

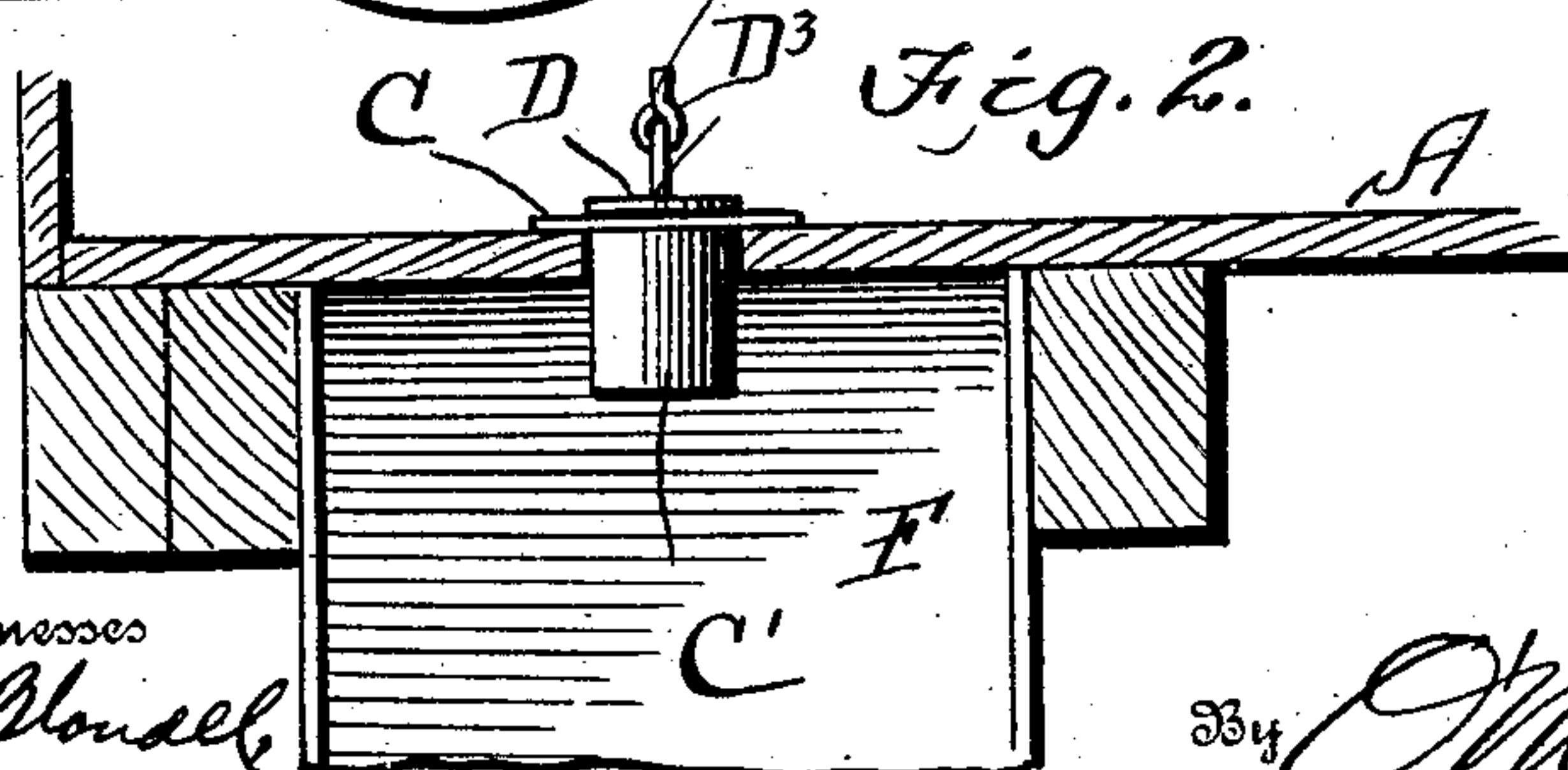
