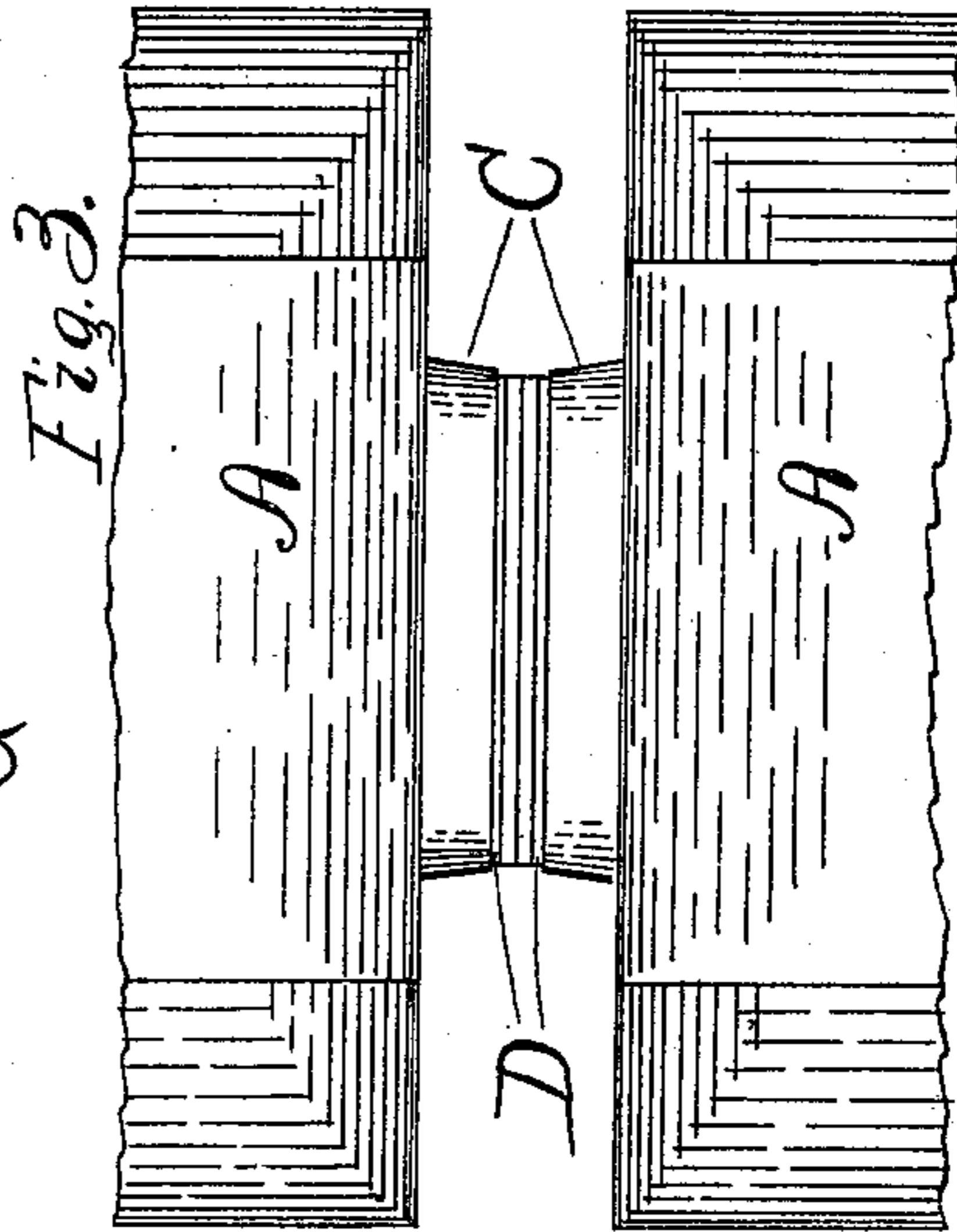
