(No Model.)

D. C. RICHARDSON & J. D. C. KNAPP.

CAR SEAL.

No. 550,136. Patented Nov. 19, 1895.

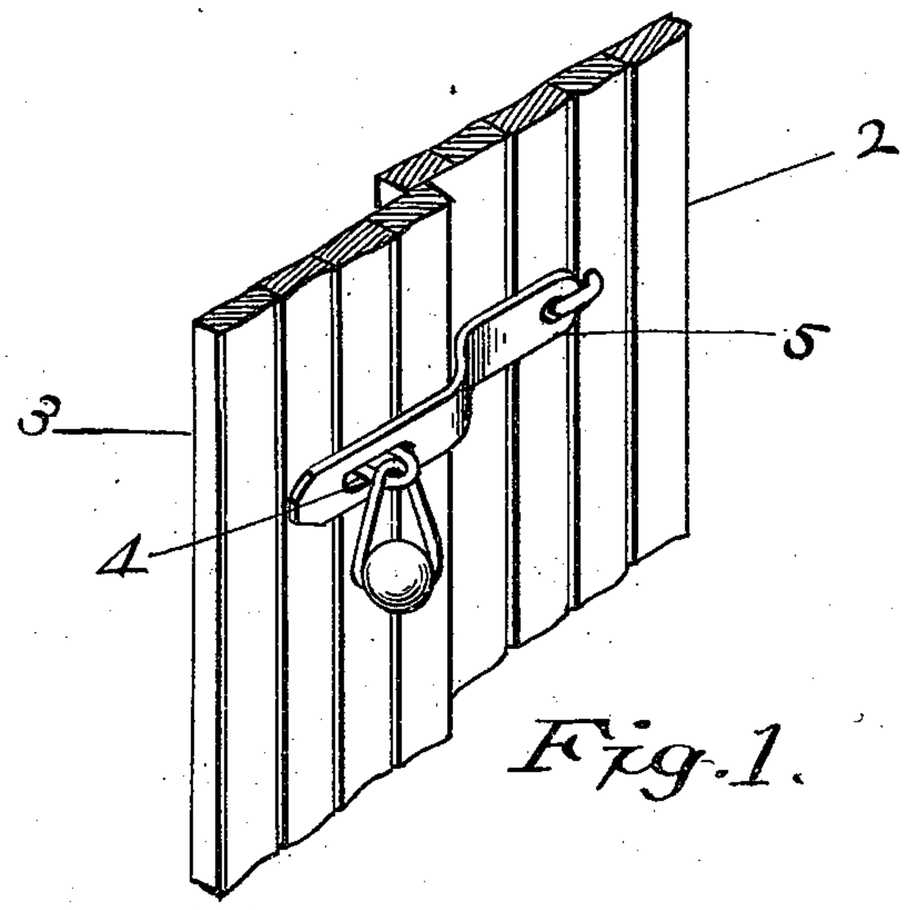

Fig. 1.

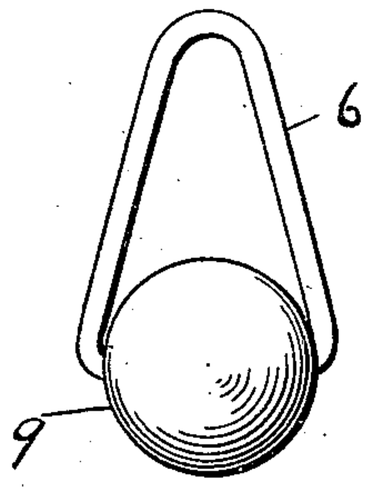

Fig. 2.

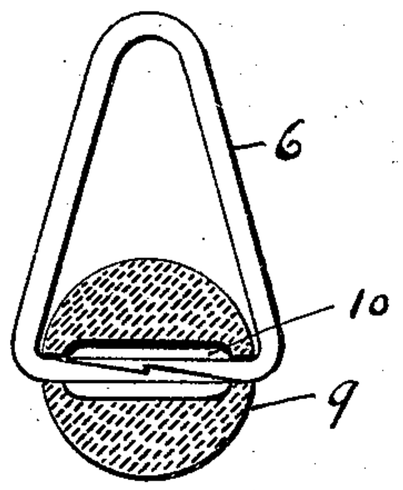

Fig. 3.

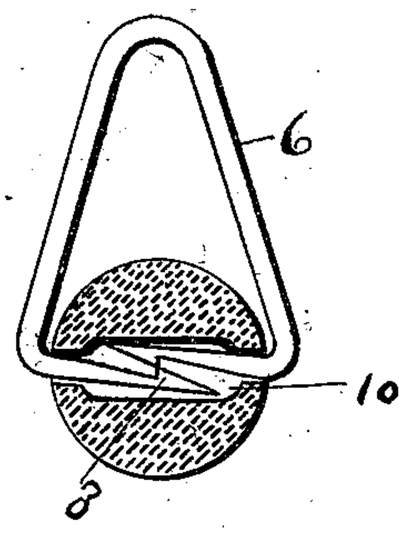

Fig. 4.