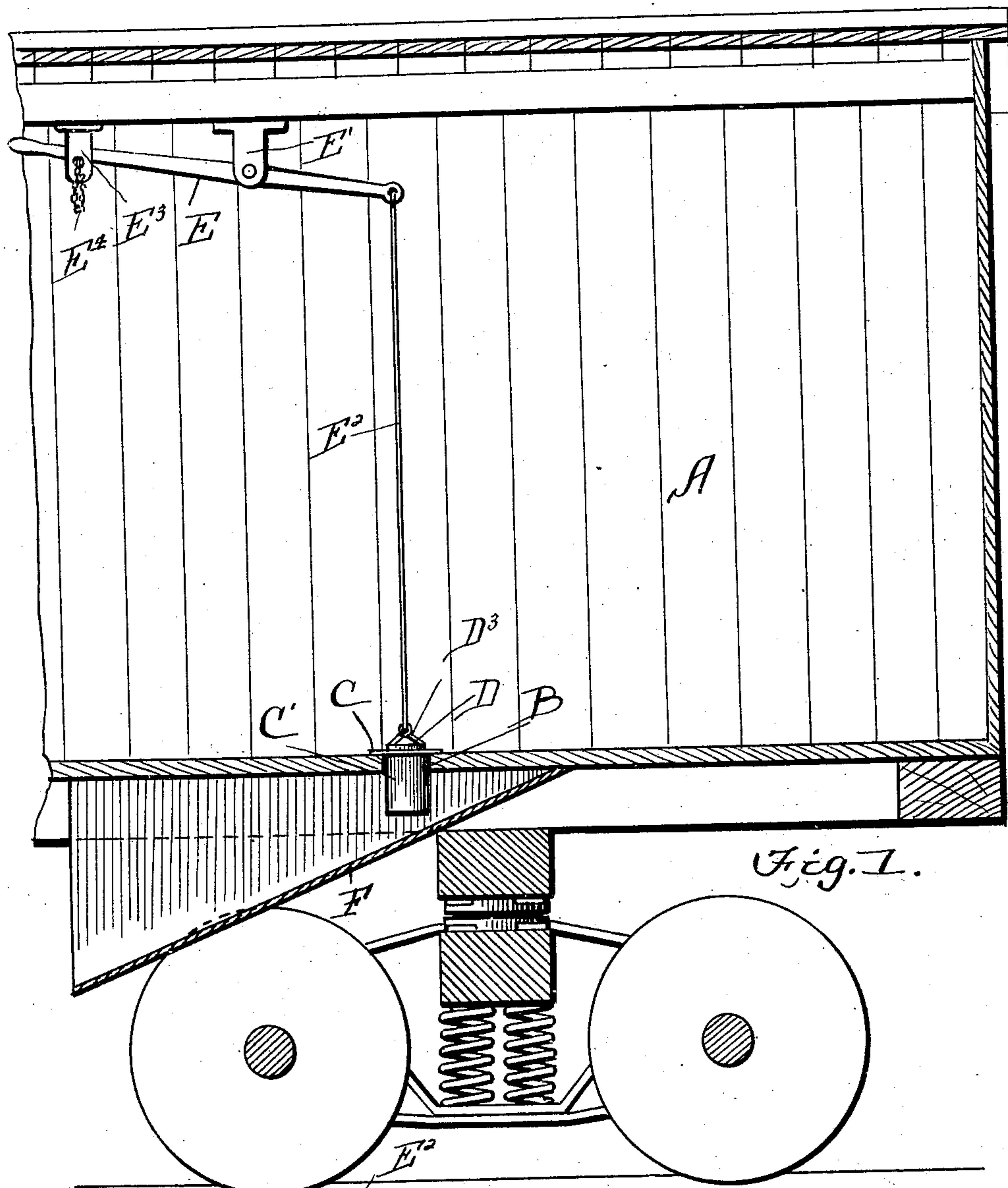
No. 865,938.

