

(No Model.)

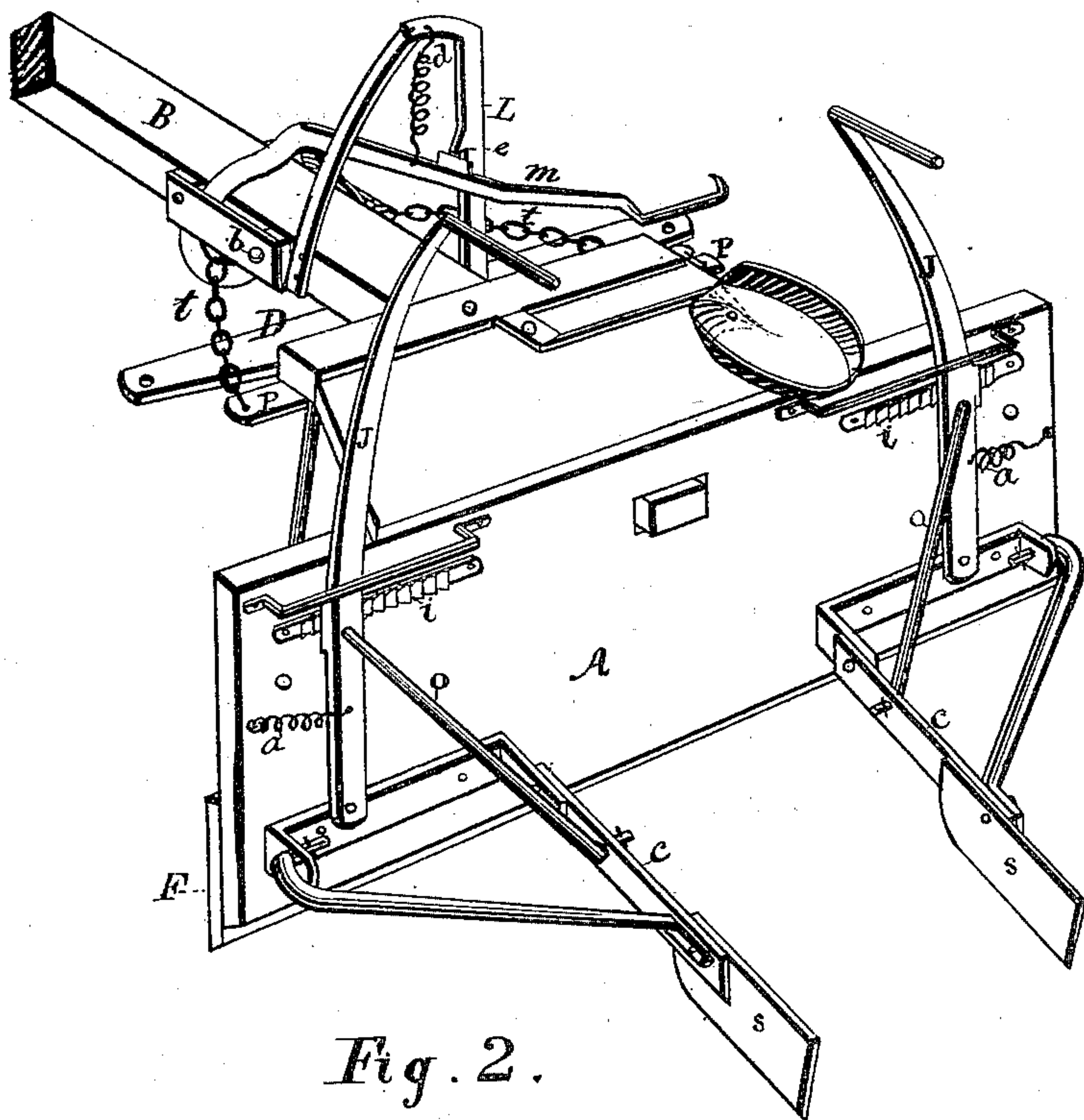
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ROAD SCRAPER.

