2 Sheets—Sheet 1.

G. W. EVANS.

Portable Pitch-Kettle for Roofing and Paving Purposes.

No. 207,647. **Patented Sept. 3, 1878.**

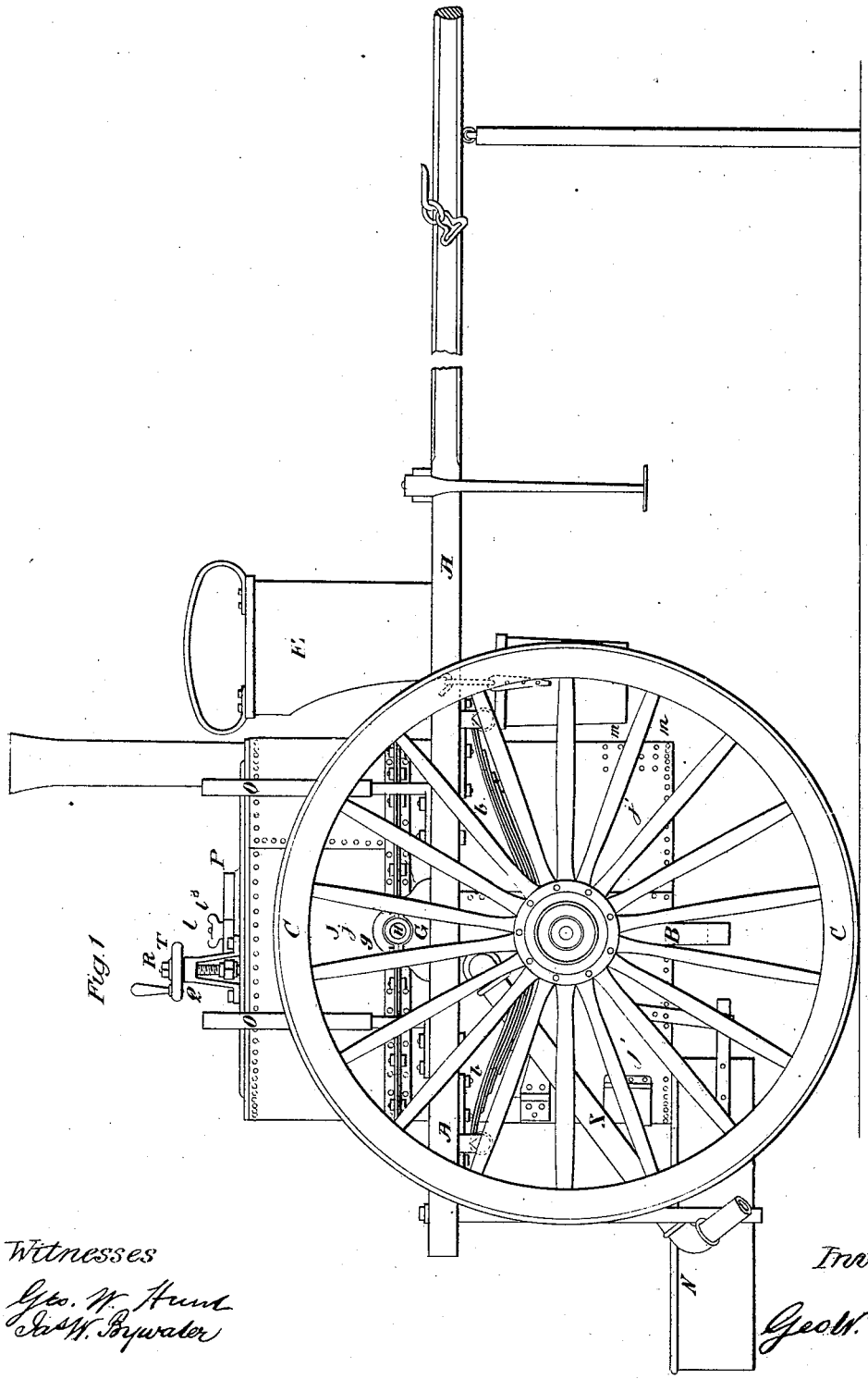

Fig. 1

Witnesses

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Jas. W. Bywater

Inventor

Geo. W. Evans

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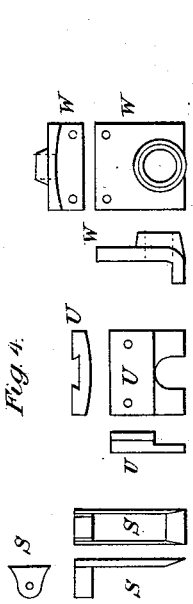

Fig. 4.

