E. F. STECK.

FIRE LADDER TRUCK.

Patented Mar. 13, 1888. No. 379,424.

(No Model.)

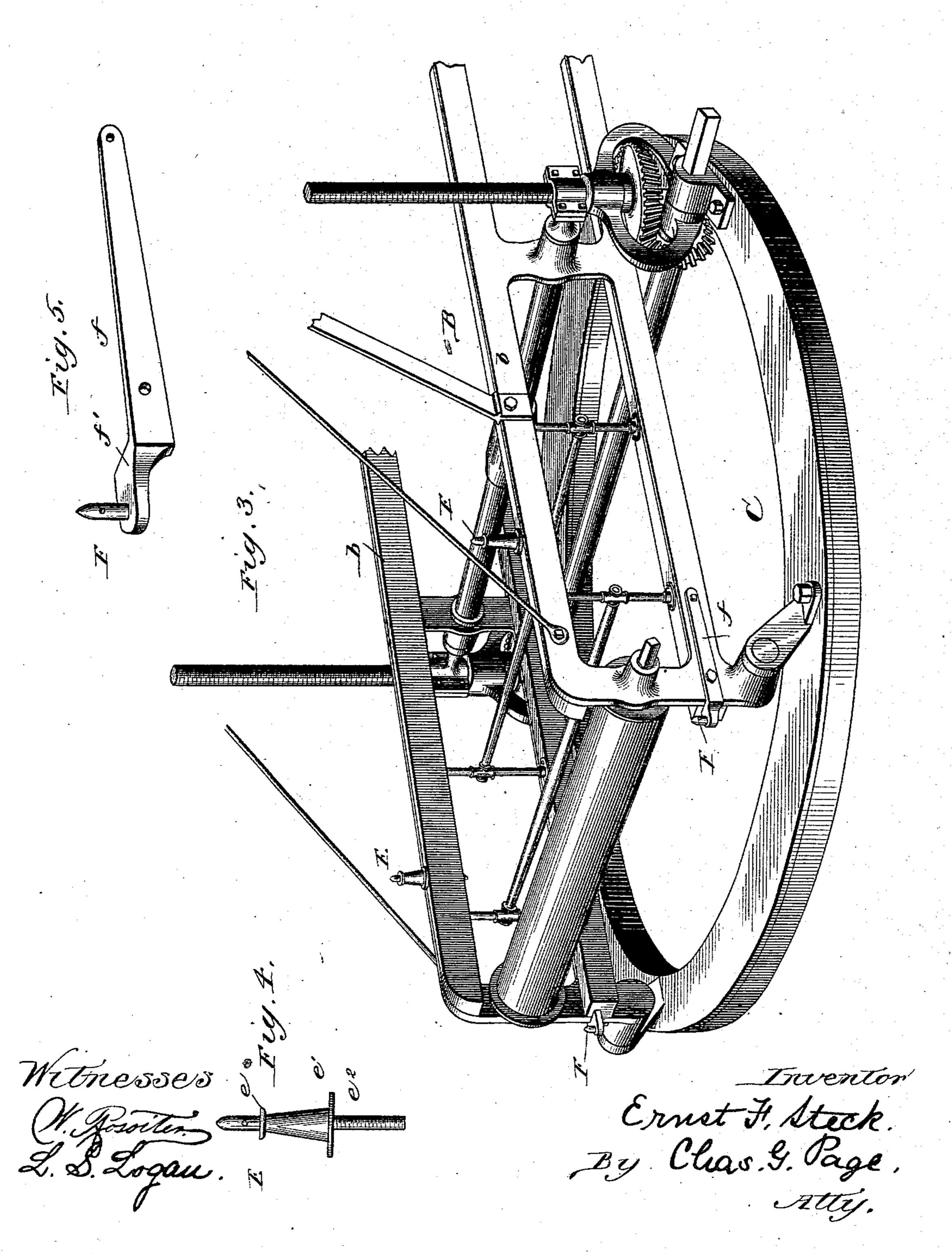
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United States Patent Office.

ERNST F. STECK, OF CHICAGO, ILLINOIS.

