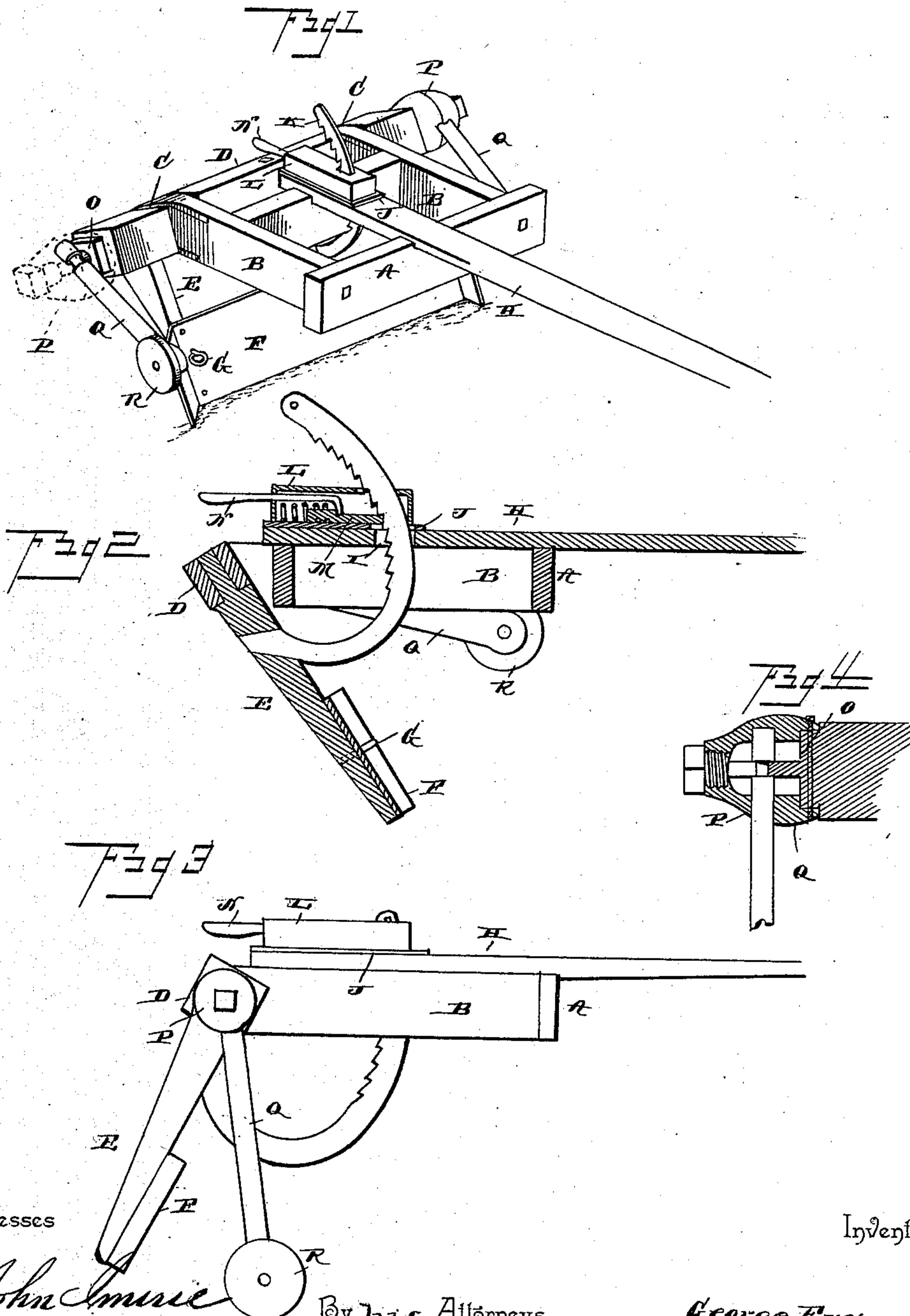


(No Model.)

G. FRY.  
ROAD SCRAPER.

No. 412,742.

Patented Oct. 15, 1889.



Witnesses

Inventor

*John Amie*  
*Wm. Bagger*

By his Attorneys,

*George Fry*  
*C. A. Snow & Co.*



# UNITED STATES PATENT OFFICE.

GEORGE FRY, OF PHOENIX, ARIZONA TERRITORY.

## ROAD-SCRAPER.

SPECIFICATION forming part of Letters Patent No. 412,742, dated October 15, 1889.

Application filed June 28, 1889. Serial No. 315,872. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE FRY, a citizen of the United States, residing at Phoenix, in the county of Maricopa and Territory of Arizona, have invented a new and useful Road-Scraper, of which the following is a specification.

This invention relates to road-scrapers and land-levelers; and it has for its object to produce a machine of this class which shall possess superior advantages in point of simplicity, durability, and general efficiency, by means of which the dirt may be conveniently conveyed to any place where it shall be desired to dump it, and which shall be so constructed as to be capable of dumping the entire load of dirt either simultaneously at a single operation or gradually, so as to scatter it over considerable surface.

