

C. F. FLEMMING.
 AUTOMOBILE SHIPPING CASE.
 APPLICATION FILED JAN. 24, 1910.

982,046.

Patented Jan. 17, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

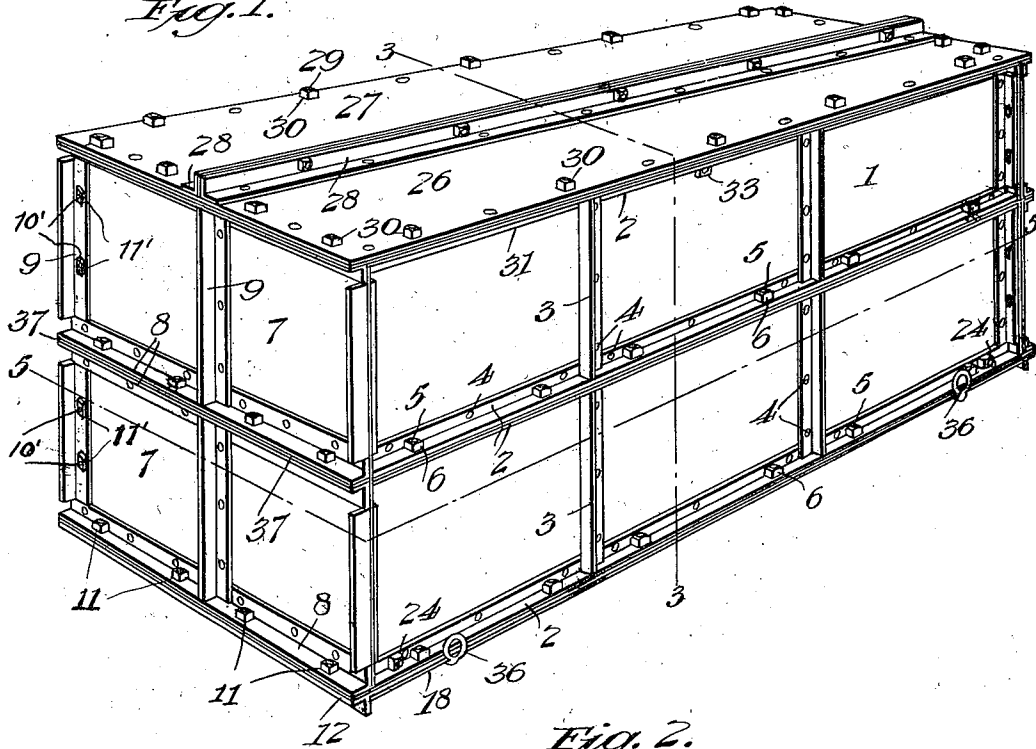
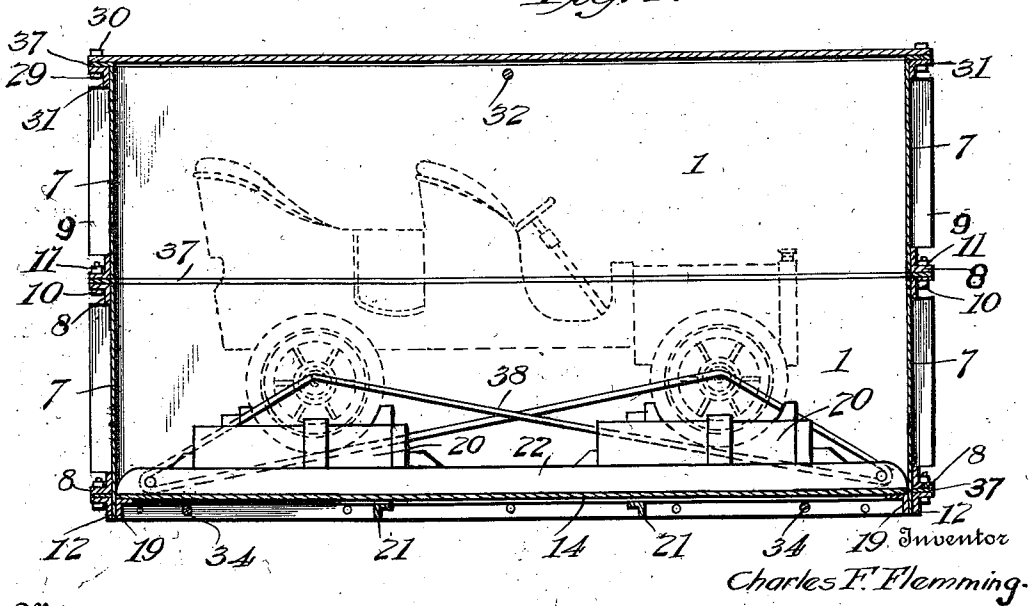


Fig. 2.



