

(No Model.)

T. S. WHEELWRIGHT.
CAR SEAL.

No. 545,260.

Patented Aug. 27, 1895.

Fig. 1.

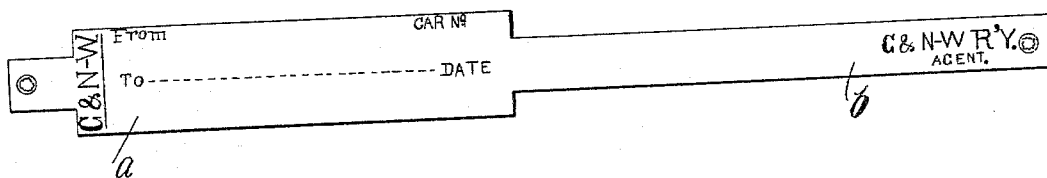


Fig. 2.

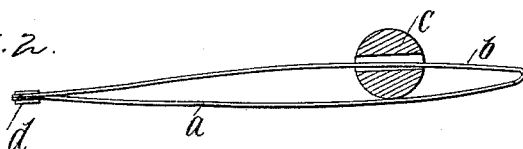


Fig. 3.

Fig. 4.

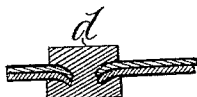
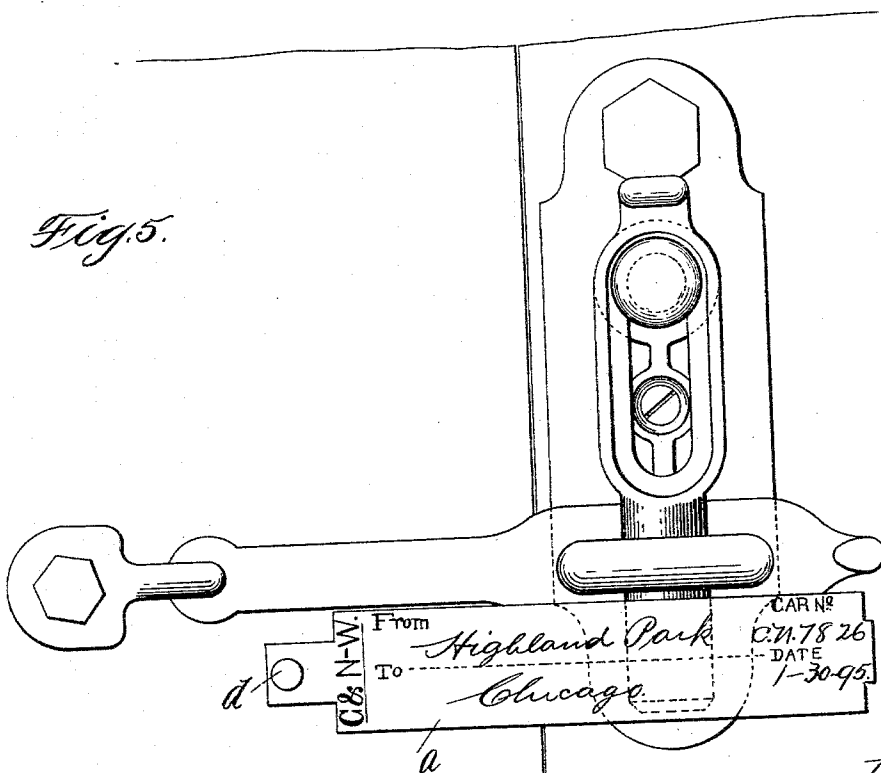


Fig. 5.



Witnesses:

George F. Cragg
W. Clyde Jones.

Inventor:
Thomas S. Wheelwright.
By Barton Brown
Attorneys.

UNITED STATES PATENT OFFICE.

THOMAS S. WHEELWRIGHT, OF HIGHLAND PARK, ILLINOIS.

CAR-SEAL.

SPECIFICATION forming part of Letters Patent No. 545,260, dated August 27, 1895.

Application filed February 4, 1895. Serial No. 537,279. (No model.)

To all whom it may concern:

Be it known that I, THOMAS S. WHEELWRIGHT, a citizen of the United States, residing at Highland Park, in the county of Lake and State of Illinois, have invented a certain new and useful Improvement in Car-Seals, (Case No. 1,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

In the use of seals in connection with the locks of freight-cars it is of the greatest importance to provide for readily and promptly detecting when a seal has been tampered with or replaced by an imitation. It has been found most difficult to counterfeit handwriting; and the object of my invention is to provide a seal or tag of sheet metal upon the surface of which is provided a coating formed of a composition peculiarly adapted, when written upon with a pencil or with ink, to retain the lead of the pencil or the ink, although the seal be subjected to rain or other effects of the weather.