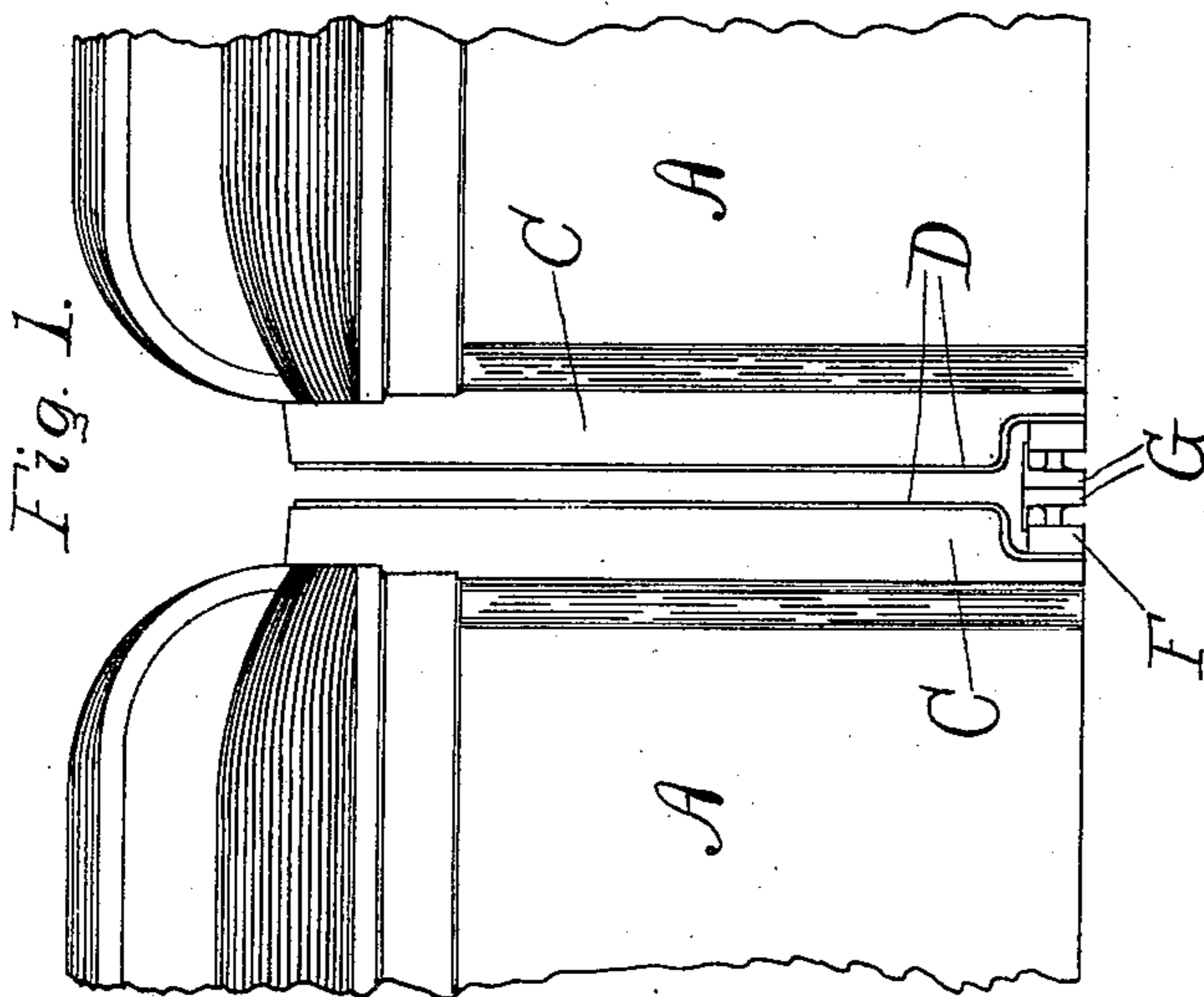
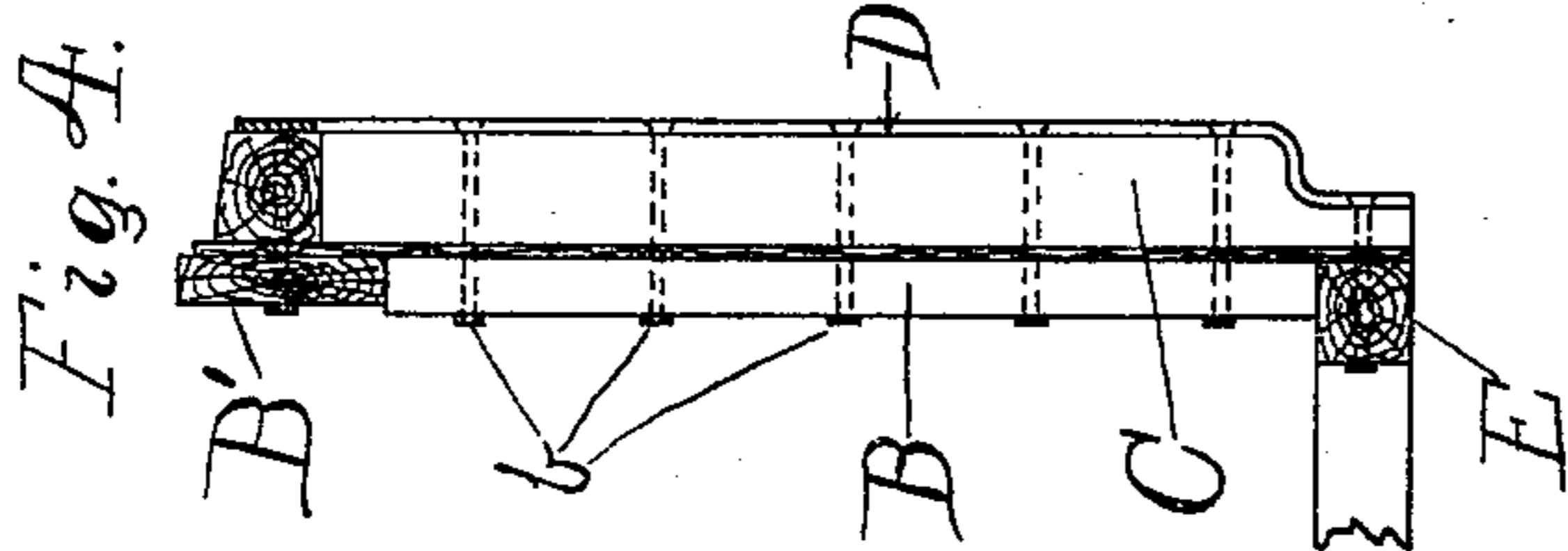