Witnesses

T. L. Mochman
 E. D. Williams

By

Chas. E. Riordan
 Attorney

C. F. FLEMMING.
 AUTOMOBILE SHIPPING CASE.
 APPLICATION FILED JAN. 24, 1910.

982,046.

Patented Jan. 17, 1911

2 SHEETS—SHEET 2.

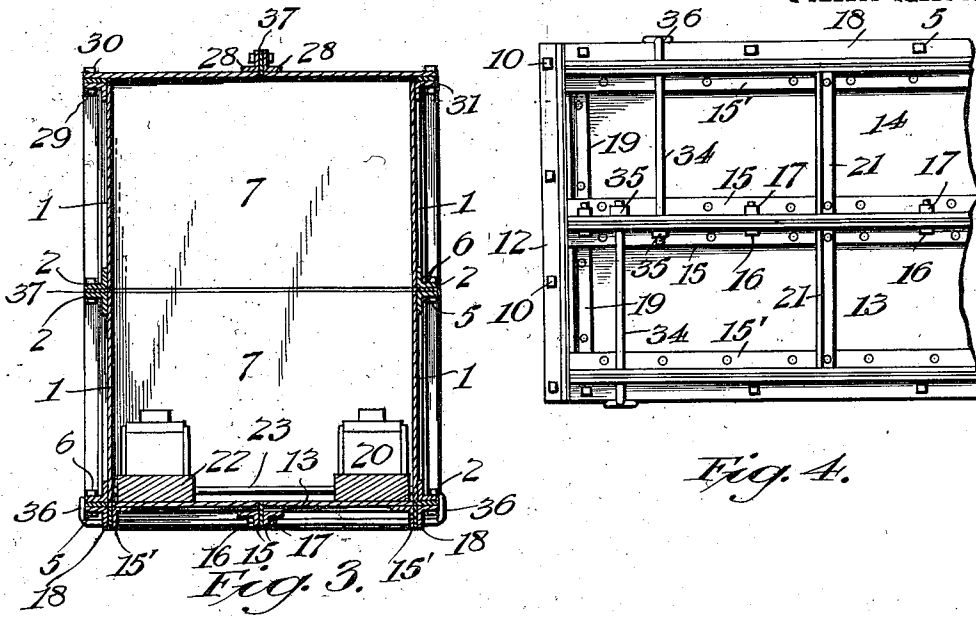


Fig. 4.

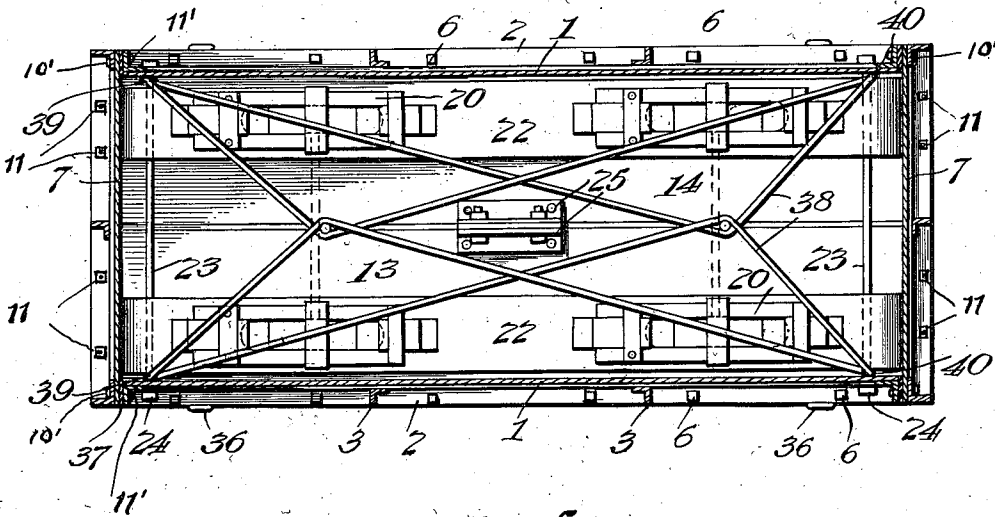


Fig. 5.

Inventor
 Charles F. Fleming

Witnesses
 T. A. Rockwell
 E. L. Williams

By Chas. E. Rorden
 Attorney

UNITED STATES PATENT OFFICE.

CHARLES F. FLEMMING, OF WASHINGTON, DISTRICT OF COLUMBIA.

AUTOMOBILE-SHIPPING CASE.