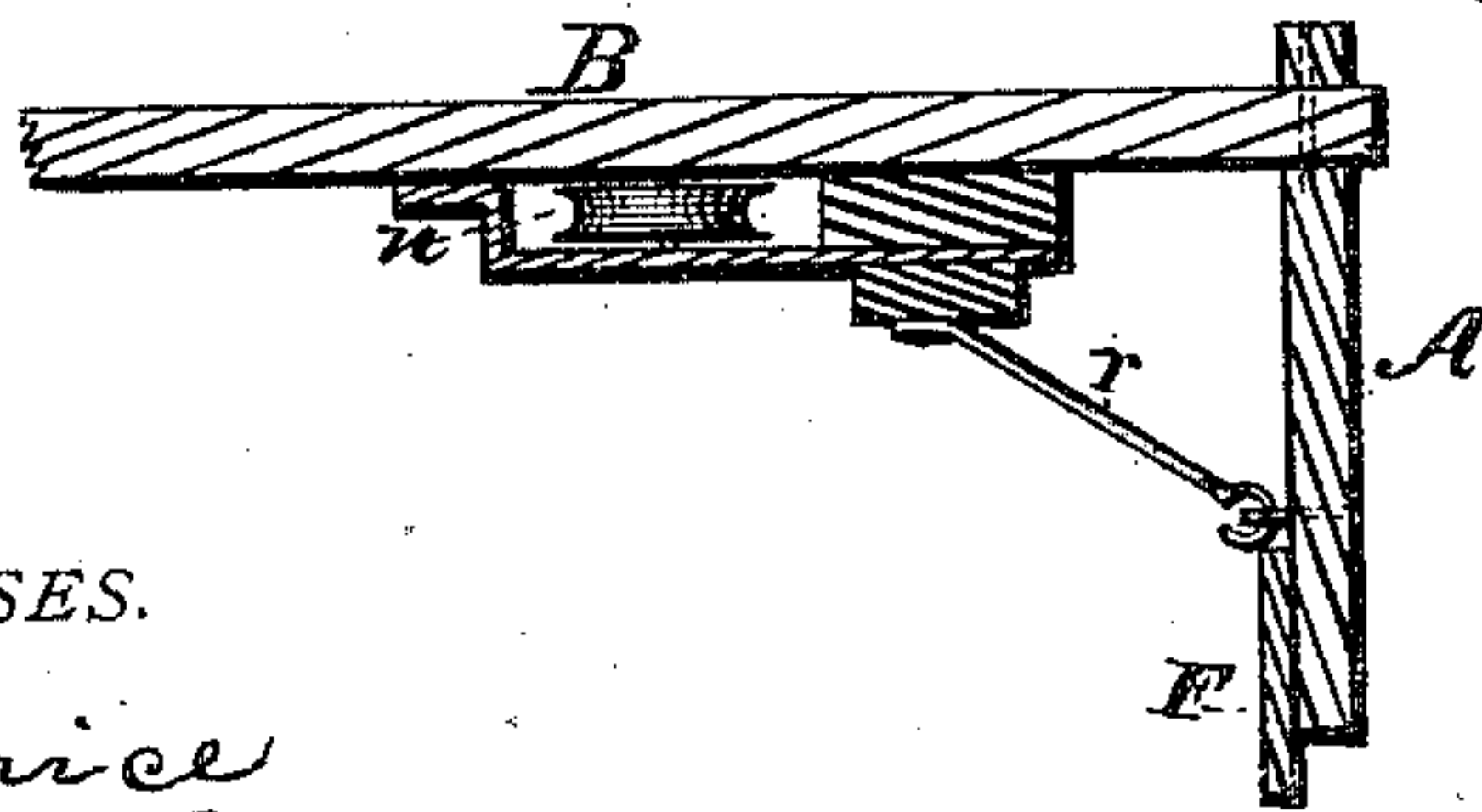
No. 283,835.

Patented Aug. 28, 1883.

*Fig. 1.*



*Fig. 2.*



WITNESSES.

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INVENTOR.

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# UNITED STATES PATENT OFFICE.

JOSIAH H. VORHES, OF FANDON, ILLINOIS.

## ROAD-SCRAPER.

SPECIFICATION forming part of Letters Patent No. 283,835, dated August 28, 1883.

Application filed May 18, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOSIAH H. VORHES, a resident of Fandon, in the county of McDonough and State of Illinois, have invented a new and useful Improvement in Road-Scrapers; and I do hereby declare that the following is a full, clear, and exact description of my invention, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view of my device. Fig. 2 is a section showing parts not appearing in Fig. 1.

The nature and object of this invention is to construct a road-scraper that will scrape a road smooth and make it level or any grade that may be required; and its novelty consists, first, in suitable devices so arranged that the tongue can be adjusted to any required angle, and held firm by means of a chain clamped to its under side by means of a lever; second, in adjustable rear guides, which guide the scraper and cause it to run straight; and also act as runners when the scraper is drawn across bridges or street-crossings.

In the drawings, A represents the scraper-head, at the lower edge of which a steel plate, F, is attached on the front side. On the rear side of the head the adjustable guide-frames *c c* are attached. These frames are pivoted to the head so that they can be raised or lowered at will by means of the levers *J J*, and held in any position by means of the ratchets *i i*. The frames *c c* have knives *s s* firmly attached to them. The tongue B is pivoted to the head A, and has attached to its under side a sheave-wheel, *n*, and draft-bar D. At each side of the tongue are attached plates *b b*. Between these plates and the tongue the forked lever *m* is attached. This lever is curved down so as to extend below the tongue, so that the chain *t* can pass around the sheave-wheel *n* and between the tongue and curved part of the lever, so that when the lever is pressed down until it catches in the notch *e* in the upright L it clamps the chain firm to the under side of the

tongue. The chain *t* is attached at P P to the frame part of the head A, so that when the chain is clamped to the tongue the head A and tongue are held rigidly together. By this means the tongue can be set to any angle required, and made as rigid as though it were framed solid to the head A. When the lever *m* is taken out of the notch *e*, it is held up by the spiral spring *d*, so that it will allow the tongue to move free and easy. The brace *r* is pivoted to the head A and firmly attached to the tongue, so that the draft is applied close to the lower edge of the scraper-head.

The operation is as follows: The tongue is placed at the required angle and clamped firmly by means of the chain *t* and lever *m*. The operator then takes his position in the seat, and when the team starts he takes hold of the levers *J J* and draws them inward, which, by means of the rods *o o*, presses the knives *s s* down sufficiently into the ground to guide the scraper and prevent it from slipping sidewise; and when a street-crossing or bridge is to be crossed the operator draws the levers *J J*, one at a time, until the head A is raised up sufficient to throw all the weight on the knives *s s*, which then act as runners until the bridge is crossed, when the levers *J J* are thrown out of the ratchets, and the springs *a a* hold up the frames *c c* off the ground, so that the scraper can be turned around.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The adjustable tongue B, having sheave-wheel *n*, attached lever *m*, upright L, having notch *e*, and spiral spring *a*, in combination with the chain *t*, substantially as shown and described, for the purpose set forth.

2. The frames *c c*, having knives *s s* attached, rods *o o*, levers *J J*, ratchets *i i*, and spiral springs *a a*, all operating jointly together, as and for the purpose set forth.

JOSIAH H. VORHES.

Witnesses:

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JOHN M. PRICE.