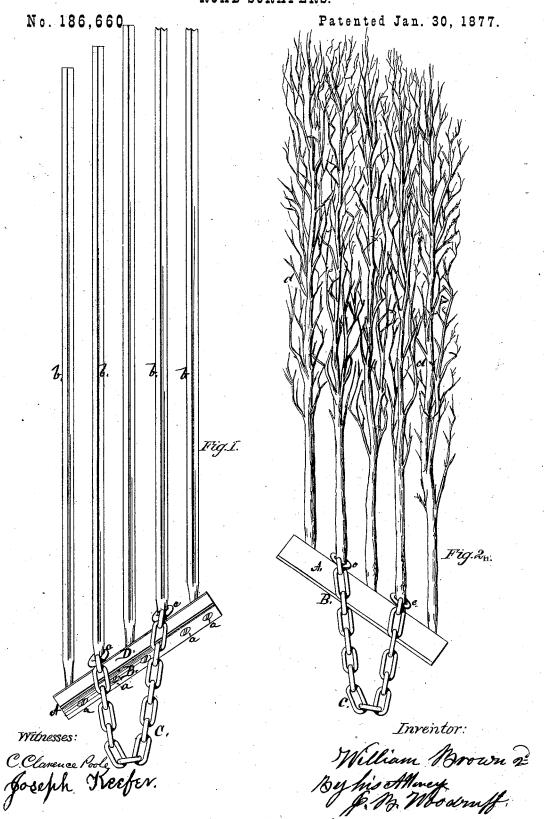
W. BROWN, 2d. ROAD SCRAPERS.



## UNITED STATES PATENT OFFICE.

WILLIAM BROWN, 2D, OF WINCHENDON, MASSACHUSETTS.

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Specification forming part of Letters Patent No. 186,660, dated January 30, 1877; application filed dated to the date of the d

To all whom it may concern:

Be it known that I, WILLIAM BROWN, 2d, of Winchendon, in the county of Worcester and State of Massachusetts, have invented a certain new and useful Improvement in Road-Scrapers; and the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a plan or top view of my improved road-scraper, showing a series of longitudinal guiding-bars extending back from the angular scraper-bar. Fig. 2 is a view of the scraper turned bottom side up, showing (white birch) poles with the brush on,

instead of the guiding-bars.

My invention consists in attaching to the rear of an angular scraper bar a series of one or more long guiding bars or poles, with or without the brush left on, by the action of which the scraper will retain its angle with the line of draft, so that the earth is inclined to be moved and deposited at the receding end of the scraper; also, by removing the top bar and turning the scraper bottom up, the earth may be leveled and smoothed off.

To enable others to make and use my invention, I will describe it more in detail, referring to the drawings and the letters marked

thereon.

The main portion of the scraper is made of a piece of timber, A, of any desired size and length, the front side of which is beveled off on an angle of about thirty-five degrees, on which is secured the steel plate or scraper-blade B, by a series of screws, a a, or holts.

blade B, by a series of screws, a a, or bolts.

In the rear side of the timber A are bored a series of holes, on an angle of about thirty-five degrees, or in such a manner as to give the desired inclination to the scraper, either right or left. The holes in the rear side of the timber A are made large enough to receive the ends of the series of guiding-bars b b—one or more, as may be desired. The guiding-bars b b should be about five times the length of the scraper-timber A, and run or extend back parallel with each other.

The scraper is drawn and operated by a chain, C, with a ring, c, on each end, sufficiently large to admit the ends of the guidingbars b b to pass through them.

On the top of the timber A, above the in-

clined scraper-blade B, a square piece of timber, D, is secured with dowel-pins, in such a manner that it can easily be removed when desired. The draft-chain C, resting upon it, holds it firmly in its place when hitched to the team, and helps to press the scraper down and steady it while operating, to incline the dirt to the receding end of the scraper, and deposit it on the bed of the road.

If desirable, in the place of the series of guiding bars b b, white birch staddles, or small trees of any suitable kind, may be used, either with or without the brush being left on, either of which—the bars b b or the brush d d, as seen in Fig. 2—will guide the angular scraper, and keep it in a direct line of the draft; and when a sufficient quantity of dirt or gravel has been deposited in place upon the road, the timber D on top of the timber A may be taken off, and the scraper turned bottom side up and drawn over the road, when it will effectually level off and brush the surface of the road smooth and uniform.

The advantages of my invention or improvement in angular road-scrapers is, that it dispenses with all wheels or handles, and requires no holding to keep the scraper in a line with the draft, works efficiently, can be made very cheaply, and answers the double purpose of a scraper to remove the dirt from the sides, and deposit it in the road-bed, and also a drag and brush to smooth down the surface.

What I claim as my invention is-

1. An angular road scraper and leveler, provided with a series of long guiding bars, poles, or brush, rigidly attached to the rear side of the scraper, in such a mauner that the scraper will retain its angle with the line of draft, when constructed as shown, and for the purpose herein set forth.

2. The removable timber D, from the scraper-timber A, constructed as shown, so that the scraper may be inverted to form a drag to smooth the road-surface, as and for the

purpose herein set forth.

In testimony whereof I hereunto subscribe my name.

WILLIAM BROWN, 2D.

Witnesses:

FRANK B. SPALTER, H. ALDRICH.