With these ends in view the invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a perspective view of my improved scraper and leveling machine. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a side view showing the machine in position for dumping the load and for traveling over the road. Fig. 4 is a detail sectional view.

The same letters refer to the same parts in all the figures.

A designates a suitably-constructed rectangular frame, the side bars of which B B are provided at their rear ends with bearings C for a transverse frame-bar D. The latter is provided with downwardly and forwardly extending standards E E, to the front sides of which is attached the scraping-blade F, the ends of which may be slightly curved in a forward direction.

G G are eyebolts for the attachment of the draft, which extend horizontally through the scraping-blade F and through the end standards E E.

Suitably attached to the frame A, centrally in front of the frame-bar D, is the tongue H, which is provided at its rear end with a slot I, over which is arranged a longitudinally-slotted plate J.

K designates a segmental ratchet-bar, which

is firmly attached to the central standard, and which extends forwardly and upwardly through the slot I and the slotted plate J. The latter is constructed with a casing L, in which is arranged a spring-actuated latch M, engaging the ratchet-bar K and provided with a rearwardly-extending handle N, by means of which it may be drawn against the tension of the spring, so as to disengage it from the ratchet-bar K whenever desired.

The ends of the frame-bar D are provided with square projections O O, upon which are mounted the hubs or collars P P, having downwardly and forwardly extending arms Q, at the lower or outer ends of which are mounted the caster-wheels R, which support the machine after it has discharged its load, so as to enable it to travel conveniently over the road or in any desired direction.

In operation the draft may be attached to the eyebolts G G, and the tongue is provided with a neck-yoke of ordinary construction, which enables the machine to be backed. When the standards of the frame-bar G are swung in a forward and upward direction, the spring-latch will engage the ratchet-bar, so as to retain the said frame-bar with its attachments in the position to which it has been adjusted, thus holding the machine in position for accumulating a load. This is done in the usual manner by driving the machine over the surface of the ground which is to be graded. When this has been done, the load will be dragged to the place where it shall be desired to dump or discharge it. The handle of the spring-latch may now be operated so as to disengage the said latch from the ratchet-bar, thus permitting the frame-bar D, with its attachments, to swing rearwardly in its bearings and dump or discharge the load. It is obvious that by properly manipulating the spring-latch it may be caused again to engage the ratchet-bar after a small portion of the load has been discharged, thus enabling the load to be discharged gradually and in such a manner as to cover a considerable surface. When the entire load is discharged, the standards E will have swung back sufficiently to swing the scraping-blade clear of the ground, and the machine is now supported upon the wheels or casters R, the arms Q of which extend forwardly from the frame-bar



D at an angle to the standards E. The ratchet-bar K is provided at its upper end with a transverse pin S, which forms a stop to prevent the said rack-bar from escaping 5 through the slot in the tongue.

The operation and advantages of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed. The construction is simple and inexpensive and the machine may be easily operated and manipulated. 10

The transverse frame-bar of the machine may be provided with suitable handles, by means of which the machine may be guided in operation when necessary. 15

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

20 1. The combination of the frame, the transverse frame-bar journaled in suitable bearings at the rear end of said frame, the standards extending downwardly from said frame-bar, the scraper attached to said standards, 25 and the arms extending forwardly from said frame-bar at an angle to the standards and having wheels or rollers at their outer ends, substantially as set forth.

2. The combination of the frame, the transverse frame-bar journaled at the rear end of the same, the tongue attached to and extending forwardly from the frame, the standards extending downwardly from the transverse frame-bar and carrying the scraping-blade, 35 the segmental ratchet-bar attached to one of said standards and extending upwardly through a slot in the tongue, and a spring-latch engaging said ratchet-bar, substantially as set forth.

40 3. The combination of the frame, the transverse frame-bar journaled at the rear end of

the same and having squared ends or extensions, the hubs or collars mounted upon said extensions, the forwardly-extending arms fixed in said collars, and the wheels or rollers 45 at the outer ends of said arms, substantially as set forth.

4. The combination of the frame having the forwardly-extending tongue, the transverse frame-bar journaled at the rear end of said frame and having downwardly-extending standards, the scraper secured to the lower ends of said standards, the eyebolts passing through said standards and scraper for the attachment of the draft, the collars 55 mounted upon square projections at the ends of the transverse frame-bar, and arms fixed in said collars, extending downwardly and forwardly at an angle to the standards, and having wheels or rollers at their outer ends, 60 substantially as set forth.

5. In a scraping and leveling machine, the combination of a frame, a tongue extending forwardly from the same, a transverse bar journaled at the rear end of said frame and 65 having downwardly-extending standards carrying the scraping-blade, a ratchet-bar extending from one of the standards through a slot in the rear end of the tongue, a spring-latch engaging said ratchet-bar, and arms 70 extending forwardly from the transverse frame-bar at an angle to the standards and provided with wheels or rollers at their outer ends, substantially as set forth.

In testimony that I claim the foregoing as 75 my own I have hereto affixed my signature in presence of two witnesses.

GEORGE FRY.

Witnesses:

CHARLES W. HACKETT,  
V. J. SCHIFF.