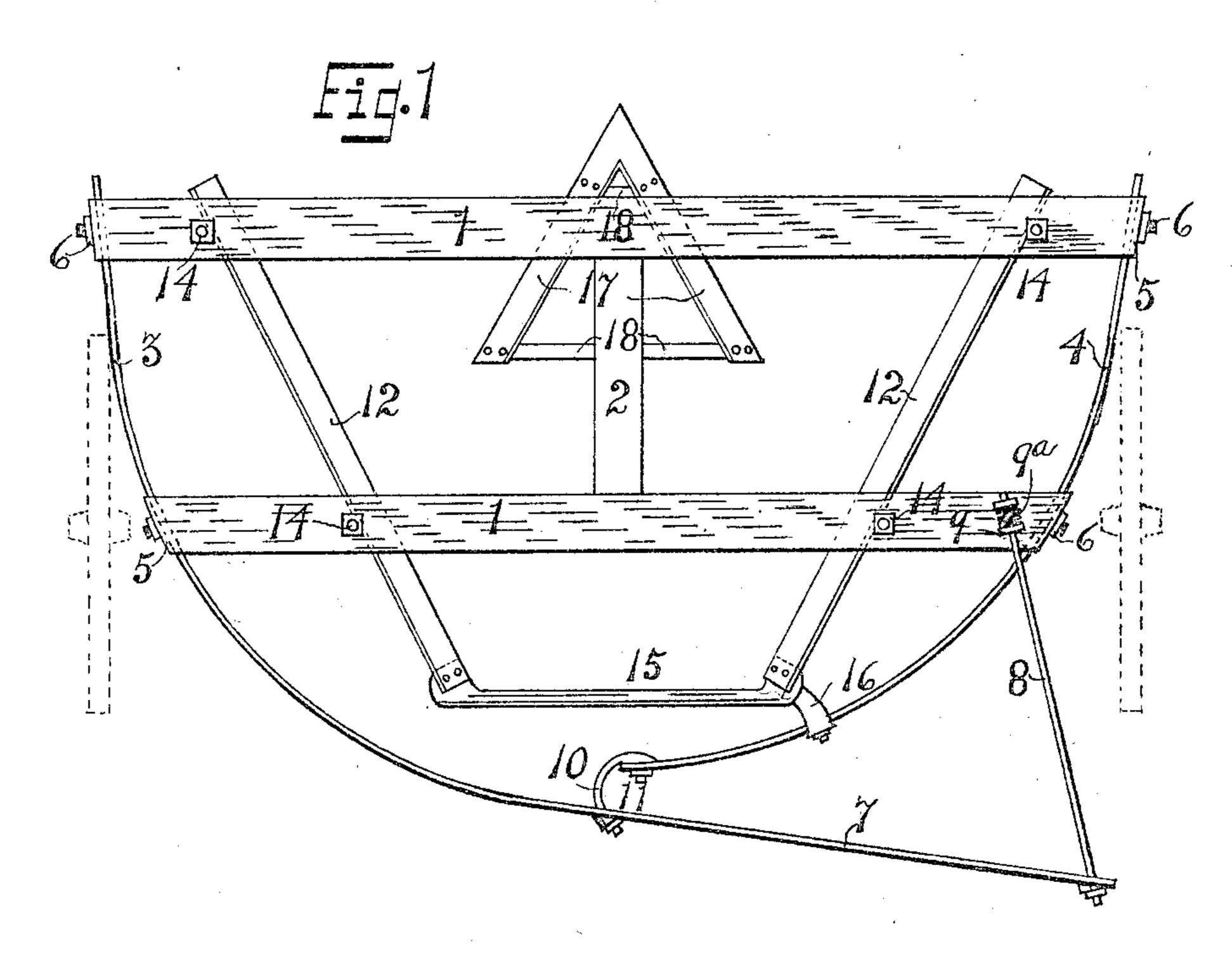
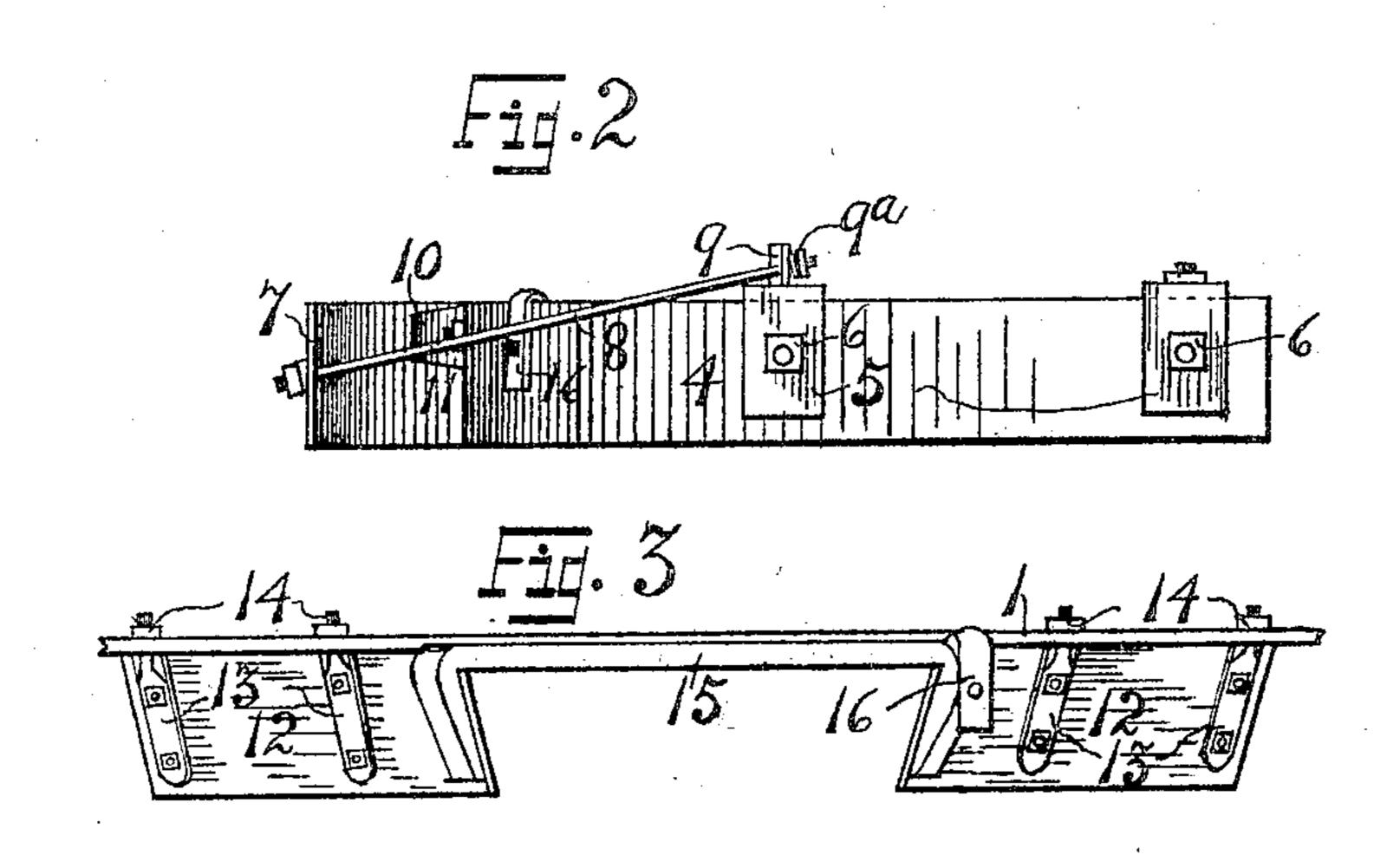
## S. RANDALL. SCRAPER BLADE FOR ROAD MAKING MACHINES. APPLICATION FILED MAY 13, 1905.