Metallic tags have been heretofore covered with paper upon which the usual directions—as, for example, the place of starting, the destination, the date of starting, and the number of the car—have been written. Such tags, which have been used as seals, have not been found satisfactory. In the first place, the paper, being exposed to the weather, is liable to come off, and, secondly, after a car has been robbed, a new plate with the paper of the true seal has not infrequently been found in place—that is, the metal of the seal is broken when the car is opened and the paper, being carefully removed, is pasted upon a new plate, so that the car is left, after being robbed, with a false seal, but having the original paper containing the written directions pasted thereon.

My invention comprises a car seal or tag formed of sheet metal and provided with a coating of composition adapted to receive pencil or ink writing and to retain the lead of the pencil or the ink, although the seal be subjected to rain or other effects of the weather. Handwriting may thus be placed upon the face of the seal in such a manner as to resist the weather and so that the removal of the

coating without destroying the handwriting is prevented.

I have found that when the seal is coated with a composition composed, essentially, of four parts, by weight, of white lead in linseed-oil, four parts of pipe-clay, forming a pulverized absorbent, two parts of enamel varnish, and one part of spirits of turpentine the directions may be written upon the label with lead-pencil or with ink, and the handwriting will be proof against rain or other effects of the weather. The white lead serves as a base for the paint and gives the coating the desired light grayish color. The enamel varnish renders the coating waterproof and somewhat elastic, the spirits of turpentine being used for the purpose of thinning the coating and causing it to dry quickly. I have used other absorbent material, such as pulverized pumice-stone, oxide of zinc, and chalk. The pipe-clay has, however, proved, in my experience, the most suitable for the purpose. The proportions of the ingredients may be varied, but I have given above the formula which my experience has shown to be the best.

In the drawings, which are illustrative of my invention, Figure 1 is a plan view of a seal ready for use. Fig. 2 is a plan view showing the seal inserted through the eye of the pin or fastening-bolt and the two ends sealed together. Fig. 3 is a sectional view, exaggerated, to illustrate the coating provided on the surface of the seal or tag. Fig. 4 is an enlarged cross-section showing the rivet joining the two ends of the seal together. Fig. 5 is an elevation illustrative of a car-lock consisting of a hasp held in place by a bolt or pin inserted through the staple or lug provided with an opening, the seal being shown inserted through the eye of the pin and the ends sealed together.

Like parts are indicated by similar letters of reference throughout the several figures.

I preferably first give the sheet metal a coating of the composition having the ingredients which I have specified, and after it is sufficiently dry the sheet metal is printed with the desired form for any railroad, giving the initials of the road, and blank spaces to be filled in by the station agent, an entire sheet containing a large number of the strips being printed

at one time. The sheet is then stamped out into strips by a suitable punch and die, the strips being preferably of the form indicated in Fig. 1, in which one portion *a* is of sufficient width to receive in fair-sized characters the usual directions, written in manuscript. The other portion *b* should be narrow enough so that it may be inserted through the eye of the hasp-pin *c*, after having received the signature of the station agent or person sealing the car, as shown in Fig. 2, after which the free ends are sealed, preferably by a rivet of lead, as shown at *d*, Fig. 2, upon which may be impressed any suitable characters to indicate the place of sealing.

Although the above is the preferred form, the seal or tag may be made of any shape, as desired.

I preferably coat both sides of the sheet metal with the composition, as indicated at *e*, Fig. 3. The composition, protecting the metal from the weather, preventing rust, fills any defects or pin-holes which may be in the sheet metal and gives the desired plane even surface adapted to receive the writing, either in ink or pencil.

I am aware that metallic surfaces have been coated or covered with paint or other composition for various purposes; but it has not been proposed heretofore to form a seal or tag upon the face of which it is desired to place handwriting by placing upon the face of the

metal of which the seal is formed a coating of composition peculiarly adapted to receive ink or pencil handwriting and retain the same even though the seal be subjected to rain or other effects of the weather, the coating thus having the function of receiving and retaining the lead of the pencil or the ink mechanically or chemically in such a manner that rain or other effects of the weather cannot remove the handwriting.

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

As a new article of manufacture, a car seal or tag formed of sheet metal and provided with a coating of composition, as described, having the property of receiving pencil or ink handwriting and retaining the lead of the pencil or the ink although the seal be subjected to rain or other effects of the weather; whereby hand-writing may be placed upon the face of the seal in such a manner as to resist the weather, and the removal of the coating without destroying the hand-writing is prevented; substantially as described.

In witness whereof I hereunto subscribe my name this 30th day of January, A. D. 1895.

THOMAS S. WHEELWRIGHT.

Witnesses:

GEORGE P. BARTON,
GEORGE L. CRAGG.