## G. THATCHER. ROAD-SCRAPERS.

No. 194,386.

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Patented Aug. 21, 1877.

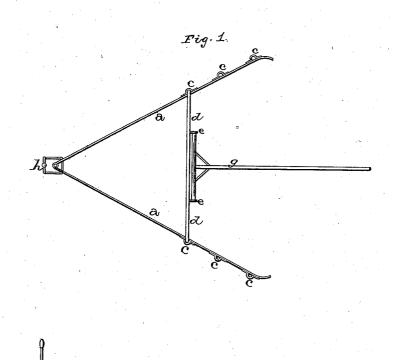
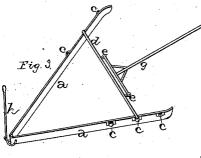


Fig. 2 LE DE a ¢Ш



INVENTOR. Ges. Thatcher, Jur J. a. Lehmann, Atty

WITNESSES

M.H. Keml

# UNITED STATES PATENT OFFICE.

# GEORGE THATCHER, OF MARLBOROUGH, NEW HAMPSHIRE.

### IMPROVEMENT IN ROAD-SCRAPERS.

Specification forming part of Letters Patent No. 194,386, dated August 21, 1877; application filed July 27, 1877.

#### To all whom it may concern:

Be it known that I, GEORGE THATCHER, of Marlborough, in the county of Cheshire and State of New Hampshire, have invented certain new and useful Improvements in Road-Scrapers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in road-scrapers; and it consists in hinging the two sides together at their rear ends, and adjusting the width of the front ends by means of the axle or spreader.

It also consists in a cam-lever which passes through the lower part of the hinged ends of the sides, for the purpose of raising the ends slightly above the ground to let all or a portion of the earth that has been gathered by the sides escape, all of which will be more fully described hereinafter.

Figure 1 is a plan view of my invention; Fig. 2, a side elevation of the same.

a represents the two sides of my scraper, made of any suitable material, and shod ou their lower edges with steel so as to enable them not only to cut through any obstruction, but to prevent them from being worn away too rapidly. These two sides are hinged or pivoted together at their rear ends so as to allow the front ends to be opened out to any desired distance, or, when the scraper is not in use, to be folded together so as to occupy but very little room. The front ends of the sides are slightly curved inward, as shown, and the lower front corners are rounded away so that the sides will readily mount over any slight obstruction they may encounter.

Upon the outside of each one of the sides a are made a number of sockets, c, into which the downwardly bent ends of the axle or evener d catch.

By moving the axle back to the rear pair of sockets, the sides will be opened to their greatest capacity, and by moving the axle forward to the front pair, the sides will be opened to their least capacity.

Extending forward from the front side of the axle or evener are the two ears or bearings e, in which the tongue g is pivoted. By this construction of parts, while the axle is held rigidly in position, the tongue is allowed free vertical play.

Passing through the lower edges of the pivoted ends of the two sides a is the hand-lever h, which is made wide and curving at its lower end, and serves as a cam to raise the two ends of the sides up a suitable distance above the ground, so as to let all or a portion of the dirt escape that has been gathered in between the two sides. In order to raise the ends upward, the operator has only to pull backward upon the upper end of the lever, and the lower curved portion, acting as a cam, will raise the sides upward sufficiently to let any desired amount of dirt escape upon any desired portion of the road.

Having thus described my invention, I claim-

1. The combination of the two sides a, binged together at their rear ends so as to retain the dirt, with the rigid axle d, hinged tongue g, and sockets c on the sides a, whereby the front ends of the sides may be opened and closed at will, substantially as shown.

2. The combination of the two sides, pivoted together at their rear ends, with the cam lever for raising the ends above the ground, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of July, 1877.

#### GEORGE THATCHER.

Witnesses: GEORGE G. DAVIS, ELIJAH BOYDEN.