

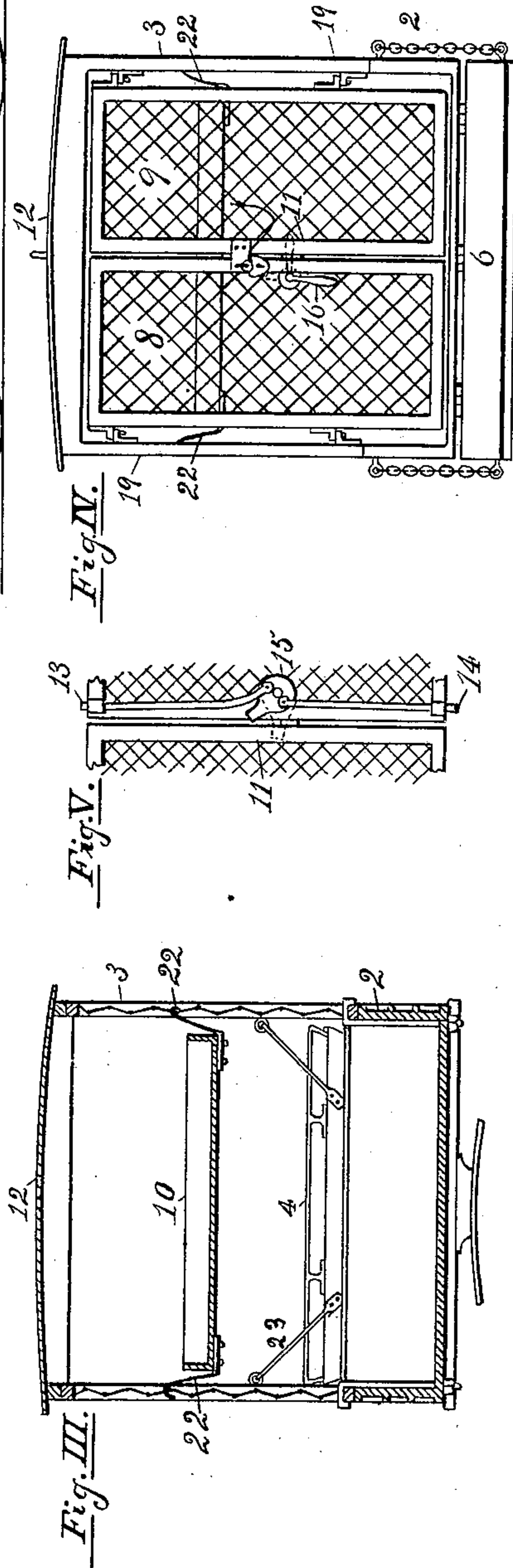
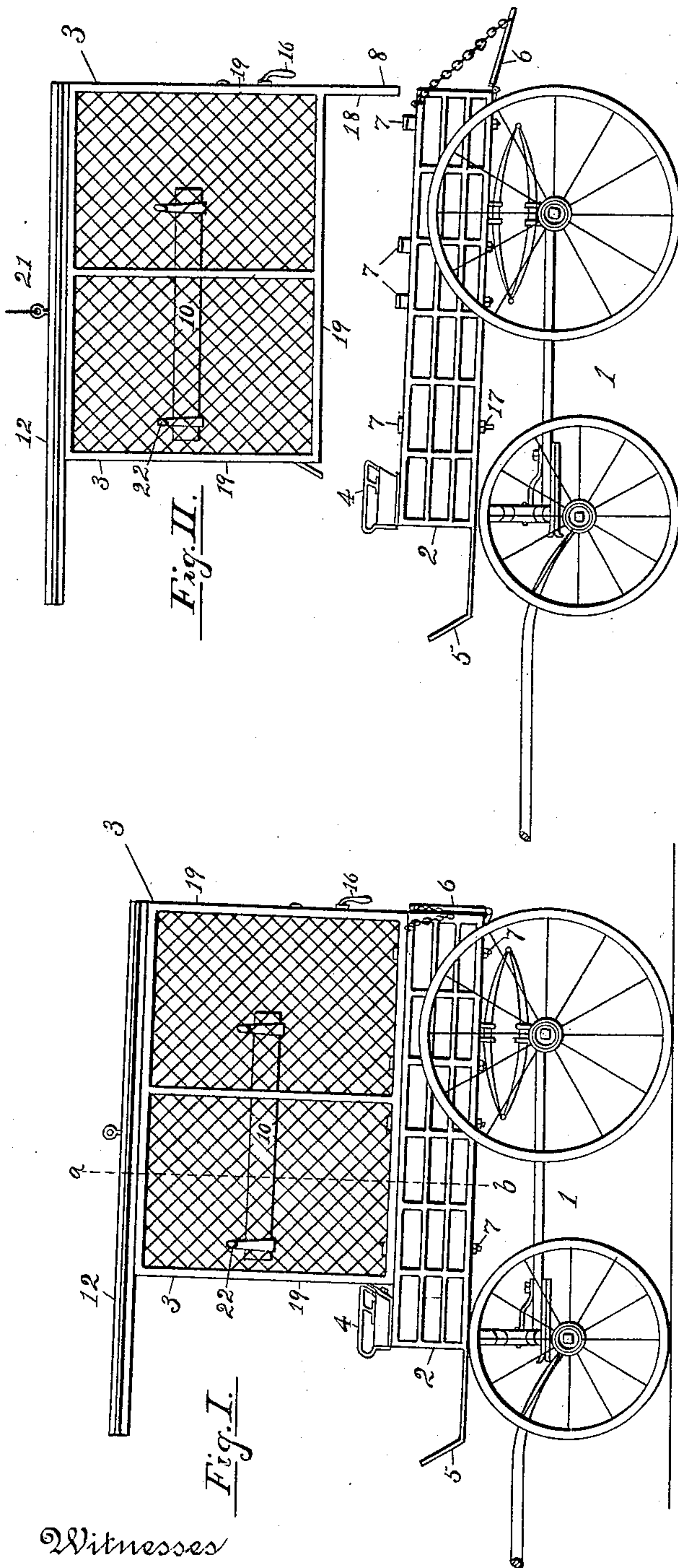
No. 607,120.