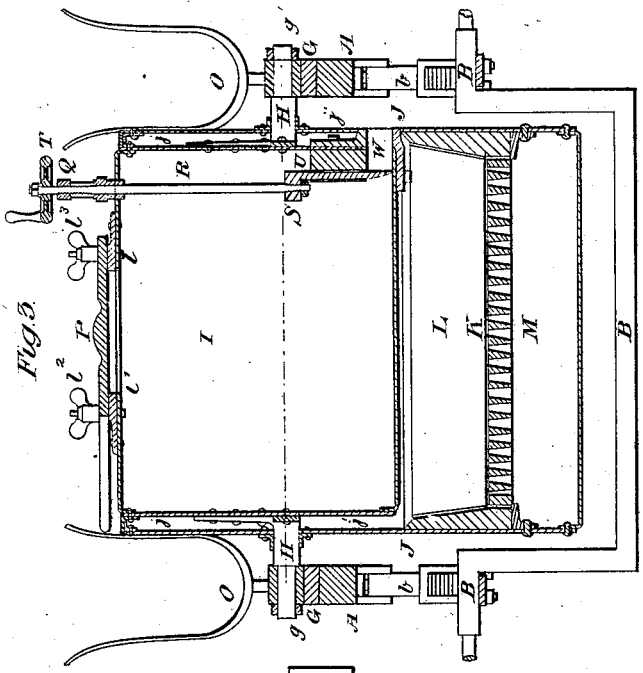

Fig. 3.

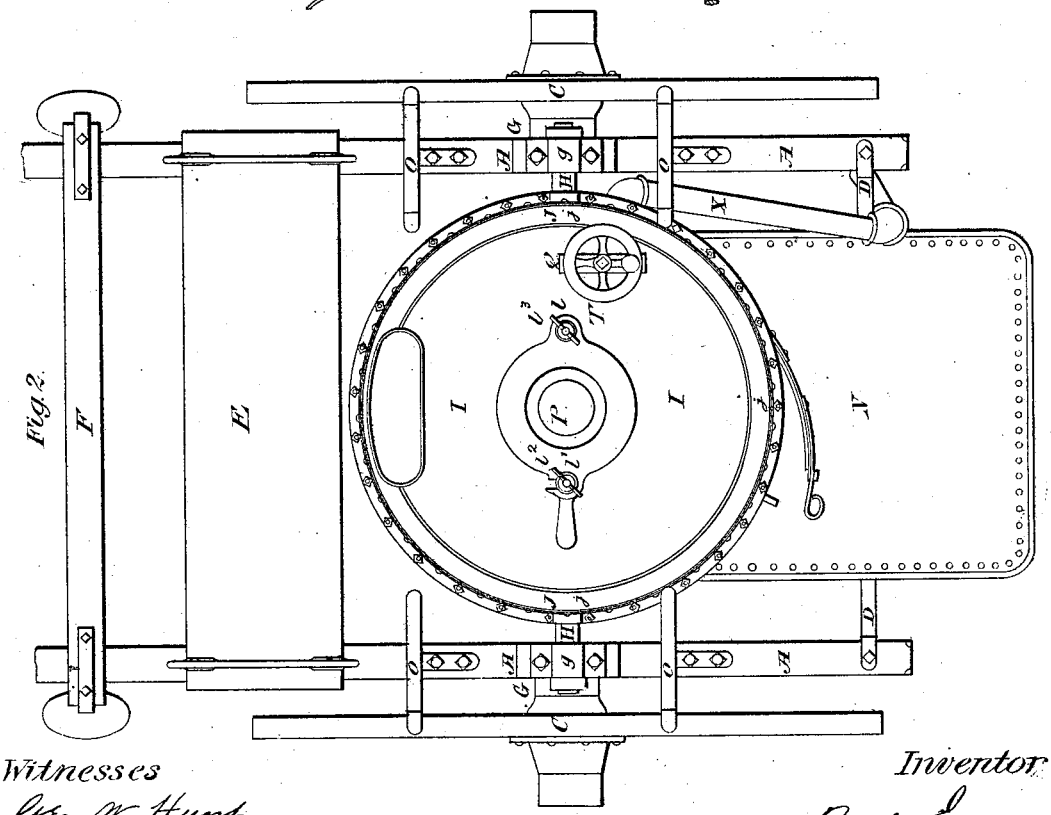

Fig. 2.

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UNITED STATES PATENT OFFICE.

GEORGE W. EVANS, OF BROOKLYN, NEW YORK, ASSIGNOR TO ELLA EVANS, OF SAME PLACE.

IMPROVEMENT IN PORTABLE PITCH-KETTLES FOR ROOFING AND PAVING PURPOSES.

Specification forming part of Letters Patent No. **207,647**, dated September 3, 1878; application filed April 1, 1878.

To all whom it may concern:

Be it known that I, GEORGE W. EVANS, assignor to ELLA EVANS, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Portable Pitch-Kettles, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a side elevation; Fig. 2, a top view; Fig. 3, a longitudinal section; Fig. 4, a group of parts forming the gate or outlet for melted material.