PATENTED SEPT. 10, 1907.

C. RAGO.
GRAIN CAR.

APPLICATION FILED JAN. 26, 1907.

2 SHEETS—SHEET 1.



Witnesses
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2 SHEETS—SHEET 2.

Fig. 3.

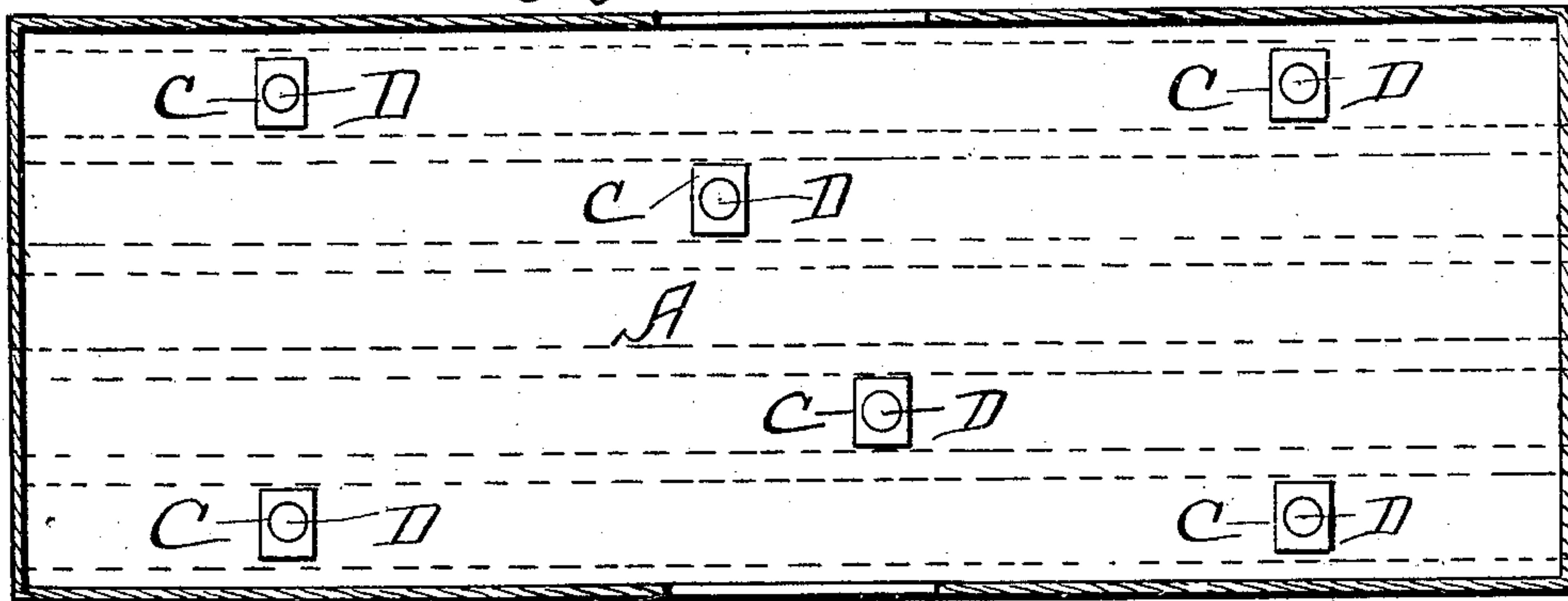


Fig. 4.