Patented July 12, 1898.

H. D. MORTON.  
EXPRESS WAGON.

(Application filed Dec. 9, 1897.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

HENRY D. MORTON, OF SAN FRANCISCO, CALIFORNIA.

## EXPRESS-WAGON.

SPECIFICATION forming part of Letters Patent No. 607,120, dated July 12, 1898.

Application filed December 9, 1897. Serial No. 661,303. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY D. MORTON, a citizen of the United States, residing at San Francisco, county of San Francisco, and State of California, have invented certain new and useful Improvements in Express - Wagons; and I hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to wagons for what is called "express service," consisting in the conveyance of goods and parcels, especially in cities, and to certain improvements in such wagons to render them more convenient, secure, and readily adaptable for different kinds of merchandise.

My improvements consist in constructing the bodies of such wagons in two parts—one part permanent and open for heavy goods and a top part for parcel service—readily separable, so that the wagon can in a few minutes' time be converted from an open to a closed one, and the reverse; also, in movable trays within the inclosed wagon-bodies that can be set at various heights, so that light parcels can be separated from the heavy ones to avoid injury and remain accessible for delivery; also, in providing the separable inclosed body with doors, so fastened that there will be no risk of leaving them open or unsecured.

The objects of my invention are to reduce the number of vehicles required for a particular service and to render them more convenient and safe against the purloinment of goods during transit and delivery. To these ends I construct express-wagon bodies as shown in the drawings herewith, in which—

Figure I is a side elevation of an express-wagon made according to my invention. Fig. II is a side view of the same wagon with the inclosed or parcels top removed. Fig. III is a section through the wagon-bodies on the line *ab* in Fig. I. Fig. IV is a rear end view of one of my improved wagon-bodies. Fig. V is a detail of Fig. IV, showing the door-fastening devices, looking from the inside.

Referring first to Figs. I and II, 1 is the running-gear, of the ordinary construction and not requiring description. 2 is the box or permanent portion of the wagon-body, and 3 the crate or removable portion. (Shown de-

tached in Fig. II.) 4 is the driver's seat, 5 a dashboard, and 6 the tail-board. (Shown extended in Fig. II.)

The open or box body 2, with the exception of the movable clamping - bolts 7, is of the usual form, made strong enough to carry ordinary merchandise of any kind that is heavy or bulky and may be exposed; but if the same wagon is required for lighter and more bulky goods or parcels then the wire crate 3, provided with doors 8 and 9, is set on top of the box-body 2, fastened by the bolts 7 and braces 23, and the wagon is thus converted to a closed one, as shown in Fig. I. As, however, this modification of the wagon does not meet all the requirements of express service I make further provision for light parcels, such as may be injured by pressure or handling, consisting of a movable tray 10. (Shown in section in Fig. III and in side view in Figs. I and II and to be hereinafter further described.)

The removable crate 3 I make, preferably, of metal, consisting of light frames 19, with panels of woven wire rigid enough to retain and protect ordinary parcels. On the top, when required for protection from the weather, I place a light cover 12, of wood, cloth, or any suitable material, extending at the front to cover the driver's seat 4.

