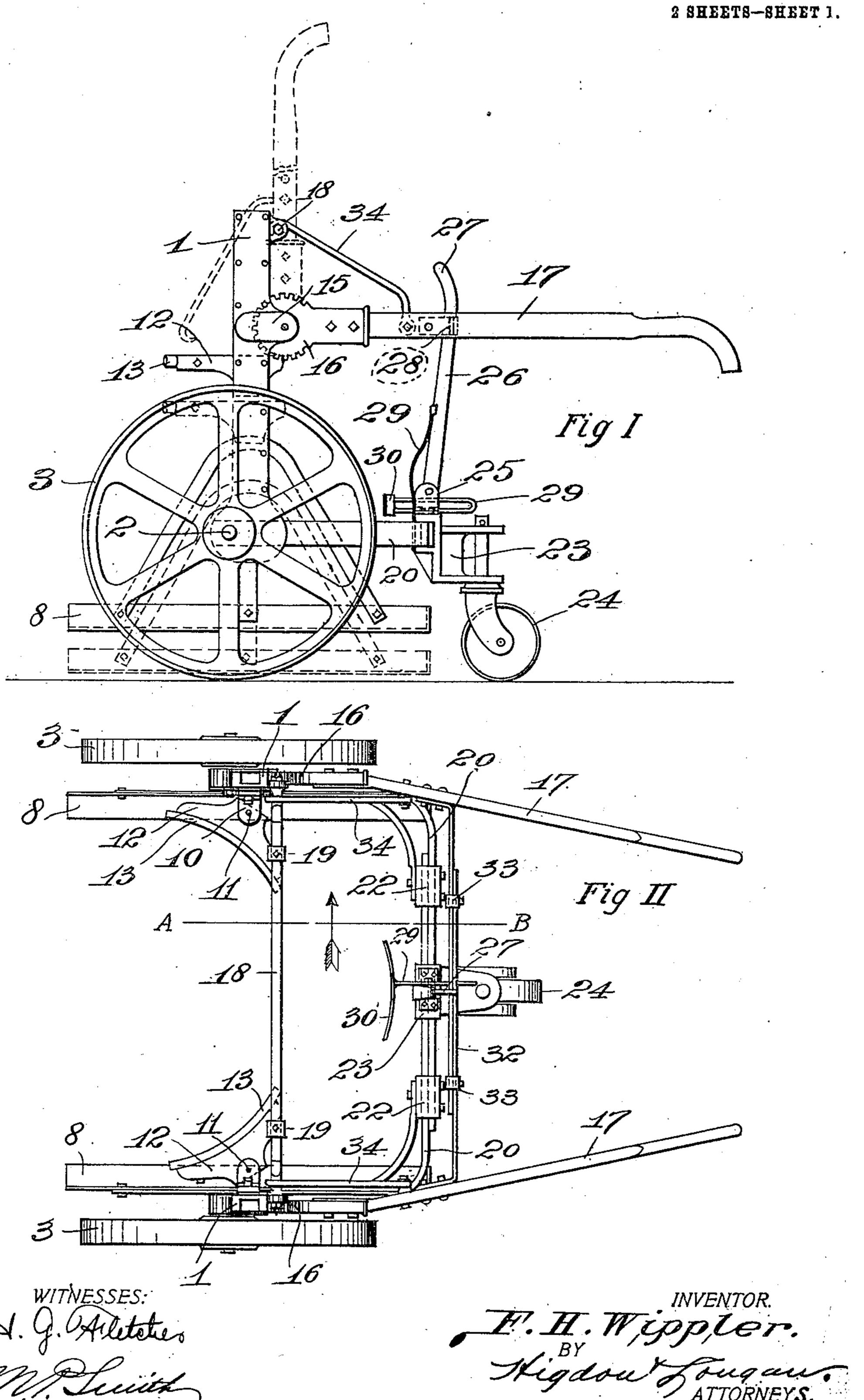
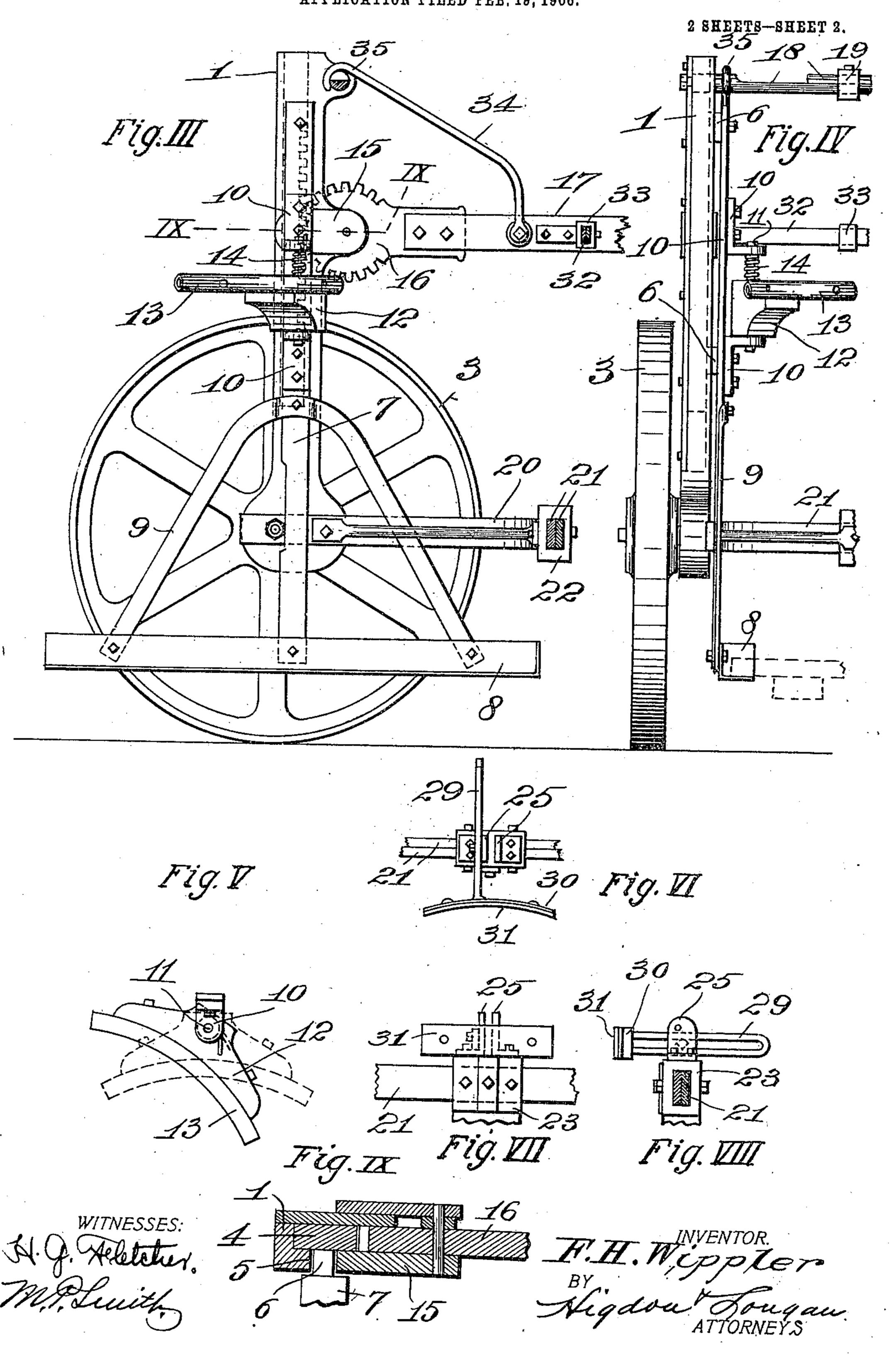
F. H. WIPPLER. SEWER PIPE TRUCK. APPLICATION FILED FEB. 19, 1906.