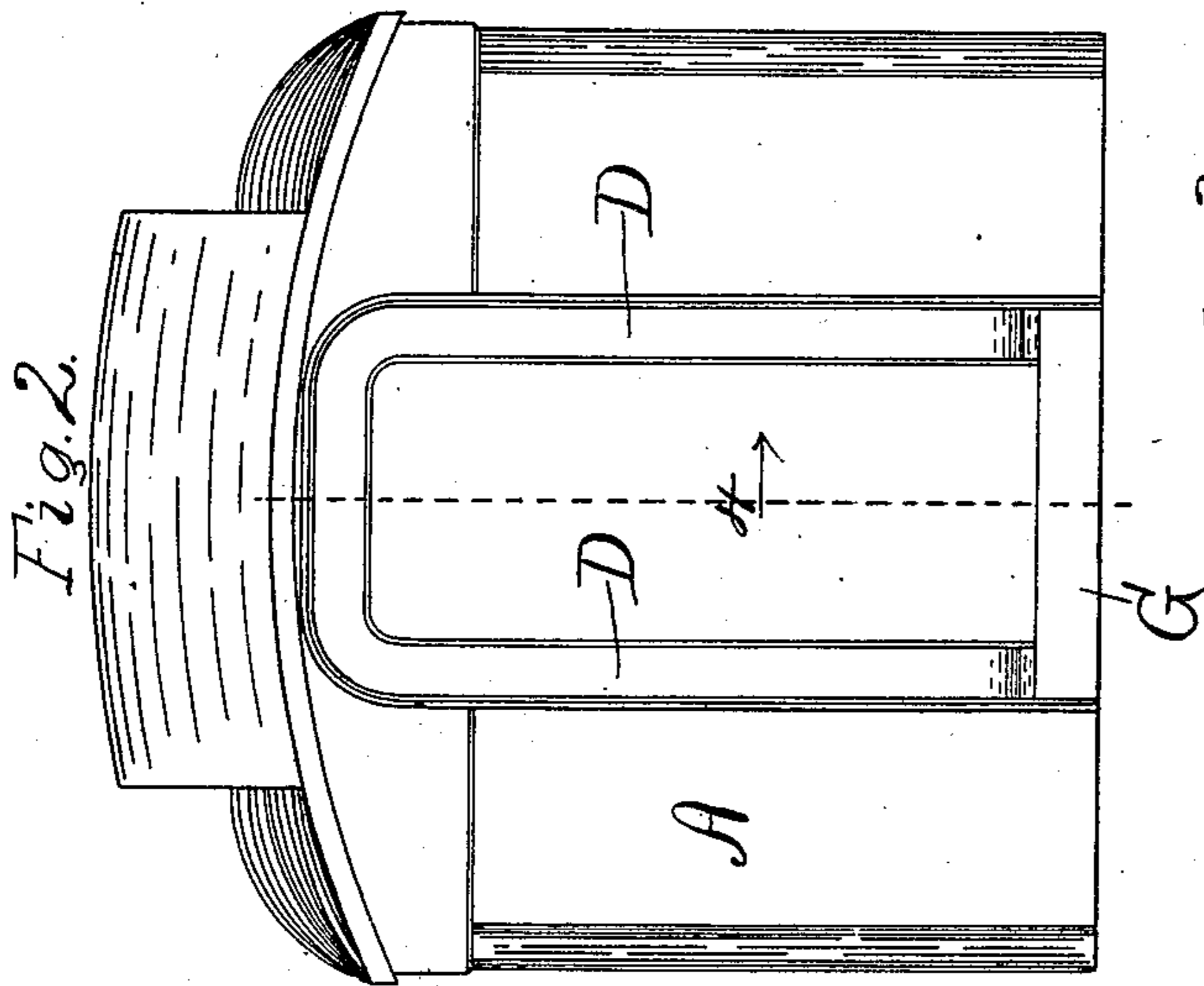


