J. H. SPARKES.

TILE-LAYING MACHINES.

No. 195,775. Patented Oct. 2, 1877.

Fig. 1

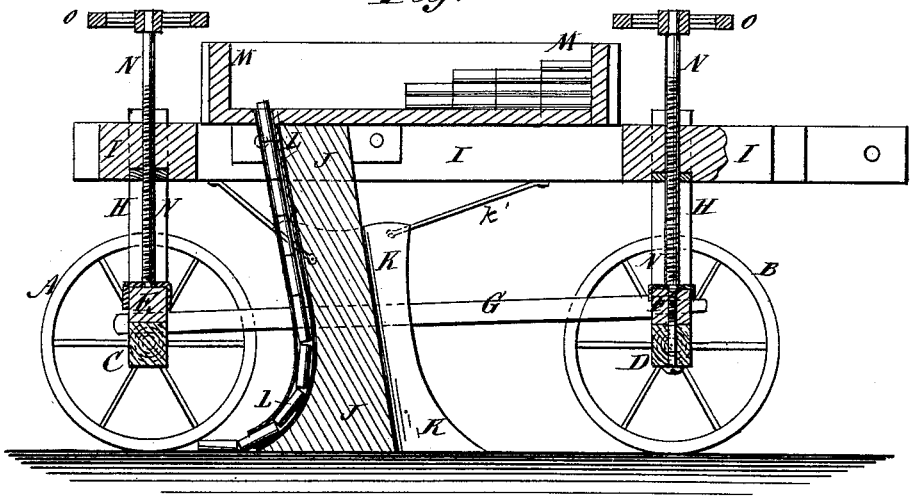


Fig. 2

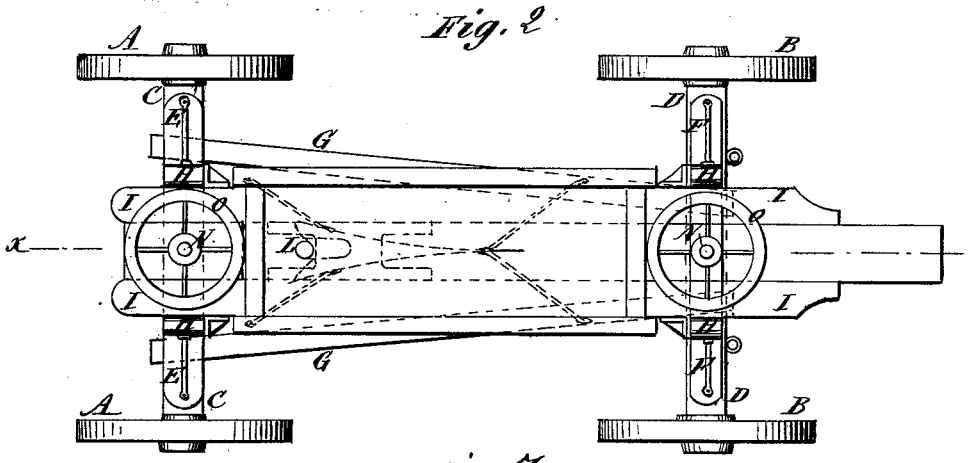
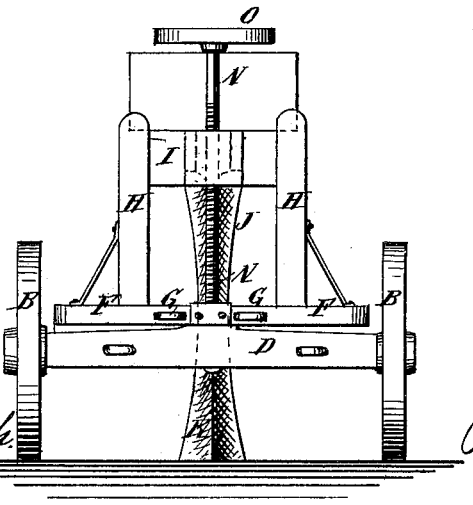


Fig. 3.



WITNESSES:

C. Nevens

J. H. Scarborough.

INVENTOR:

J. H. Sparkes

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES H. SPARKES, OF CLINTON, ILLINOIS.

IMPROVEMENT IN TILE-LAYING MACHINES.

Specification forming part of Letters Patent No. **195,775**, dated October 2, 1877; application filed July 9, 1877.

To all whom it may concern:

Be it known that I, JAMES H. SPARKES, of Clinton, in the county of De Witt and State of Illinois, have invented a new and useful Improvement in Tile-Laying Machines, of which the following is a specification:

Figure 1 is a vertical longitudinal section of my improved machine, taken through the line *x x*, Fig. 2. Fig. 2 is a top view of the same. Fig. 3 is a front view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish a machine which shall be so constructed as to open a channel to receive the tile and lay the tile in said channel as the machine is drawn forward, and which shall be simple in construction and reliable in operation.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

A are the rear wheels. B are the forward wheels. C is the rear axle. D is the forward axle. E is the rear bolster, which is attached to the rear axle C. F is the forward bolster, which is connected to the forward axle D by the king-bolt. G are the reaches, the rear ends of which are attached to the rear bolster and axle E C, and their forward ends are attached to the forward bolster F.

In case of muddy or swampy land the wheels of the carriage are replaced by runners similar to sled-runners.

To the bolsters E F are attached four posts or standards, H, between the upper ends of which is placed a strong frame, I. To the frame I is secured the upper end of the iron standard J, to which is secured the knife K. The knife K is further secured by the braces *k'*, attached to its upper end and to the frame I.

The foot of the standard J is made of such a shape and size as to form a channel large enough to receive the ordinary semi-tubular tiles. The rear edge of the opener-standard J is grooved or concaved to receive the tube L, through which the tiles pass into the channel opened by the knife and standard K J. The lower part of the tube L and of the rear edge of the standard J are curved to the rearward, so as to leave the tiles in proper position in the channel. The upper end of the tube L passes up through the bottom of the box M, attached to the frame I, to receive the tiles to be laid, and in which the person rides who places the said tiles in the tube L, which tube should be kept full of tiles, so that their weight may keep their ends close together.

The frame I is kept from longitudinal movement upon the posts H by brackets attached to it, and which rest against the sides of the said posts H.

The frame I is raised and lowered, to regulate the depth at which the tiles are laid in the ground, by the screws N, which pass through nuts secured in the centers of the end bars of the said frame I, and their lower ends are swiveled to the bolsters E F.

To the upper ends of the screws N are attached hand-wheels O for convenience in operating them.

The machine is designed to be drawn by a capstan operated by horse or other convenient power, and the draft is applied to the forward end of the frame I.

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

The combination, in a tile-laying machine, of the box M, tube L, opener-standard J, and knife K, all connected, constructed, and arranged as shown and described.

JAMES H. SPARKES.

Witnesses:
STEPHEN K. CARTER,
JOHN GARTON.