the accompanying drawings, A represents a rock-shaft or crank-lever formed from an iron rod in such a manner that each end thereof terminates in a handle or crank, *a*, while its central portion is made -shaped, on the same plan as the vertical portion of the said handles or cranks. The upper portion, *b*, of each handle or crank rests in a groove or corrugation, *c*, formed in the bumpers B at or near the centers, where they join the strengthening-piece or sill C of the car, and when at rest the -shaped portion of the shaft or lever hangs

vertically beneath the draw-head D, said groove or corrugation in the bumpers, when made of wood, being bushed with a metallic material to prevent wear, and at the same time give a smooth, free bearing for the shaft or lever, though if the bumpers are of metal the grooves or corrugations are either cast therewith or cut therein, as may be most convenient.

Though I have more particularly described the groove or corrugation as being formed in the bumpers, I do not wish to limit myself to such construction, as in some cases a stringer or strengthening-piece, F, is placed between the bumpers and the car, and in such an instance said stringer or strengthening-piece would have its ends grooved or corrugated upon the inner sides, next the car. This manner of construction may be found preferable, as the farther the rod or lever is secured from the front of the draw-head the nearer its  portion will come thereto when raising the link. The -shaped portion of the rock-shaft or crank-lever A is made of such a length that it will just miss the bottom of the draw-head when used to raise the link E, this operation being accomplished by taking hold of either handle *a* and turning the same in a direction toward the approaching car.

It will be noticed that by forming the rod composing the rock-shaft or crank-lever into handles or cranks, beginning at the upward termination of the -shaped portion thereof, said portion, when raised, assumes such an angle as to render it impossible to catch the same between the colliding draw-heads when coupling, as, if the person performing this operation does not let go of the crank the instant the link enters the opposing draw-head, the least touch thereof will force it down.

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

1. A rock-shaft or crank-lever formed from a single rod, with its ends terminating in handles or cranks, and its central portion -shaped, on the same plan as the vertical portion of said handles or cranks, and adapted to be connected to a car directly between the bumpers and the strengthening-piece or sill thereof, substantially as and for the purpose set forth.

2. The bumpers of a car, having formed therein, at or near their centers, where they join the strengthening-piece or sill, a groove or corrugation, in combination with a rock-
5 shaft or crank-lever having its central portion L-shaped, at its ends terminating in handles or cranks, substantially as and for the purpose specified.

3. The combination of the bumpers B, each
10 having formed therein a groove or corrugation, c, and provided with a metallic bushing, d, in combination with a rock-shaft or lever, A, all arranged to operate substantially as and for the purpose described.

4. The stringer or strengthening-piece of a
15 railway-car, having its ends grooved or corrugated upon their inner sides, in combination with a rock-shaft or crank-lever having its central portion L-shaped, substantially as and
20 for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

WILLIAM S. THAYER.

Witnesses:

J. B. WITHERELL,

C. M. HAYWOOD.