(No Model.)

M. M. MARTIN.  
CAR.

No. 582,479.

Patented May 11, 1897.



*Attest*  
*Walter Donaldson*  
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*Atty*

# UNITED STATES PATENT OFFICE.

MARK M. MARTIN, OF LITCHFIELD, ILLINOIS.

## CAR.

SPECIFICATION forming part of Letters Patent No. 582,479, dated May 11, 1897.

Application filed November 27, 1896. Serial No. 613,661. (No model.)

*To all whom it may concern:*

Be it known that I, MARK M. MARTIN, a citizen of the United States, residing at Litchfield, in the county of Montgomery and State of Illinois, have invented certain new and useful Improvements in Cars, of which the following is a specification.

My invention relates to a rigid vestibule-frame for use on cars unprovided with the usual platform and steps; and its object is to receive shocks to prevent the cars from telescoping in case of accident. Under normal conditions the faces of the frames on adjoining cars coupled in a train are separated somewhat and are adapted to meet only after full compression of the springs of the ordinary platform or movable buffer-plates in case of collision or unusual shock. The force of the shock is consequently taken up by the vestibule-frames.

My invention is also designed to keep tramps and robbers from riding between the cars, as there are no means of lodgment afforded.

The several advantages of my improvement will be readily apparent from the description hereinafter made.

In the accompanying drawings, Figure 1 is a side elevation of the adjacent ends of the cars coupled in a train, showing my frame attached; Fig. 2, an end elevation of one of the cars; Fig. 3, a plan view, and Fig. 4 a section on line 4 of Fig. 2.