FIRE-LADDER TRUCK.

SPECIFICATION forming part of Letters Patent No. 379,424, dated March 13, 1888.

Application filed January 30, 1888. Serial No. 262,442. (No model.)

To all whom it may concern:

Be it known that I, ERNST F. STECK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have 5 invented a certain new and useful Improvement in Fire-Ladder Trucks, of which the fol-

lowing is a specification.

This invention relates to an improvement in ladder-trucks adapted for city fire-department ic service and involving the employment of a ladder that is at one end fulcrumed at the forward end of the truck, my said improvement being particularly applicable to a ladder-truck wherein an extension-ladder is arranged as in Letters Patent of the United States, No. 348, 594,

heretofore granted to me.

My invention is directed to the arrangement and manipulation of the driver's seat, and has for its objects to arrange the seat whereby it 20 may occupy a sufficiently elevated position at the forward end of the truck without an objectionable prolongation of the length of the truck beyond the point where the ladder is fulcrumed; to permit the seat when in position 25 for use to stand at the desired elevation without necessitating the employment of long seatsupports, which, to insure stability, must of necessity be increased in size and weight proportional to their length, (it being here ob-30 served that maximum strength with minimum weight is a most important end to be attained in the construction of large city fire-ladder trucks;) to so arrange the seat that upon arriving at the field of action the seat may with-35 out delay be removed, in order to allow the ladder to be freely raised, and also to permit such arrangement of the seat to allow the free movement of the turn-table; to provide simple and reliable means for holding the seat in po-40 sition for use, but permitting its ready removal, and to provide certain improved features of combination and details tending to the general efficiency of the ladder-truck.

To the attainment of the foregoing and other 45 useful ends, my invention consists in matters hereinafter described, and particularly pointed out in the claims.

In carrying out my invention I provide, in connection with the pivoted ladder, a driver's 50 seat, which is removably supported upon and over the pivoted end of the ladder when the

latter is in a recumbent or horizontal position, whereby when the ladder is down the seat can be supported upon and over the same, from which position, however, the seat can be read- 55 ily removed when it becomes desirable to raise the ladder.

In the drawings, Figure 1 represents, in side elevation, the forward end portion of a laddertruck with the pivoted ladder down and the 60 driver's seat supported thereon. Fig. 2 is a perspective view of the driver's seat removed. Fig. 3 is a perspective view of the pivoted end portion of the ladder fulcrumed upon the turntable, with a portion of the raising and lower- 65 ing mechanism, the driver's seat being understood to have been removed in order to allow the ladder to be raised. Figs. 4 and 5 are details of parts adapted for holding the seat in position for use.

In said drawings, A indicates the wheeled truck-frame, and B the ladder pivoted or fulcrumed at one end upon a turn-table, C, which is preferably present for reasons too well un-

derstood to require explanation.

D indicates the driver's seat, which, when the ladder is down—as in Fig. 1, for example can be supported upon and over the pivoted end portion of the ladder and there held in condition for use so long as the ladder remains 80

in its recumbent position.

As an extremely simple and efficient way of removably attaching the seat to the ladder, the latter is provided with studs or bolts, and the seat is provided with correspondingly-ar-85 ranged eyes for receiving the studs or bolts that are on the ladder, the studs in such case being preferably arranged so that when the ladder is in a recumbent position the studs shall all stand vertically. As a further fea- 90 ture of improvement in this connection, the seat is provided with front legs, d, which, when the seat is in position over the recumbent ladder, drop opposite the end of the same, in which way the forward end portion of the 9; ladder is to a considerable extent received within the angle between the bottom of the seat and its front legs. With such arrangement the seat is provided at its rear corners with eyes d' for receiving studs or bolts E, that 100 are secured to the sides of the ladder, the representation of one of such eyes at one rear cor-

ner, as in either Fig. 1 or 2, being sufficient to indicate the presence of a like eye on the

other rear corner.