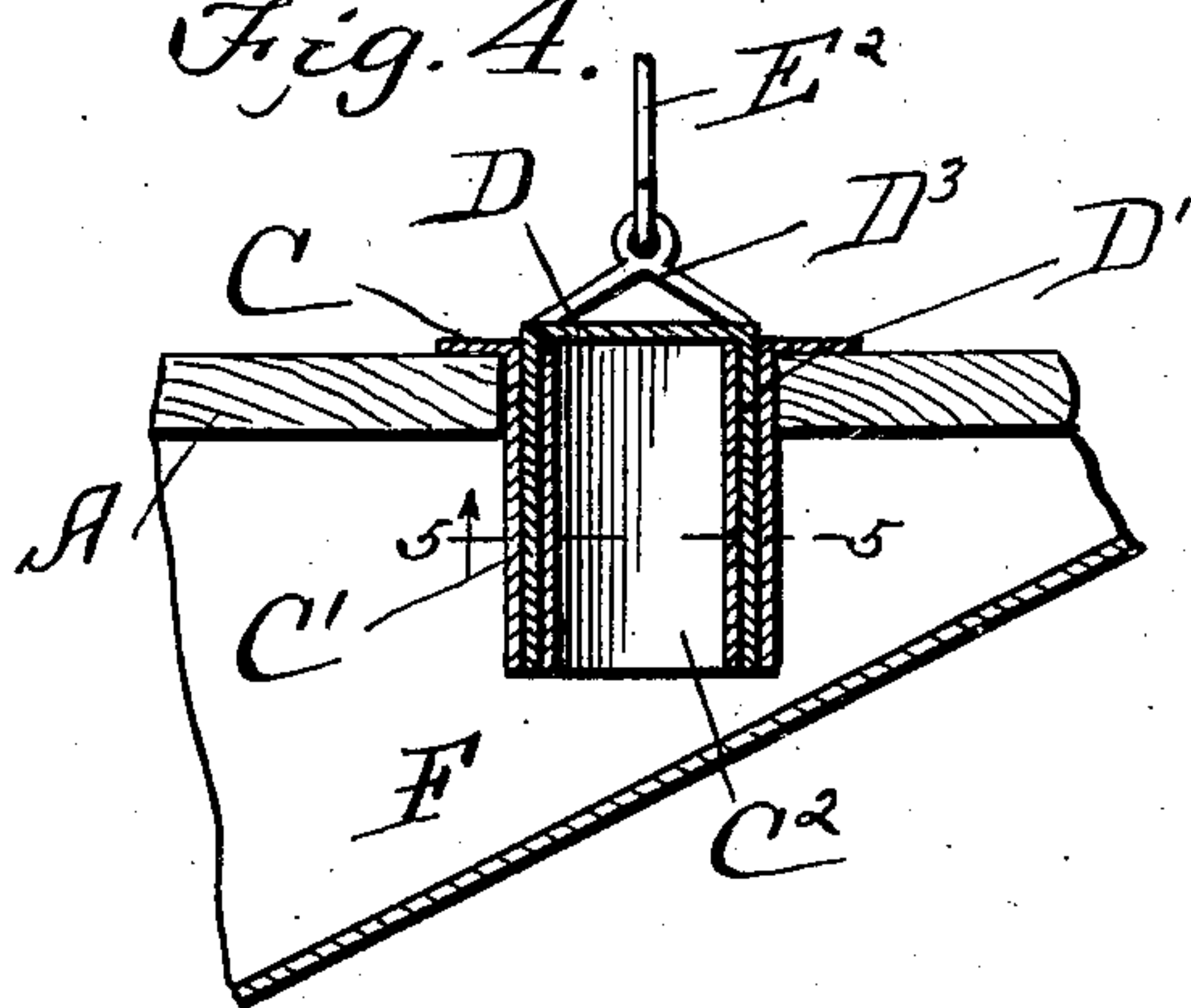


Fig. 5.