The cars A, to which my invention is applied, are straight or flat ended—that is, unprovided with platform and steps. To the usual end posts B, end plate B', and sill E, I secure the rigid vestibule-frame, which forms a solid extension from each end of the car. This vestibule-frame comprises a blocking or framework C, of wood or other material suitable in car construction, and is built in the form of a doorway-frame, extending from about the roof of the car to the lower line or plane of the movable buffer-plates, as more particularly illustrated in Fig. 1.

The lower portion or end of the blocking or frame proper is cut or recessed back at the lower end to accommodate the buffer-plates and permit of their proper operation. The buffer acts in the well-known and usual manner as before, as their movements are neither

changed nor interfered with by the use of my invention.

The vestibule-frame further comprises a plate D, secured to the face of the blocking C, and to be termed herein a "face-plate." This plate is also inverse-U-shaped or in the form of a door-frame, as shown in Fig. 2, and made, preferably, of wrought iron or steel. The lower end of the face-plate is shaped to conform to the recess in the blocking or frame C. Bolts *b* extend through the face-plate and blocking and serve to secure the same to the usual end posts, end plates; and sill. However, any other suitable and convenient means may be adopted for the purpose of fastening the parts together and attaching them to the car body or frame.

The buffer-blocks F and plates G employed may be those ordinarily used on railway-cars, constituting what are called "platform-buffers," preferably of the angular type. The vestibule-frames on the cars do not in any manner interfere with the movements of the buffer-plates, and such frames are so constructed that ordinarily the face-plates will not be in contact but separated a short distance, say four to six inches. The face-plates are designed to come in contact only when the buffer-springs are exhausted—that is to say, are fully compressed, so that the vestibule-frame is called into action to prevent telescoping in case of a collision or unusual shock.

The vestibule-frame is generally applied to platformless cars without end doors—that is, those having what are known as "blind ends." The invention, however, may be applied to cars having end doors, but without platforms, without departing from the spirit and scope of my invention and claims.

Although I have described more or less precise forms and details of construction, I do not intend to be understood as limiting myself thereto, as I contemplate changes in form, proportion of parts, and the substitution of equivalents as circumstances may suggest or render expedient.

I claim—

1. In railway-cars the combination of a car-frame, movable buffer-plates, and a solid U-shaped vestibule-frame secured to the ends of the cars and forming a solid extension, the

outer plane of such vestibule not extending to the normal plane of the buffer-plates whereby the vestibule-frames between adjacent cars similarly equipped are normally separated a short distance but adapted to contact in case of shock or collision and thereby form a continuous, rigid structure throughout the train to avoid telescoping.

2. In railroad-cars, the combination of a car-frame, movable buffer-plates, a solid, rigid vestibule-frame secured directly to the car-frame and forming a solid extension therefrom, face-plates secured to the front of the vestibule-frame, such vestibule-frame being recessed backward near the bottom to accommodate the buffers, the faces of the vestibules on two adjacent cars similarly equipped being normally separated by the buffers and adapted to contact when the buffers are compressed to form a continuous structure throughout the train to avoid telescoping.

3. The combination of railway-cars A, un-

provided with end platforms but having end posts B, end plates B' and sill E, of platform-buffers, a rigid, inverted-U-shaped vestibule-frame secured to each end of the cars and comprising a blocking C secured to the said posts, end plate and sill of the car-frame and recessed at the bottom to accommodate the buffers, and a U-shaped face-plate D upon the blocking, the vestibule-frames forming rigid extensions at the ends of the cars, and those on adjoining ends of two similarly-equipped cars being separated a distance substantially equal to the full amount of compression or movement of the buffers, whereby after the buffers are exhausted and fully compressed by accident, unusual shock or otherwise, the blow will be received by the vestibule-frames.

MARK M. MARTIN.

Witnesses:

J. G. BADENHAUSEN,  
P. F. CARROLL.