The front legs, d, are provided with eyes d^2 5 for the reception of studs F, that are connected with but arranged to stand out a short distance from the end of the ladder. These studs are arranged so that when the ladder is in a recumbent or horizontal position they will 10 stand upright, the studs F for such purpose being provided upon the ends of angle-bars or cleats f, which, when bolted to the laddersides, fit the end corners thereof, so as to brace and steady the attachment. Where the con-15 struction of ladder is substantially the same as that shown in my said patent, the side bars, b, will rise to such height above the truck-frame or turn-table (when the ladder is down) as to avoid the necessity of long rear legs for the 20 driver's seat, and hence permit the seat to be brought close down to the ladder, it being observed that the studs E, which may also be regarded as short posts, provide for the seat a couple of rear legs, which, however, are sepa-25 rable from the seat and secured to the ladder, although they could be permanently secured to the seat and detachably attached to the ladder by locking devices such as shown in my

30 pivotally supported on the ladder. The foot-board D' is secured to the straight front legs of the seat, so that when the seat is lifted from the studs the foot-board will go

application No. 247,160, wherein the seat is

with the seat.

By the foregoing arrangement the length of studs E, which may be considered as the rear legs of the seat, is practically nominal, and hence light but strong supports are provided for the rear portion of the seat. The front 40 legs are of course somewhat longer; but such legs are utilized as hangers for the foot-board.

It will be obvious that the seat can be removed with ease and rapidity, and that since when in use the eyes d' and d^2 are in horizon-45 tal planes with the studs E and F, extending vertically up through said eyes, substantial

and reliable supporting media will be provided for the seat.

The short posts or studs E are suitably 50 bolted to the ladder and provided with shoulders e, forming seats for the rear eyes, d', of the seat, it being also observed that each stud or short post E is further provided with a second lower shoulder, e', which bears against 55 the ladder frame or side, so as to effectively steady the stud. The lower end portion, e^2 , of the stud or post can be threaded and passed down through the latter side, and a nut then applied to the lower terminal of such threaded 60 portion. The forward ends of the plates or bars f are adapted to provide seats f' for the eyes d^2 of the seat, Fig. 5 serving to illustrate one of such bars, with a stud, F, rising from a seat, f', at the forward end of the bar.

The foregoing arrangement of the seat upon 55 the latter also avoids the necessity for seatsupports rising from the truck-frame and standing in the way of the ladder when the turn-table is turned for the purpose of swinging round the ladder, and at the same time, 70 after the seat has been removed, the seat-engaging devices on the ladder will not interfere with the free raising of the ladder.

If desired, the studs or posts E and F can be provided with small holes, in which pins 75 can be inserted when the seat is in place, with such studs extending up through its several eyes, said small holes (indicated in Figs. 4 and 5) being of course arranged to lie above the eyes when the seat is in place, as shown.

What I claim as my invention is--

1. A fire-ladder truck having a ladder fulcrumed at its forward end and provided with a driver's seat, which said seat, when the ladder is in a recumbent position, stands sup- 85 ported from and over said fulcrumed end of the ladder, for the purpose set forth.

2. A fire-ladder truck having a ladder fulcrumed at its forward end and provided with a removable driver's seat, which said seat, 90 when the ladder is in a recumbent position, stands detachably supported upon said fulcrumed end of the ladder, for the purpose set

forth.

3. The combination, substantially as set 95 forth, of the ladder fulcrumed at one end, and the driver's seat with short seat-supports for supporting the rear portion of the seat from the ladder when the latter is in a recumbent position, front-seat legs arranged to stand in 100 front of the forward end of the recumbent ladder, and attaching devices for connecting the front-seat legs with the ladder, for the purpose set forth.

4. The combination, substantially as de- 105 scribed, with the ladder, provided at its fulcrumed end with studs E and F, of the driver's seat, provided at the rear with eyes for engaging the studs E, and having front legs provided with eyes for engaging the studs F, 110 said front-seat legs being arranged to stand opposite the forward end of the ladder when the ladder is in a recumbent position, for the purpose set forth.

5. The combination, with the ladder ful- 115 crumed at one end, of the seat D, having front legs d^2 , with a foot board secured thereto, and attaching devices, substantially as set forth, for removably attaching the seat to the ladder.

ERNST F. STECK.

Witnesses: L. S. Logan, CHAS. G. PAGE.