932,046.

Specification of Letters Patent.

Patented Jan. 17, 1911.

Application filed January 24, 1910. Serial No. 539,896.

To all whom it may concern:

Be it known that I, CHARLES F. FLEMMING, a citizen of the United States, residing at Washington, District of Columbia, have invented new and useful Improvements in Automobile-Shipping Cases, of which the following is a full, clear, and exact specification.

This invention relates to shipping cases, and its primary object is to provide a case especially adapted for use in the transportation of automobiles and other vehicles on ocean steamers.

In transporting automobiles on railways, it is only necessary to employ suitable chocks and fastenings for the wheels of the vehicle to secure them against movement or displacement upon the car floor, but most ocean going vessels require automobiles to be entirely inclosed for shipment, so that they may be stored in the hold of the vessel in such a manner as to occupy the minimum of space, and to permit other merchandise to be stored above and around them.

Ordinarily the machines are inclosed in wooden cases which entirely inclose them, and these cases like the wooden cases used on other merchandise are knocked apart when the machines are delivered, thus rendering the cases unfit for subsequent use.

The present invention aims to provide a sectional waterproof metallic shipping case for automobiles, vehicles or merchandise of any character, which case may be readily built up to entirely inclose its contents, said case being so constructed as to adapt it for continued use, and not merely as a temporary shipping case.

The invention also provides a shipping case of very strong and durable construction in which the sides, ends, bottom and top members are all firmly braced and reinforced both longitudinally and transversely, so that there will be no liability of injury to either the case or its contents from the weight of articles or merchandise packed upon it aboard ship.

Another object of the invention is to provide a sectional shipping case the parts of which may be disconnected and stored within a small space when the case is not desired for use, and a still further object is to provide a metallic shipping case with means for the attachment of ropes or chains for hoisting it, in loading or unloading.

The construction of the improvement will

be fully described hereinafter, in connection with the accompanying drawings which form a part of this specification, and its features of novelty will be set forth in the appended claims.

In the drawing: Figure 1 is a view in perspective of a sectional metallic shipping case embodying the invention. Fig. 2 is a central longitudinal section of the same, showing an automobile in position therein, in dotted lines. Fig. 3 is a transverse section on the line 3—3 of Fig. 1. Fig. 4 is a bottom plan view of one end of the case showing the means provided for the attachment of hoisting ropes or chains; and Fig. 5 is a horizontal section on the line 5—5 of Fig. 1.

The sides of the case each comprise a plurality of sheet metal panels 1, (preferably of sheet steel) reinforced by longitudinally disposed angle bars 2 and vertically disposed angle bars 3, said bars being securely riveted to the sheet metal panels by rivets 4.

The longitudinal angle irons 2 of adjacent panels overlap each other, and are detachably connected together by bolts 5, and nuts 6, and the upper and lower longitudinal angle bars are secured in the same manner respectively to the top and bottom of the case.

Each end of the case comprises a plurality of sheet metal panels 7, reinforced by transverse angle bars 8, and vertically disposed angle bars 9. The abutting transverse angle bars of the end members are detachably connected by bolts 10 and nuts 11, and the outer vertical angle bars 9 of the ends are detachably secured to the adjacent vertical angle bars of the sides by bolts 10' and nuts 11'.

The upper transverse angle bars of the ends are bolted to the projecting ends of the top of the case as shown, and the lower transverse angle bars of the ends are bolted to angle bars 12 projecting from the bottom of the case.

The bottom or floor of the case consists of two sheet metal sections 13 and 14, to the under side of each of which are firmly riveted two parallel angle bars 15 and 15'. The inner bars 15 abut and are detachably connected by bolts 16 and nuts 17, while the outer bars 15' are riveted to angle bars 18, fitting between the bars 15' and the lower longitudinal angle bars 2 of the sides.

At each end of each of the bottom sec-

tions 13 and 14 is secured a transverse angle bar 19, and these bars are riveted to angle bar 12 fitting between the bars 19 and the lower angle bars 8 of the ends of the case.

Between the longitudinal angle bars 15 and 15' of the bottom sections are secured any desired number of supplemental transverse angle braces 21, which insure a very firm and rigid structure.

To the upper side of the floor or bottom of the case adjacent to the sides thereof I secure two parallel wooden strips 22 which serve as supports to which are secured chocks as hereinafter set forth. The wheels of the automobile are clamped and secured by chocks or fastenings 20 of any suitable character, but I prefer to employ wheel chocks of the construction shown in United States Letters Patent No. 833,454 granted to me under date of October 16, 1906. The wooden tracks or strips 22 are riveted to the bottom of the case, and as a further securing means therefor, I employ transverse rods 23 which extend through the strips and through the sides of the case and have their projecting end threaded for the reception of nuts 24. These rods in addition to securing the track-strips serve as supplemental transverse braces for the case. To further strengthen the bottom sections 13 and 14 two abutting angle plates 25 are secured to said sections centrally of their length, the vertical abutting portions of said plates being detachably connected by bolts and nuts.