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UNITED STATES PATENT OFFICE.

FRIEDRICH H. WIPPLER, OF ST. LOUIS, MISSOURI.

SEWER-PIPE TRUCK.

No. 837,764.

Specification of Letters Patent.

Patented Dec. 4, 1906.

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Be it known that I, Friedrich H. Wippers, a citizen of the United States, and a resident of St. Louis, Missouri, have invented certain new and useful Impressed. Sewer-Pipe Trucks, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part 10 thereof.

My invention relates to a sewer-pipe truck; and the object of my invention is to construct a simple and easily-operated truck for conveying large sewer-pipe and the like from

15 one point to another.

In the manufacture of sewer-pipe the sections fresh from the press or former are comparatively soft, and therefore must be handled carefully to prevent their becoming 2c bent or out of shape before becoming thoroughly dried, and I propose to construct a truck particularly adapted for receiving and conveying larger sizes of sewer pipe or tile to and from the drying-room, and which truck 25 is so constructed as to do away with the necessity of manually engaging newly-formed pipe or tile.

My invention consists, briefly, of a pair of traction-wheels, a vertically-moving frame 30 adapted to engage and lift the platform on which the pipe or tile is positioned, a pair of push-handles for actuating the verticallymoving frame, a caster-wheel for supporting the rear of the truck while the same is being 35 pushed forward, and suitable devices for engaging the sides of the pipe when in position in the truck, which last-mentioned devices are removed when the truck is used for handling newly-formed pipe.

My invention further consists in certain novel features of construction and arrangement of parts, which will be hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in

45 which—

Figure I is a side elevation of my improved truck. Fig. II is a plan view of the truck. Fig. III is a vertical section, enlarged, taken on the line A B of Fig. II. Fig. IV is an end 50 elevation of the parts seen in Fig. III. Fig. V is a plan view of one of the pipe-engaging | clamps carried by the vertically-moving frame. Fig. VI is a plan view of a stop against which the rear side of the pipe en-55 gages when positioned in the truck. Fig. |

Referring by numerals to the accompanying drawings, 1 1 designate a pair of vertically-arranged hollow standards, the lower ends of which are widened slightly, and projecting outwardly from each standard in 65 front of a vertical line through the center of said standard is a trunnion 2, on which is journaled a traction-wheel 3.

Arranged for vertical movement in each hollow standard 1 is a rack-bar 4 and pro- 70 jecting through a vertically-arranged slot 5 in the inner wall of each standard and carried by said rack-bar 4 is a pair of lugs 6, to which is secured in any suitable manner a vertically-arranged bar 7, that extends below 75 the lower end of the adjacent hollow standard 1. Fixed to the lower end of each bar 7 is a longitudinally-extending angle-bar 8, the front and rear ends of which are supported by braces 9, that extend upwardly and are 80 rigidly secured to the corresponding bar 7. Fixed to the inner face of each bar 7 and projecting inwardly therefrom is a pair of angle-brackets 10, and removably positioned in each pair of brackets is a vertically-ar- 85 ranged shaft 11, on the lower portion of which is mounted a block 12, carrying on its forward face a curved tile-engaging clamp 13, of rubber or analogous material. A coilspring 14 is mounted upon each shaft 11, 90 above the block 12 thereon, and the lower end of said coil-spring is seated in the upper one of the brackets 10. The normal tendency of these coil-springs 14 is to swing the blocks 12 upon the shafts 11 forwardly into 95 the positions seen in Fig. II.

Pivotally mounted in bearings 15, which extend rearwardly from each hollow standard 1, is a segment 16, the teeth of which mesh with the corresponding rack-bar 4, and 100 fixed to and extending rearwardly from each

segment 16 is a handle 17.

Fixed in the upper ends of the hollow standards 1 are the outer ends of a pair of transversely-arranged rods 18, the inner por- 105 tions of which overlap one another and are adjustably held together by the clampingcollars 19. Fixed to the inner face of each hollow standard 1, at the lower end thereof, is the forward end of a rearwardly-extending 110 bar 20, and which bar is bent laterally, as in-VII is a front elevation of the stop seen in | dicated by 21, so as to extend across the

truck at the rear side thereof and overlap the corresponding end of the opposite bar 20. These overlapping ends 21 are adjustably held together by the clamps 22. Adjustably 5 held at the centers of the portions 21 of the bars 20 is a bracket 23, in the rear lower portion of which is arranged for operation a caster-wheel 24. Fixed on top of the bracket 23 is a pair of upwardly-projecting ears 25, ro between which is pivotally held the lower end of an upwardly-projecting lever 26, the upper end of which is curved forwardly, as indicated by 27, and there being a notch 28 formed in the rear side of said lever. A leaf-15 spring 29 is secured at its lower end to the bracket 23, and the upper end of said spring bears on the front face of the lever 26 and tends to push the same rearwardly. Adjustably held to one of the brackets 25 is a 20 slotted bar 29, the forward end of which carries a transversely-arranged curved centering-stop 30, the front face of which is faced with rubber or analogous material, as indicated by 31. Fixed to the handles 17 are 25 the outer ends of a pair of transversely-arranged bars 32, the inner ends of which overlap one another and are adjustably held together by the clamping-blocks 33. When the handles 17 are in normal positions, the 30 centers of these bars 32 occupy the notch 28, formed in the rear side of the lever 26. Handle-braces 34 are pivotally connected to the handles 17 and extend from thence forwardly and upwardly, and their forward ends are provided with hooks 35, which engage over the rods 18 adjacent the upper ends of the hollow standards 1.

