

(No Model.)

T. H. MALONE & G. A. WHITING.  
METHOD OF ATTACHING SEALS TO CARS.

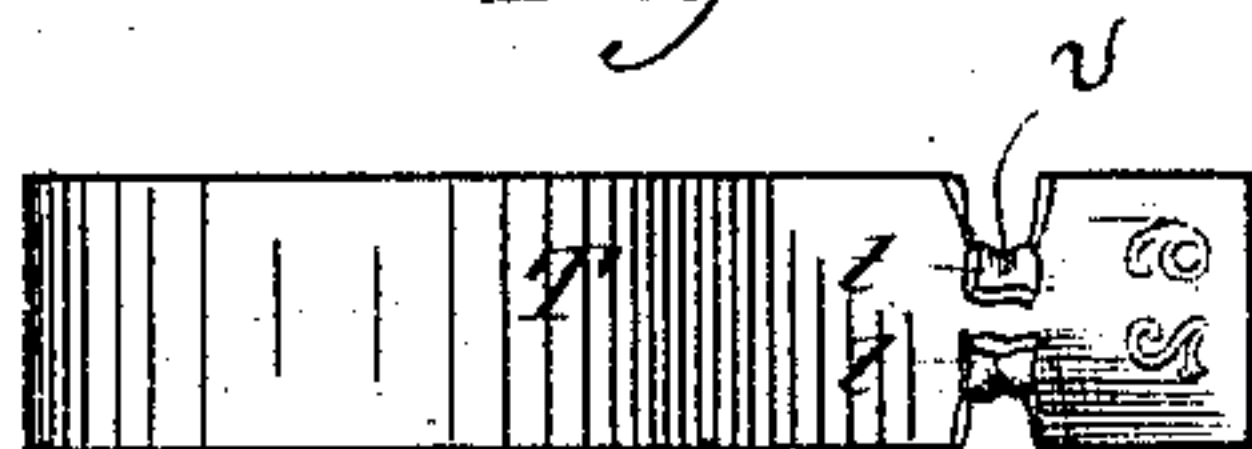
No. 282,205.

Patented July 31, 1883.

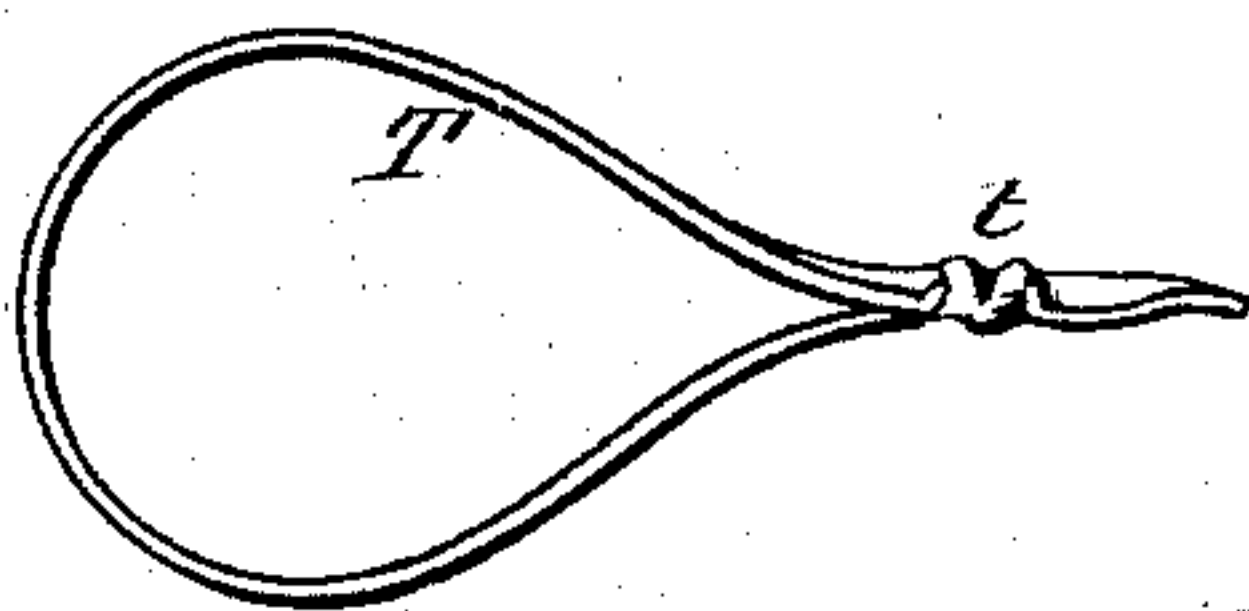
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES.