The top or cover of the case consists of two sheet metal sections 26 and 27 to the inner edge of each of which is secured an angle bar 28. The horizontal portions of these bars are riveted to the sections 26 and 27 respectively, and their vertical abutting portions are detachably connected by bolts and nuts. The ends and sides of the top or cover sections overlap the upper angle bars of the sides and ends of the case, and are detachably connected thereto by bolts 29 and nuts 30.

To strengthen the edges of the cover sections 26 and 27 I provide metallic reinforcing strips 31 which are firmly riveted to the under surfaces of the sections along their edges.

To reinforce the case transversely a tie-rod 32 extends centrally across the same, the ends of said rod projecting through openings in the sides of the case, and being screw-threaded to receive securing nuts, 33.

To facilitate loading and unloading the case I employ at each end thereof a pair of eye-bolts 34, which extend through openings in the angle bars at the bottom of the case, and are secured by nuts 35. As shown the members of each pair of eye-bolts are disposed in overlapped parallel relation, and their eyes 36 are turned upward in conven-

ient position to be engaged by the hooks of hoisting ropes or chains. By extending these eye-bolts through both of the abutting angle bars 15 and 15' the securing nuts 35 of the eye-bolts draw the angle bars into close contact, and thus materially strengthen the case.

As the entire case is preferably made of steel, it affords a very strong, and practically indestructible structure, and the disposition and connection of the angle-bars are such as to insure a firm bracing of all parts of the case in all directions.

It will be apparent that the case may be readily "knocked down" and its parts stored away when not required for use; and a characteristic feature of the construction is, that the work of building up, or disconnecting the parts of the case is accomplished entirely from the outside of the case.

It will be understood that the improvement may be embodied in cases of varying dimensions to accommodate machines of different sizes. I therefore reserve the right to make all such variations and modifications in the details of construction of the improvement as may fall within the terms and scope of the following claims.

The various sections of the case when locked in position are constructed so as to form practically waterproof joints, but to avoid any possibility of water entering the case I interpose between the different joints or points of connection as at 37 waterproof paper. This paper is placed in position in strips of the width of the angle steel and completely overcomes any liability of water entering the case.

As will be apparent any number of sections and tie-rods desired may be utilized and I do not therefore desire to limit myself to the exact number of members in the construction shown and described.

In preparing an automobile for shipment in my improved sectional case, the bottom thereof is first put together, the wooden strips 22 securely riveted in place thereon, and the four chocks fastened to these wooden strips. The wheels of the automobile are then securely fastened in said chocks in the manner fully set forth in the above mentioned patent. The sides and ends of the case are then put together in the manner hereinafter indicated. After the tie rods 23 are secured in position, to further securely fasten the automobile against any possible movement in the case I secure a rope at one end of the tie-rods at each side of the bottom of the case as indicated at 39, and pass this rope over the axle of the automobile on the side opposite the fastening point of the rope and secure the other end of said rope to the opposite tie-rod as at 40. The top of the case is then securely fastened in position on the case with the automobile completely boxed

and secured against any possible movement when the case is ready for transportation with its contents.

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

1. A metallic case for automobiles comprising a floor or bottom, top, sides and ends, each consisting of detachable sections, track strips secured to said floor or bottom and extending substantially the length thereof and means secured to said track strips for receiving and securing in position the wheels of the automobile.

2. In a metallic shipping case for automobiles, the combination with a sectional floor or bottom, parallel track strips secured to said floor, parallel abutting angle bars depending from the abutting edges of said floor sections, eye-bolts arranged transversely of the floor or bottom and having their inner ends extending through said angle bars, and nuts on the ends of said

eye bolts which tend to hold said angle bars in close abutting contact.

3. In a metallic shipping case for automobiles, the combination with a sectional floor or bottom, of parallel abutting angle bars depending therefrom, eye bolts arranged transversely of said floor or bottom and extending through said angle bars, nuts secured on the ends of said eye bolts farthest from the eye portion, said bolts tending to hold said angle bars in close abutting contact, parallel track strips secured to said floor or bottom, and transverse brace rods passing through the walls of said case and through said track strips, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES F. FLEMMING.

Witnesses:

CHAS. E. RIORDAN,
E. L. WILLIAMS.