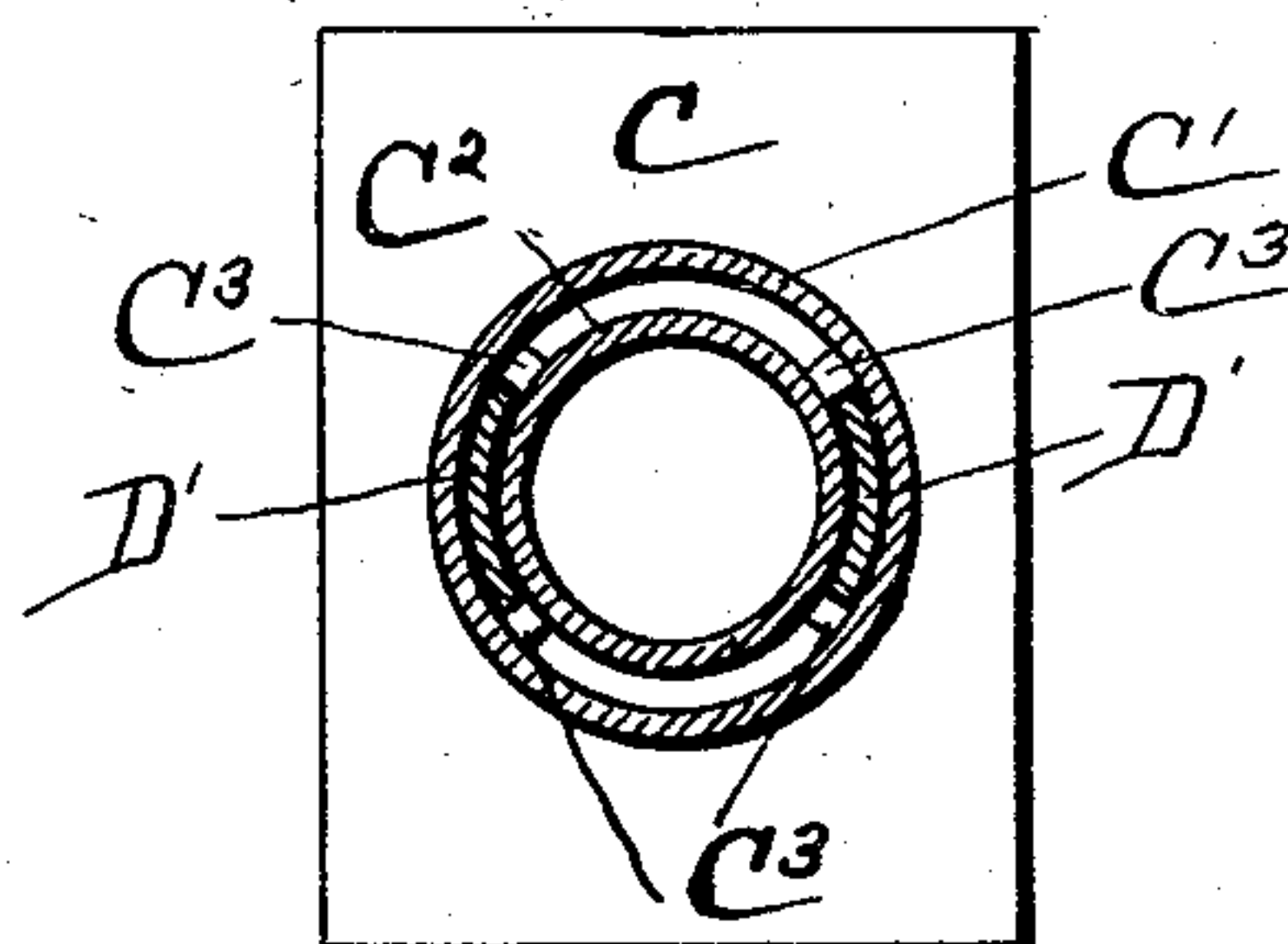


Fig. 6.