At the rear end of the crate 3 I place the doors 8 and 9, the former provided on the inside with bolts 13 14, that lock the top and bottom and are operated by an eccentric 15, having a turning handle 16 outside of the door, as seen in Figs. IV and V. These doors 8 and 9 are hinged to the frame 19 of the crate 3 and extend below, as seen at 18 in Fig. II, so as to close the rear end of the box-body 2 when the tail-board 6 is let down to serve as a platform for conveniently loading and delivering goods from the crate. These doors are provided with fastenings, as before described, arranged in a manner that prevents the doors from being left open during transit. The door 8 is fastened by slide-bolts 13 14 on the inside, operated by an eccentric 15, as shown in Fig. V. The door 9 is fastened to the door 8 by a hasp to receive a lock or a pin, as shown in Fig. IV. When the door 8 is closed, but not bolted, the door 9 cannot be shut, because the handle 16 stands across and obstructs this door, as indicated by dotted



lines in Fig. IV. In this manner the door 9 cannot be closed until the one 8 is bolted. This guards against risk of leaving the doors unfastened, a thing likely to occur in the usual  
5 hurry of delivering parcels.

The crate-body when mounted sets on the top of the box-body 2 and is clamped by the bolts 7, that extend down through the bottom of the box-body 2 to receive screw-nuts, as  
10 seen in Figs. I and II. The clamp-bolts 7 besides holding this crate-body 3 act also as supports for the sides of the box-body 2 and when the crate is removed are screwed down firmly, as shown at 17 in Fig. II, giving sup-  
15 port to the sides of the box or open body for the heavier service when the open body 2 is in use. I provide also detachable brace-rods 23 to assist in sustaining the sides of the crate-body 3.

20 The tray 10 is a useful device for both convenience and safety in light-parcel service. The heavier merchandise is placed below and the lighter or more fragile parcels above in the tray, which not only protects them from  
25 damage, but facilitates their selection during delivery. This tray is held by hooks 22, that engage in the meshes of the wire panels at the side, and can be shifted upward or downward by springing these hooks inward to dis-  
30 engage them.

In conveying merchandise or parcels before reaching the district for delivery the tail-board 6 can be closed up against the doors 8 and 9, as seen in Fig. I, thus guarding against  
35 goods being purloined from the wagon.

The manner of operating is as follows: The wagons for a general express service are all made uniform, each arranged to receive the crates 3, which are also uniform and inter-  
40 changeable between the wagons, the number of which need not exceed what the actual business requires. When the wagons are sent out in the morning or at noon, they are either left open or supplied with the crate-tops 3, as  
45 the kind of service for the day or a part of the day may demand as nearly as can be ascertained. If the heavy-parcel service should be found to exceed what was expected and provided for, some of the wagons can be sent  
50 to the station and the crates 3 lifted off or where the ceiling is high enough can be raised

by slings, as indicated at 21 in Fig. II, and left suspended out of the way until again wanted. If, on the contrary, the light-parcel exceeds the heavy-parcel service, some of the  
55 open wagons can call at the station to receive the separable crate-bodies 3, thus permitting a more systematic and economical service with greater care and safety to the merchandise conveyed. If the crate-bodies 3 are too  
60 heavy for convenient handling, the doors 8 and 9, being hung on pintles, can be lifted off; so, also, can the covers 12, if made of material that adds much weight. I do not confine myself to a particular construction of the  
65 parts; but

I claim as my invention—

1. In an express-wagon, the open box-body 2, in combination with a removable crate-top 3, having roof 12 extended over the seat, rear  
70 swinging doors extending below the said crate, and means for attaching the said top to the body, substantially as specified.

2. The open box-body 2, in combination with a removable crate-top 3, adapted to set  
75 on and be secured to the said open body, said top being provided with hinged swinging doors at the rear which close not only the top but also the rear of said wagon-box, substantially as specified. 80

3. The open box-body 2, in combination with a removable crate-top 3, having woven-wire paneled sides and rear, and a movable goods-tray 10 adjustable at different heights within the top by means of hooks engaging  
85 with said paneled sides, substantially as specified.

4. In an express-wagon, an open box-body 2, a removable crate 3 adapted to fit thereon, the latter provided with doors 8 and 9, one  
90 door fastened by bolts, an eccentric and handle 16, that prevents closing the second door until the first one is bolted, substantially as described.

In testimony whereof I have hereunto af-  
95 fixed my signature in the presence of two witnesses.

HENRY D. MORTON.

Witnesses:

K. LOCKWOOD-NEVINS,

H. SANDERSON.