The object of my invention is to furnish a device for melting tar, pitch, or similar substances while the same is in transit, and to keep the same at a proper temperature for immediate use; also, to avoid the delay, building fires in the streets, and other inconveniences and objections connected with the old method.

In the drawings, A A are the side frame-timbers of the truck or carriage, placed about four feet apart; B, the axle; *b b*, springs; C C, truck-wheels; D, an iron strap or brace; E, driver's seat; F, foot-board; G G, pillow-blocks, provided with cast-iron journal-boxes *g g*, which support the trunnions H H of the suspended pitch-kettle I, with its inclosing case or shell J. Said kettle I and case J are made of boiler-plate. The case or shell J is made in two parts—upper, *j*, and lower, *j*^{1}—provided with flanges, and bolted together at the center-line of trunnions H H. In the lower part, *j*^{1}, is the fire-box, provided with a grate, K, and fire-clay lining L, and ash-pit M. In front of the shell *j*^{1} are perforations *m m*, opening into said ash-pit M, to provide a draft when the vehicle is in motion and doors closed. The case or shell J, being larger in diameter than the kettle I, leaves a fire or heating space around said kettle. (See Fig. 3.)

A projecting inclosed platform, N, attached to the lower front of the case or shell J, provides a standing-place for the fireman while the vehicle is in motion; also, a receptacle for fuel. The said platform N rests upon and is secured to the iron strap D, and acts as a brace to keep the case or shell J and its inclosed kettle I in a vertical position.

Upon each side frame A A are two upright yokes, O O, of sufficient size to carry felt for an ordinary roof, which is thus kept warm and pliable by the heat from the case or shell J, and in condition for ready use.

In the center and top of kettle I and case or shell J is an opening for supplying the kettle I with material to be melted. This opening is provided with a cover or lid, P. Said lid is hinged on the bolt *l* and yokes on the bolt *l*^{1}, and is held down by means of said bolts *l* *l*^{1} and the wing-nuts *l*^{2} and *l*^{3}, and is opened by loosening said wing-nuts and moving said lid P in a horizontal or sidewise direction.

A standard, Q, is bolted to the top of case or shell J. A rod, R, passes down through said standard Q, and through a gland or stuffing-box in the top of case or shell J, into and near to the side of the kettle I, and connects with the top of gate S. The said rod R is provided with a screw or thread at or near the top, and is matched into a similar female screw or thread in the top of standard Q, and is moved up and down with the gate S by turning the hand-wheel T, secured to its top end. Said gate S is beveled on the edges and fitted into a corresponding recess in the front of the casting U, covering the outlet in said casting U and casting W, which are cast to match each other and fit the shell, to which said castings S and W are firmly bolted. Said casting W is provided with a nozzle, into which is screwed the delivery-pipe X.

It will be seen by the foregoing that a safe and ready means for melting tar, pitch, or other substance of like nature, is thus provided for. The material is passed through the opening into the kettle I, and when the lid P is closed and secured cannot be reached by the fire, but is retained and reduced to a liquid or melted state, and in such condition is kept ready for use as required by the employment of a slow fire in the fire-box underneath, and drawn off as needed through the gate S and delivery-pipe X by raising the said gate S by means of the rod R and hand-wheel T, as shown.

Iron buckets are usually employed to receive and convey the melted material, one of which is shown in Fig. 1 suspended from a hook attached to the lower back edge of the driver's seat E.

The advantages derived from my portable pitch-kettle are many. Of these I would make mention of the safety and ease in which tar, pitch, or other combustible material is melted and kept at an even temperature; the clean and prompt manner in which work requiring the use of such melted material can be done; keeping the felt warm and pliable, by placing it in the yokes O O and alongside of the heated kettle or shell J. These advantages named are very important in applying roofing material, and can be appreciated by no one more fully than by those who have labored under the difficulties, disadvantages, and dangers of the old crude method. With my portable pitch-kettle, without regard to weather, upon a minute's notice, I can drive to any place where needed, with my pitch and felt all ready to commence work or repair a roof at once, and do it better than it can be done under any circumstances in the old way.

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

1. The kettle I, suspended by its trunnions H H in a vertical position in the journals *g* of the pillow-block G upon the truck side frames A A, and inclosed within the case or shell J, substantially as shown and described.

2. The yokes O O, bolted in an upright position upon the side frames A A, in combination with the kettle I, suspended and inclosed, substantially as shown and described, for the purpose specified.

3. The gate S, castings U and W, forming the outlet, the rod R, and hand-wheel T, in combination with the kettle I, substantially as shown and described, for the purpose specified.

GEO. W. EVANS.

Witnesses:
GEO. W. HUNT,
JAS. W. BYWATER.