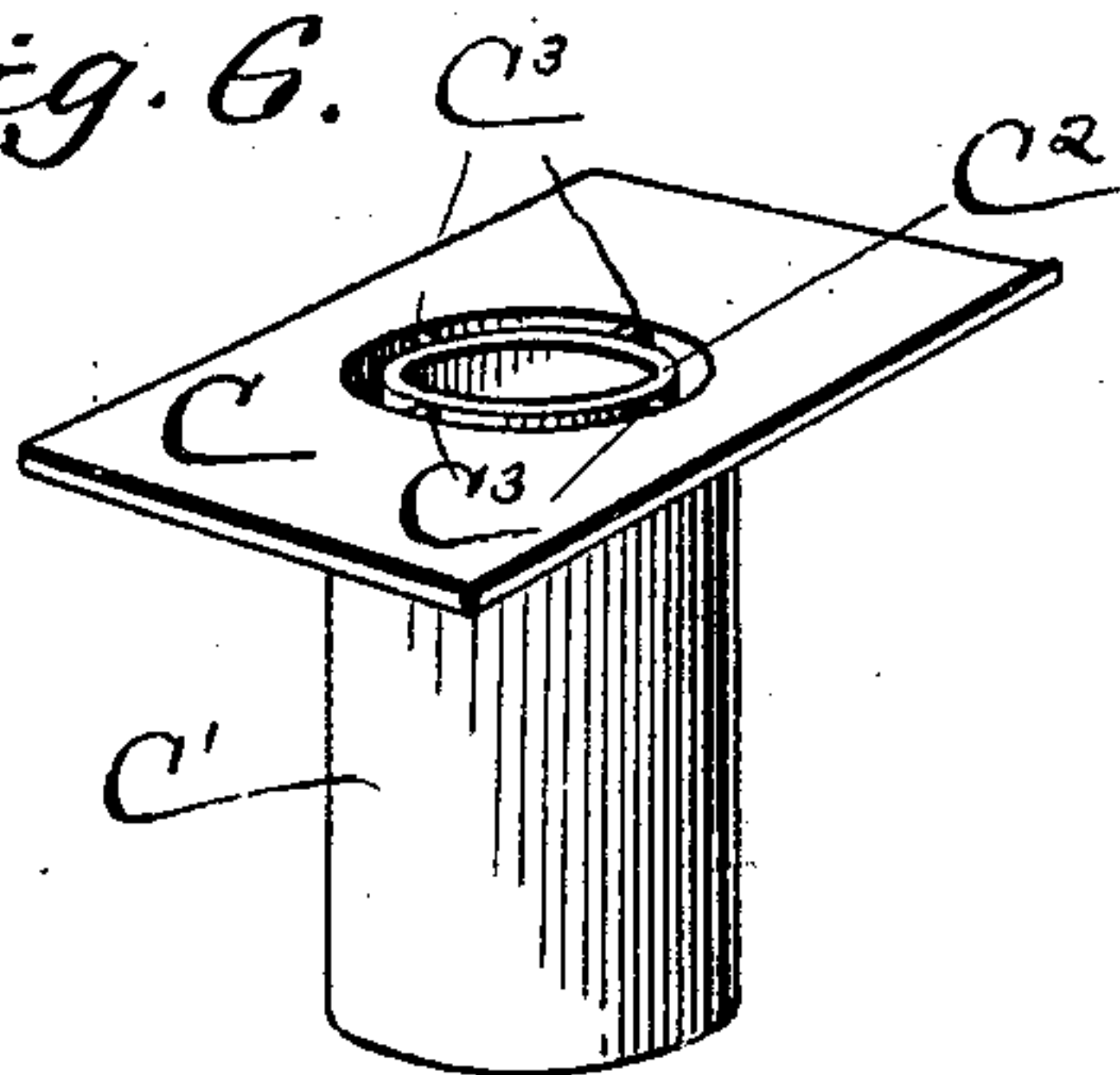
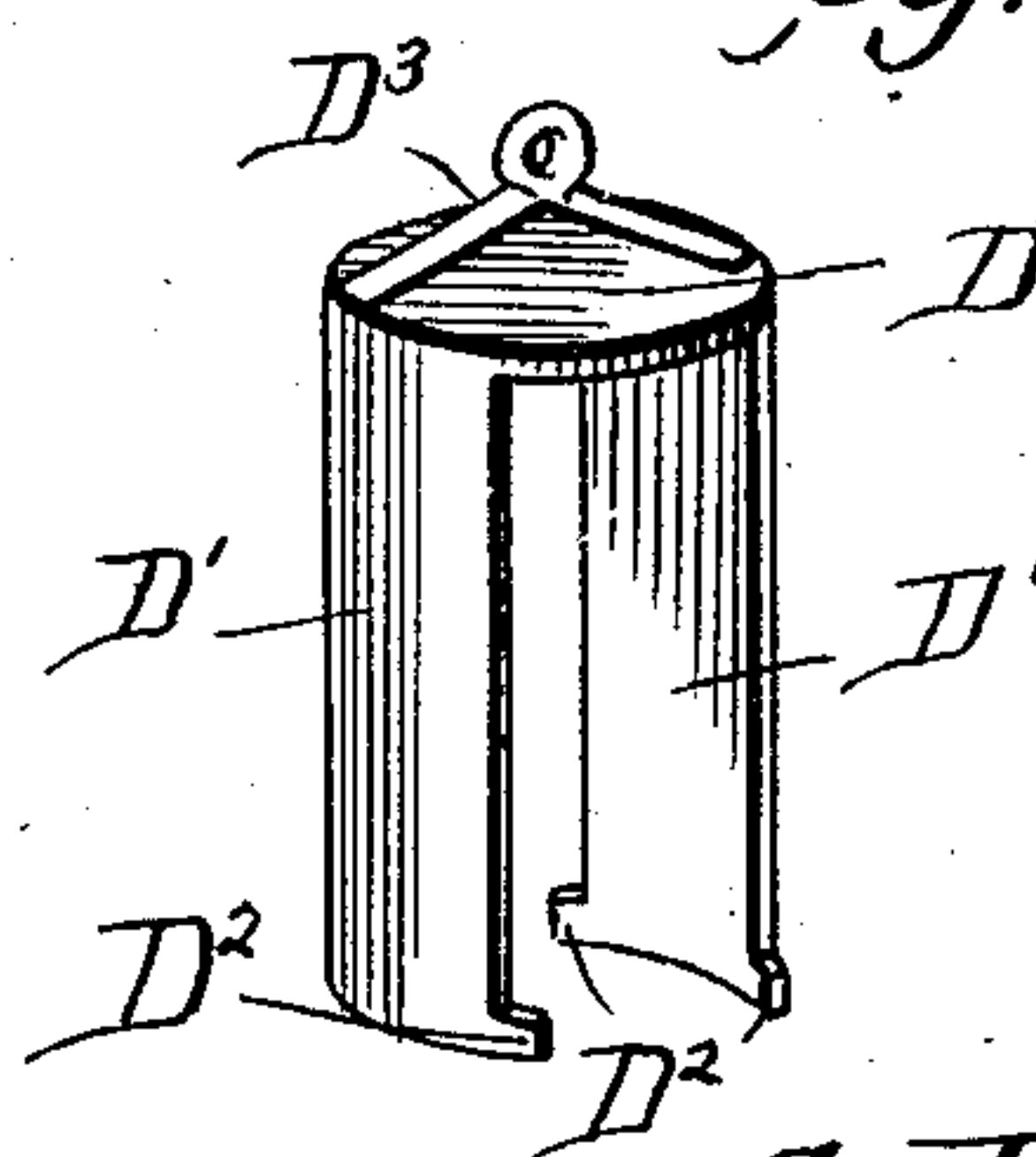