WITNESSES:

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BY

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## UNITED STATES PATENT OFFICE.

STEPHEN RANDALL, OF RUSSELL, IOWA.

## SCRAPER-BLADE FOR ROAD-MAKING MACHINES.

No. 807,495.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Application filed May 13, 1905. Serial No. 260,287.

To all whom it may concern:

Be it known that I, Stephen Randall, a citizen of the United States, residing at Russell, in the county of Lucas and State of Iowa, have invented new and useful Improvements in Scraper-Blades for Road-Making Machines, of which the following is a specification.

My invention relates to improvements in scraper - blades for road - making machines; and the primary object of this invention is to produce a generally improved device of this class which will be exceedingly simple in construction, cheap of manufacture, and efficient in use and which will be better suited to its intended purposes than any other device of the same class with which I am acquainted.

The invention is designed to be mounted in any suitable manner beneath the frame of any ordinary "wheeled scraper" and is especially adapted to be used in connection with my "road-making machine" patented February 14, 1905, No. 782,270, as a substitute and an improvement on the "scraper-blade" therein shown and described.

With these ends in view the invention consists in the novel construction, arrangement, and combination of parts hereinafter described, illustrated in the accompanying drawings, and particularly pointed out in the

appended claims.

Referring now to the accompanying drawings, forming a part of this specification, Figure 1 is a top plan view of my improved scraper-blades with attached supporting beams or frame. Fig. 2 is a side elevation of the same. Fig. 3 is a rear view of two of the inwardly and rearwardly extending cutting-blades.

In the drawings, 1 designates supporting-beams disposed transversely and connected intermediate their ends by means of a beam 2. These beams are preferably constructed of steel and are designed to connect and support the scraper-blades, hereinafter described, in proper position.

3 and 4 designate, respectively, side cutting-blades secured to the downturned ends 5 of the supporting-beams 1 by means of the

50 bolts 6.

7 designates a rearwardly and outwardly extending portion of the side cutting-blade 3, designed to convey the loose dirt or earth to the right-hand side of the cutting-blades.

8 designates a draft-rod secured to the outer end of said outwardly-extending por-

tion 7 and secured to the supporting-beam 1 by means of a bracket 9. This draft-rod 8 may be yieldingly secured or cushioned to the bracket 9 by means of a coil-spring 9<sup>a</sup>, as 60 shown, if found necessary or desirable.

10 designates a brace-arm connecting the inner end of the side cutting-blade 4 to the rear of the cutting-blade 3, designed to support these parts in proper position and form 65 a recess 11, through which the loose dirt or earth passes to and along the rearwardly and outwardly extending portion 7, hereinbefore referred to.

12 designates a pair of inclined inwardly 70 and rearwardly extending cutting-blades or scrapers mounted within the side cutting-blades 3 and 4 and secured to the supporting-beams 1 by means of supporting-arms or braces 13, provided at their upper ends with 75 bolts and nuts 14.

15 designates a brace-arm secured at the rear ends of the inclined cutting-blades or scrapers 12 and provided with a short outwardly and rearwardly extending support- 80 ing-arm 16, designed to take over and be secured to the rear side of the side cutting-blade 4.

17 designates a second set or pair of inclined cutting-blades or scrapers mounted 85 intermediate the front ends of said cutting-blades or scrapers 12 and secured to the front supporting-beam 1 and the beam 2 by means of brace-arms 18.

It will be seen that the inclined cutting- 90 blades or scrapers 17 extend outwardly and rearwardly in A-shape at the front end and are designed to cut the earth intermediate the cutting-blades or scrapers 12 and which would not be touched by them.

The wheels of the machine (indicated by dotted lines in Fig. 1) should be so mounted as to travel upon the ground from which earth has been scraped by the front ends of the side cutting-blades 3 and 4.

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Having thus described my invention, without having attempted to set forth all the forms in which it may be made or all the modes of its use, I declare that what I claim, and desire to secure by Letters Patent, is— 105

1. A scraper, consisting of supporting-beams disposed transversely and connected by means of a beam, a pair of side cutting-blades suitably secured thereto, a pair of inclined inwardly and rearwardly extending 110 cutting-blades mounted within said side cutting-blades and secured to said beams, and a

pair of inclined outwardly and rearwardly extending cutting-blades secured to said beams intermediate the front ends of said cutting-blades.

beams, side cutting-blades suitably secured thereto and providing a recess at their rear and a rearwardly and outwardly extending portion, inwardly and rearwardly extending cutting-blades suitably secured to said beams, and A-shaped cutting-blades secured to one of said beams intermediate the end thereof.

3. A scraper, consisting of supporting-beams, side cutting-blades suitably secured thereto and provided at their rear with a rearwardly and outwardly extending portion, a pair of cutting-blades mounted within said side cutting-blades and suitably secured to said supporting-beams, and a pair of cutting-blades suitably secured intermediate

the front ends of said last-mentioned cuttingblades.

4. In a scraper, the combination with supporting-beams, and side cutting-blades suitably secured thereto and provided at their 25 rear with a recess and a rearwardly and outwardly extending portion; of a pair of inwardly and rearwardly extending cutting-blades suitably secured to said supporting-beams within said side cutting-blades and 30 adapted to convey material to said recess and rearwardly and outwardly extending portion.

In testimony whereof I have affixed my signature in presence of two subscribing wit- 35

nesses.

STEPHEN RANDALL.

Witnesses:

P. F. PLYMOTE, W. A. PLYMOTE.