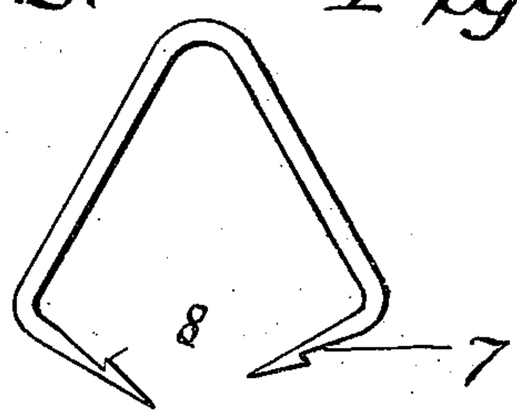

Fig. 5.

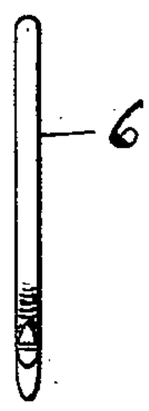

Fig. 6.

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UNITED STATES PATENT OFFICE.

DAN C. RICHARDSON AND JOHN D. C. KNAPP, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR OF ONE-THIRD TO JOHN H. SESSIONS, OF SAME PLACE.

CAR-SEAL.

SPECIFICATION forming part of Letters Patent No. 550,136, dated November 19, 1895.

Application filed May 11, 1895. Serial No. 548,906. (No model.)

To all whom it may concern:

Be it known that we, DAN C. RICHARDSON and JOHN D. C. KNAPP, of Minneapolis, county of Hennepin, and State of Minnesota, have invented certain new and useful Improvements in Car-Seals, of which the following is a specification.

Our invention relates to devices for sealing freight-cars; and the object we have in view is to provide a seal which cannot be tampered with without detection; and a further object is to provide a seal which shall be very simple in construction and cheap to manufacture.

Our invention consists in a self-fastening car-seal comprising a substantially-U-shaped shackle having inwardly-turned ends adapted when brought together to engage and lock upon one another, and a fragile block having a transverse opening into which the ends of the shackle are inserted and wherein the same are engaged, the ends of said opening being of substantially the size of the cross-section of the wire wherefrom the shackle is formed, and the sides of said shackle being adapted to engage the sides of said block when said ends are engaged within the block, whereby said ends are locked in both directions, all substantially as described, and particularly pointed out in the claim.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective of a portion of the side of a freight-car and the door, showing the position of the device when the car is sealed. Fig. 2 is a plan view of the seal after the ends of the wire have been locked together within the ball. Fig. 3 is a similar view showing the ball in section and the ends of the wire interlocked. Fig. 4 shows the position of the ends of the wire just before locking. Fig. 5 is a view of the wire, showing the locking ends. Fig. 6 is an edge view of the same.

In the drawings, 2 represents a portion of the side of the car, and 3 the closed door, provided with the usual staple 4 for receiving the slotted end of the strap or bar 5, the opposite end of which is secured to the side of the car.

The seal comprises a wire 6, of spring-steel or brass, having inwardly-turned ends, as shown in Fig. 5. These ends are tapered slightly, so that the ends will pass without catching, and each end is provided with a notch or slot 7, forming a shoulder 8 to engage a similar shoulder formed by the notch in the opposite end of the wire. The wire is bent into a triangular shape, the inwardly-turned ends forming the base, and a ball 9 is provided, composed of clay, terra-cotta, glass, or other fragile material which will break when tampered with, and having a hole or opening 10 extending entirely through it. Each end of the hole or opening is just large enough to receive the end of the wire which is passed through the same, while the opening is enlarged near the middle of the ball to permit the ends of the wire to pass and the shoulder in each end to engage the shoulder in the opposite end, thereby locking the two ends together, as shown in Fig. 3. As soon as the ends are interlocked, it will be impossible to separate them without breaking the ball or otherwise damaging it, so that the fact that the seal has been tampered with will be noticed by the most casual observer.

We do not confine ourselves to the exact form of hook shown in Fig. 5, as any other hooks that are adapted to interlock may be provided in the ends of the wire, and it is not necessary to use a round fragile portion, as this part may be made in any desired form without departing from the spirit of our invention. When it is desired to open the car, the ball or block is broken and the ends of the wire disengaged. The wire may be used again and as often as desired until it is broken or worn out, and while we have shown the wire bent in a triangular form it may be bent into any other shape, if desired.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination in a car seal, of a substantially U-shaped shackle having inwardly turned ends, adapted when brought together to engage and lock upon one another, a fragile block having a transverse opening into which said ends of the shackle are adapted to project and wherein the same may be pressed

together and locked upon one another, the ends of the opening in the block being of the size of the cross section of the wire of which the shackle is formed, the sides of the shackle adapted to engage the sides of the block when the inner ends are in engagement, substantially as described.

In testimony whereof we have hereunto set our hands this 1st day of May, A. D. 1895.

DAN C. RICHARDSON.
JOHN D. C. KNAPP.

In presence of—
C. G. HAWLEY,
M. E. GOOLEY.