

(No Model.)

F. W. HUBBARD.

ROAD SCRAPER.

No. 359,537.

Patented Mar. 15, 1887.

FIG. 1.

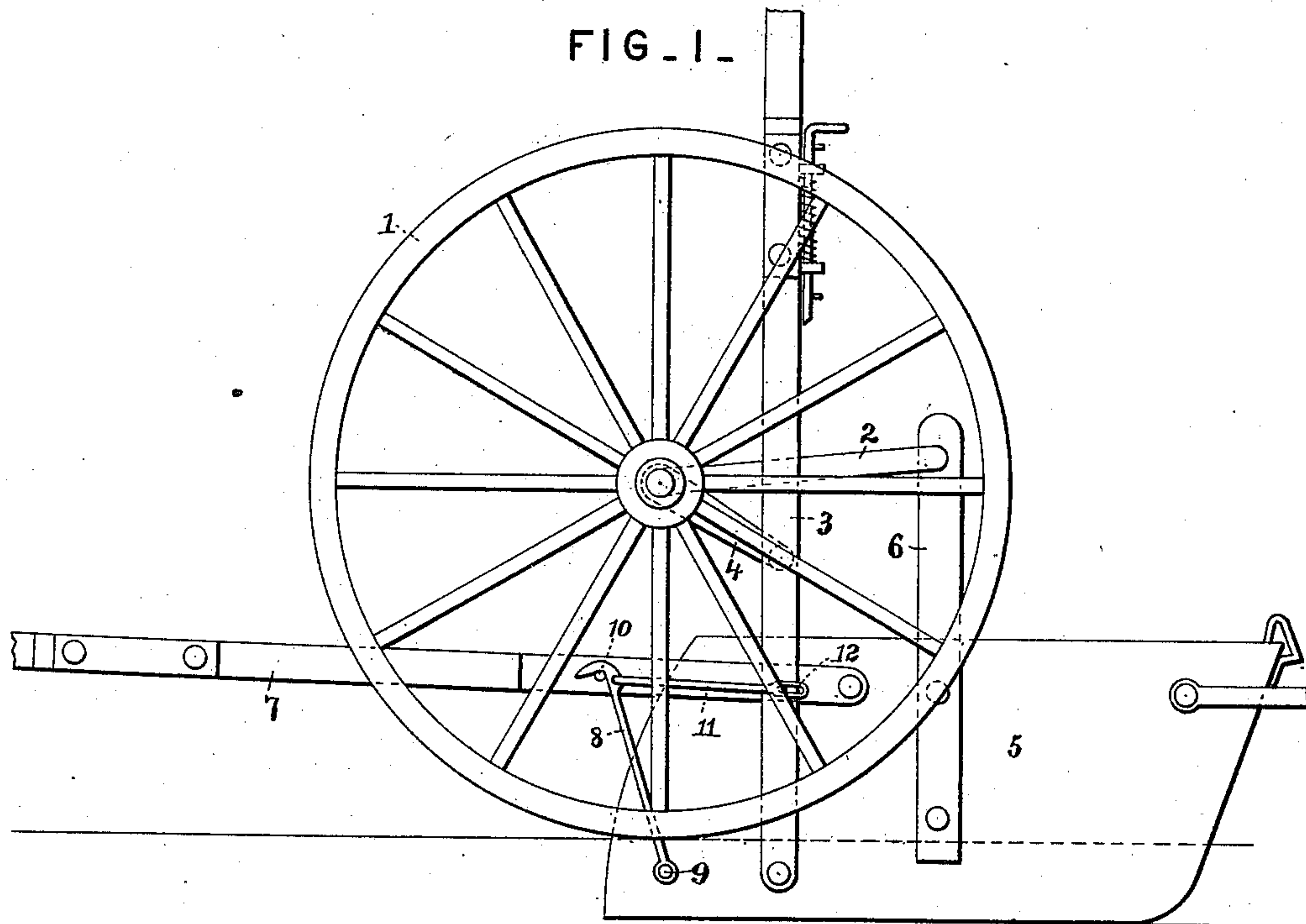
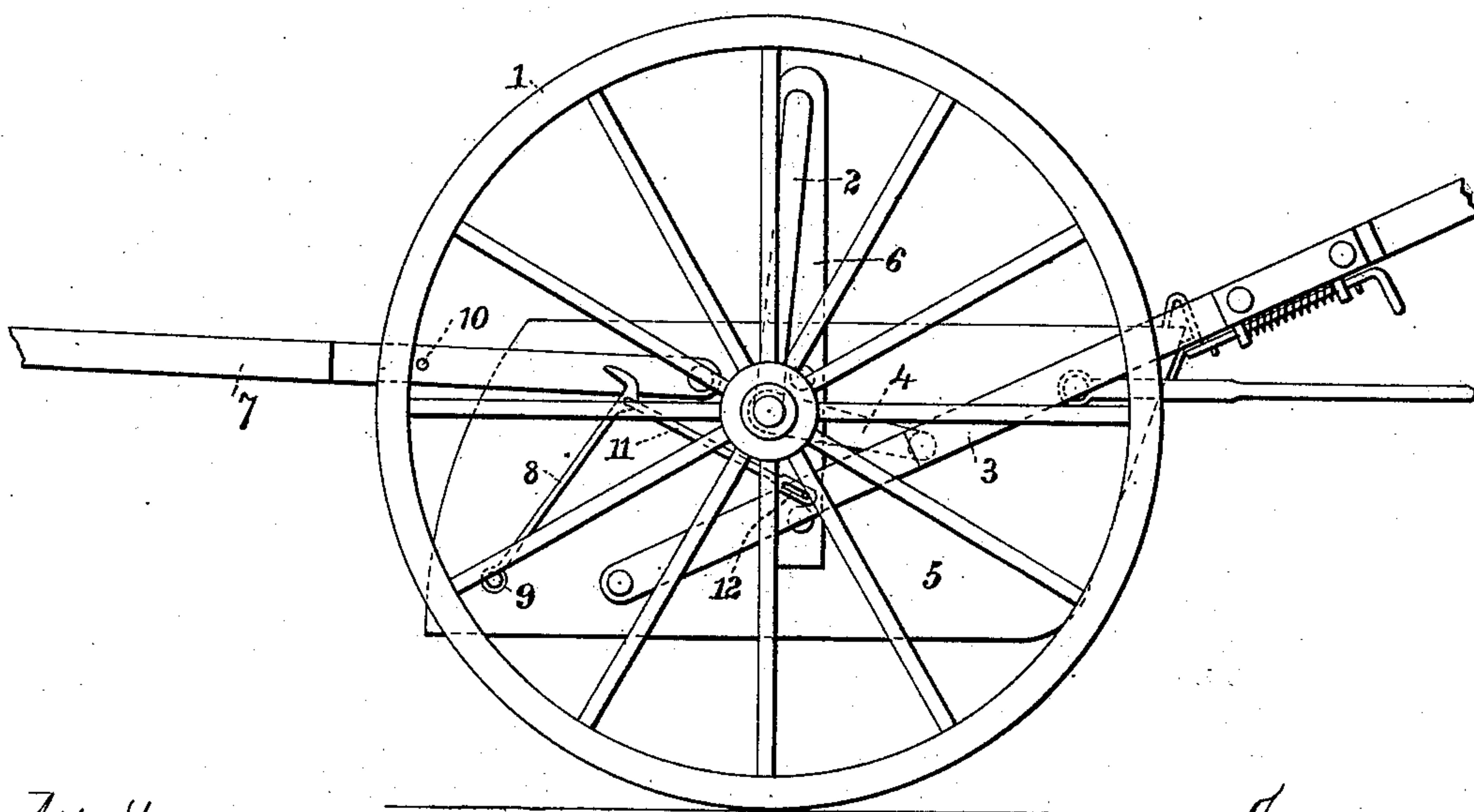