Fig. 7.



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UNITED STATES PATENT OFFICE.

CARMEN RAGO, OF CHICAGO, ILLINOIS.

GRAIN-CAR.

No. 865,938.

Specification of Letters Patent.

Patented Sept. 10, 1907.

Application filed January 26, 1907. Serial No. 354,321.

To all whom it may concern:

Be it known that I, CARMEN RAGO, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and
5 useful Improvement in Grain-Cars, of which the following is a specification.

This invention relates to grain cars and more particularly to discharge valves for the same, the object being to provide a car with discharging valves so that the
10 grain can be easily and quickly removed without any dust.

Another object of my invention is to provide the valve with operating means for opening and closing the same when the car is filled with grain.

15 With these and various other objects in view, the invention consists in the novel features of construction, combination and arrangement of parts hereinafter fully described and pointed out in the claims.

In the drawings forming a part of this specification:—

20 Figure 1 is a longitudinal sectional view of a portion of a car showing my improved valve and discharge chute in place. Fig. 2 is a detail sectional view of a portion of a car showing the valve and chute in elevation. Fig. 3 is a horizontal sectional view of a car taken just above
25 the bottom of the car showing the arrangements of the valves. Fig. 4 is a detail vertical sectional view of the valve and a portion of the car and chute. Fig. 5 is a section taken on lines 5—5 of Fig. 4. Fig. 6 is a perspective view of the valve casing removed, and Fig. 7
30 is a perspective view of the cap valve removed.

In the drawings A indicates an ordinary grain car, the floor of which is provided with openings B, between the joist in which are arranged my improved valves C, which consist of an apertured plate adapted to rest on
35 the floor having a tube C' extending therefrom, downwardly through the opening B. A tube C², of a smaller diameter, is arranged in the tube C' and spaced therefrom by pins C³, between which the depending curved arms D' of a cap D, are adapted to work, and which are
40 provided with outwardly projecting lugs D² at their ends, adapted to engage the pins C³, and prevent the same from being pulled all the way out. The cap is

adapted to fit over the opening in the plate and securely close the same, and is provided with a bail D³ for the purpose hereinafter described. 45

Arranged over each of the valves in the car, is a lever E, in a bracket E', one end of which carries a rod E² which is connected to the bail D³ so that the cap can be raised and lowered as desired, so as to open and close the valve, and the other ends work in a bracket E³,
50 which is provided with a locking chain E⁴ so that the levers can be locked so as to prevent anyone from opening the valves.

A chute F is arranged under each valve between the joist adapted to convey the grain away from the truck
55 of the car.

From the foregoing description it will be readily seen that I have provided a grain car with very novel discharging means so that the grain can be discharged quickly without any waste or dust. 60

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

1. The combination, with a grain car provided with openings in its bottom, of apertured plates arranged over
65 said openings provided with tubes fitting in said openings, a tube arranged in said tubes and spaced therefrom, cap valves provided with depending arms working between said tubes, and operating means connected to said valves, for the purpose described. 70

2. The combination with a car provided with openings in its bottom, of apertured plates arranged over said openings provided with tubes fitting in said openings, tubes of a smaller diameter arranged in said tubes, and spaced therefrom by pins, caps provided with depending arms
75 slidably mounted between said tubes, and lugs formed on said arms adapted to engage said pins, for the purpose described.

3. The combination with a car having openings formed in its bottom, valve casings arranged in said openings, cap valves slidably mounted in said casings, operating means
80 connected to said valves, and means for limiting the upward movement of the valves for the purpose described.

CARMEN RAGO.

Witnesses:

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