The operation of my improved truck when carrying newly-formed pipe or tile is as fol-40 lows: When the truck is being utilized for handling the newly-formed pipe or tile, the clamps 13, carried by the blocks 12, are removed from the bars 7 in order that the upper portion of the soft pipe will not be 45 scratched or indented by coming in contact with said clamps. The truck is pushed, by means of the handle 17, into a position adjacent the platform on which a freshly-formed sewer-pipe is standing, and after the upper 50 end of the lever 26 is pushed forwardly a short distance to allow the cross-bars 32 to be disengaged from the notch 28 the rear ends of the handles are elevated to the positions seen by dotted lines in Fig. I, and con-55 sequently the segments 16 are rotated, and the rack-bars carrying the side bars 7 and the angle-bars 8 are moved downwardly, as shown by dotted lines in Fig. I. The horizontal portions of the angle-bars 8 are now in 60 a position very close to the floor, and when so positioned the truck is moved forwardly in such a manner that the horizontal portions of the angle-bars pass beneath the edges of the platform on which the sewer-pipe is lo-65 cated. The edges of the platform are ele-

vated slightly from the floor, owing to the arrangement of battens on their under sides. When the rear side of the pipe is engaged against the face of the centering-stop 30, the operator bears downwardly upon the rear 70 portions of the handles 17, and so moves the same until the cross-bars 32 travel around the curved upper end 27 of the lever 26 and reëngage in the notch 28. This action partially rotates the segments 16 and corre- 75 spondingly lifts the rack-bars 4 and the side frames carried thereby. Thus the anglebars 8, carrying the platform and the sewerpipe, are elevated, and the truck is pushed to the proper point, where the pipe on its plat- 80 form is unloaded by reversing the movements just described.

The width of the truck is varied by adjusting the various transversely-disposed rods 18 and bars 21 and 32.

When the truck is being used for handling pipe or tile after it has become dried or burned, the clamps 13 are repositioned upon the bars 7, and when a pipe or tile is arranged in the truck these clamps engage on the 90 sides of pipe or tile and yieldingly hold the same in proper position while being moved by the truck.

My improved truck is very easily operated while being raised and lowered and very 95 readily handles sewer pipe and tile of all sizes and is particularly applicable for moving newly-formed pipe and tile from the point where they are made to the dryingroom.

I claim—

1. In a sewer-pipe truck, a frame, traction-wheels supporting said frame, rack-bars arranged to move vertically in the sides of the frame, angle-bars carried by the lower 105 ends of the rack-bars, segments arranged in the frames and meshing with the rack-bars, operating-handles for the segments, overlapping cross-bars connecting said handles, a frame extending rearwardly from the lower 110 end of the first-mentioned frame, a casterwheel arranged at the rear end of said rearwardly-projecting frame, and a spring-actuated handle extending upwardly from said frame for engaging the overlapping cross- 115 bars of the handles; substantially as specified.

2. In a sewer-pipe truck, a pair of vertically-disposed hollow standards, tractionwheels journaled to the lower ends of said 122 standards, rack-bars arranged for vertical movement in the standards, angle-bars carried by the lower ends of the rack-bars, segments journaled in the hollow standards and meshing with the rack-bars, handles carried 125 by said segments, overlapping cross-bars connecting the handles, a frame projecting rearwardly from the lower end of the hollow standards, a caster-wheel carried by the rear end of said rearwardly-projecting frame, a 130

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spring-actuated handle projecting upwardly from said frame for engaging the overlapping cross-bars of the handles, and a centering-stop adjustably mounted on top of the rearwardly - projecting frame; substantially as specified.

In testimony whereof I have signed my

name to this specification in presence of two subscribing witnesses.

FRIEDRICH H. WIPPLER.

Witnesses:

M. P. Smith, John C. Higdon