FIG. 11 -



Attest:

Geo. T. Smallwood.
F. A. Sturges.

Inventor:

Fred W. Hubbard
134 Knights Bros Attys

UNITED STATES PATENT OFFICE.

FRED W. HUBBARD, OF COLUMBUS, OHIO, ASSIGNOR TO THE KILBOURNE
& JACOBS MANUFACTURING COMPANY, OF SAME PLACE.

ROAD-SCRAPER.

SPECIFICATION forming part of Letters Patent No. 359,537, dated March 15, 1887.

Application filed September 13, 1886. Serial No. 213,420. (No model.)

To all whom it may concern:

Be it known that I, FRED W. HUBBARD, a citizen of the United States, residing at Columbus, county of Franklin, and State of Ohio, have invented certain new and useful Improvements in Road-Scrapers, of which the following is a specification.

My invention relates more especially to those wheeled scrapers or excavators in which the bowl is hung from a cranked axle, and is raised by the team and man loading, so as to be supported by the axle and clear of the ground by holding back the wheels through the medium of a suitable lever connected both to the bowl and the axle.

My invention has for its object to prevent the tilting of the bowl while being filled; and it consists of certain details of construction, which are more fully described by reference to the accompanying drawings.

In said drawings, Figure I is a side elevation of a road-scraper to which my invention is applied, the bowl being shown in position for filling. Fig. II is a similar view, the bowl being in carrying position.

The wheels 1, cranked axle 2, and lever 3, link 4, bowl 5, standards 6, and tongue 7 may be of the same general construction as shown in wheel-scrapers of this class. The difficulty of the construction shown in these scrapers, however, is that the bowl is apt to tilt and dump the earth while being filled. The point of attachment of the tongue-braces to the bowl being high up on the bowl, in order to make the dumping easy when in the position shown in Fig. II, will, it is readily seen, have a tendency to tilt the bowl when in position shown in Fig. I. This is especially apt to be the case should the nose of the bowl strike a rock or hard place in the ground. In order to prevent this evil, I provide a hook, 8, pivoted to the bowl at 9 near its nose and adapted to hook over a pin, bar, or projection, 10, on the tongue-braces.

11 is a rod pivotally connected both to the hook 8, near its upper end, and to the lever 3 at a point above the pivotal connection of the latter to the bowl. The effect of this arrangement is such that when the bowl is in loading position, as shown in Fig. I, and the lever is therefore raised to approximately vertical position, the hook 8 is thrown over the pin 10. This prevents the tilting of the bowl. When lever 3 is being thrown back to the po-

sition shown in Fig. II, in order to allow the team to raise the bowl to the carrying position, the hook 8 is disengaged from the pin 10 automatically, so as to present no further obstruction to the tilting of the bowl.

As here shown, the means of pivotal connection of rod 11 with lever 3 is by a slot, 12, on the rod and a pin carried by said lever projecting through said slot. It is plain that the slot and pin can be on the other end of the rod 11, or the latter can be used without slot in either end. The purpose of such a connection is to allow a slight movement of the lever 3 before the hook 8 is detached from its pin, so that there will be no danger of the tilting of the bowl before it is raised from the ground. It is apparent that the rod 11 can be connected to any part set in action by movement of the lever 3 instead of directly to the lever itself. For example, it can be connected with the link 4 or the axle 2.

I am aware that wheel-scrapers have been provided with a hook depending from and pivoted to the tongue-braces, with a stud or projection at the side of the bowl near the bottom, with which the hook engages when the lever-bar is raised, to which latter the hook is pivotally connected by means of a link; but this is quite different from my invention, in which the hook is pivoted to the bowl and engages a stud on the tongue-braces. This arrangement brings the hook clear of all obstructions which might tend to disengage it; also, when the scraper is dumped, the hooks, being elevated away above the ground, will not catch on the sod, roots, stumps, and other obstructions, which are liable to bend the hooks out of shape.

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

In a road-scraper, the combination of the bowl, axle, and wheels, and lever pivoted to the bowl for raising and lowering the latter, a hook pivoted to the bowl, a projection on the draft-braces wherewith the hook engages, and a rod connecting the hook with the lever at a point above the pivotal connection of the latter with the bowl, substantially as and for the purpose set forth.

FRED W. HUBBARD.

Witnesses:

F. F. HOFFMAN,
FRANK T. COLE.