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# UNITED STATES PATENT OFFICE.

THOMAS H. MALONE, OF MILWAUKÉE, AND GEO. A. WHITING, OF NEENAH,  
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## METHOD OF ATTACHING SEALS TO CARS.

SPECIFICATION forming part of Letters Patent No. 282,205, dated July 31, 1883.

Application filed August 10, 1882. (No model.)

*To all whom it may concern:*

Be it known that we, THOMAS H. MALONE, of Milwaukee, in the county of Milwaukee and State of Wisconsin, and GEORGE A. WHITING, of Neenah, in the county of Winnebago and State of Wisconsin, have jointly invented a new and useful Method of Attaching Seals to Cars, of which the following is a description, reference being had to the accompanying drawings, in which—

Figures 1 and 2 are side views of the sealed band, representing opposite sides thereof; and Fig. 3 is an edge view of the same.

Similar reference-letters indicate the same parts.

For sealing freight-cars and other depositories of valuable goods, one of the most convenient, cheap, and efficacious means yet devised consists in the employment of a sheet-metal band, the ends of which are designed to be so fastened together when in use that they cannot be separated without detection—that is to say, that if an attempt be made to separate and again secure them together, the condition of the metal band or the fastening device at its end will betray the attempt. In such “seals” the practical efficacy and value of the device depend, of course, upon the efficiency of the fastening; and the field of the invention is substantially limited to that feature of the device and to the means for producing it. Various fastenings for the purpose referred to have been brought into use by the railroad companies; but up to the date of our invention none of them has been found, in practice, to be entirely satisfactory and secure, for the reason that as heretofore constructed it has frequently been possible to separate the sealed ends of the band and again unite them in such manner as to defy detection. Among the various methods that have been employed for fastening the ends of such sheet-metal bands, for example, is that of punching the overlapped ends with a pointed punch, so as to force the round burrs formed one within the other, and then upsetting them. After a thorough study of the difficulty, and a long course of experimentation to completely overcome it, we have accomplished the object by an improved method of fastening or sealing such band, which

forms the subject of the following specification; and we have also invented a punch for applying said method in practice, which forms the subject of a separate application for Letters Patent filed contemporaneously herewith. The seal itself, though necessarily herein described, is reserved as the subject of a separate application for Letters Patent.

Our improved method of forming and attaching car-seals to cars consists in passing the ends of a somewhat brittle metal strap or band, T, through the staples, and bringing them together, so as to lie flat one on the other, then cutting or punching the doubled metal to form two tongues, *t*—one at each edge of the band—each of the tongues *t* being double, or formed of two thicknesses of metal—one thickness from each end of the strap T—then bending said tongues *t* inward toward each other until they lie flat on the metal, with their ends almost or quite touching each other, and then jamming or crushing them with such force as to completely upset the bend of the metal of which they are formed. Tongues cut from the sides of the band and bent over and upset in the manner described cannot afterward be bent out and again closed upon the body of the band without breaking off, and thus any attempt to tamper with the seal will be at once detected. Each band so sealed is designed to be permanently marked with letters, figures, or other symbols impressed into it to indicate the railroad which applies the seal and the station where it is applied, and to give any information by which the railroad authorities or shippers can correctly determine where the attempt to tamper with the seal was made, the symbol in such case depending upon the system of checks adopted by the road or shipper.

In bending and upsetting the tongues an improved result will be obtained by employing a narrow edged or ribbed bending and upsetting instrument, so as to crush a well-defined groove or depression, *v*, longitudinally into each tongue, especially at the bend, an operation which so breaks up the continuity of the metal and alters its molecular arrangement that it will break off afterward with very slight bending. The metal should be sufficiently brittle for the purpose; but with this



method of sealing any common sheet-iron or  
tinned plate has been found to answer.

Having thus described our invention, we  
claim as new—

5 1. The method of attaching seals to cars, &c.,  
substantially as herein described, consisting  
in laying the ends of the seal-band together,  
cutting or punching the tongues from the edges  
of the doubled band, bending them in upon  
10 the body of the band and upsetting them, as  
described.

2. The method of attaching seals to cars, &c.,  
substantially as herein described, consisting

in laying the ends of the seal-band together,  
cutting or punching the tongues from the edges 15  
of the double band, bending them in upon the  
body of the band, and upsetting them by  
means of a narrow edged or ribbed instrument,  
so as to form a groove or depression in and  
longitudinally of the tongues, substantially as 20  
described.

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Witnesses:

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