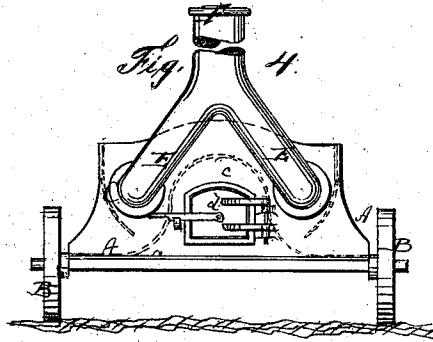
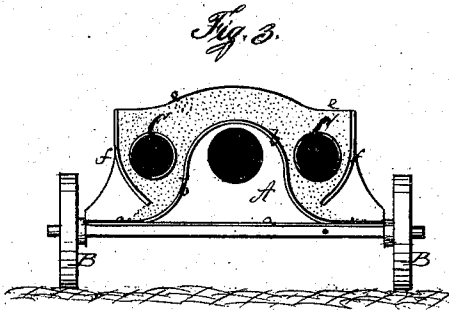
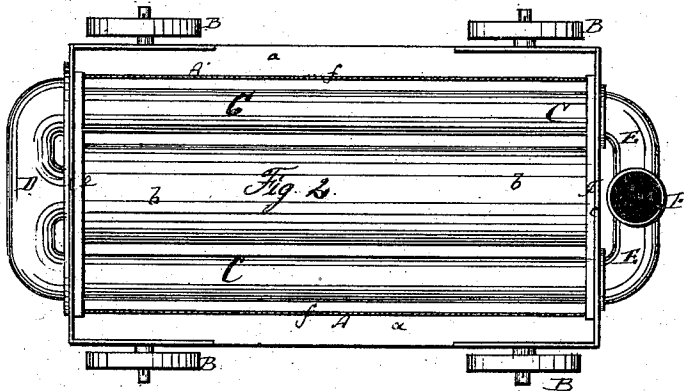
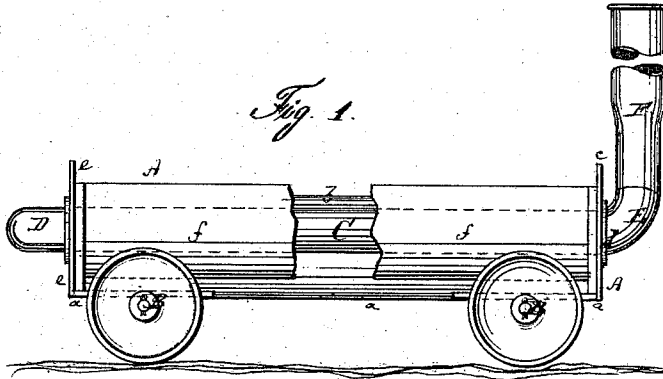


H. FRANKE.  
GRAVEL PAN.

No. 100,745.

Patented Mar. 15, 1870



Witnesses:

*Hugh Martin*  
*Morgan Evans*

Inventor

*Henry Franke*

# United States Patent Office.

HENRY FRANKE, OF BROOKLYN, NEW YORK.

Letters Patent No. 100,745, dated March 15, 1870.

## GRAVEL-PAN.

The Schedule referred to in these Letters Patent and making part of the same.

### To all whom it may concern:

Be it known that I, HENRY FRANKE, of Brooklyn, in the county of Kings, and State of New York, have invented a new and improved Gravel-Pan; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 represents a side elevation, partly in section, of my improved gravel-pan.

Figure 2 is a plan or top view of the same.

Figure 3 is a vertical transverse section of the same.

Figure 4 is a front elevation of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide an apparatus on which gravel or sand used for roofing and paving purposes can be heated and dried in a continuous process.

The invention consists in the construction of a system of heating-flues, together with an open pan, in which the sand is contained, all parts being so arranged that the sand or gravel can be put into the pan at the top, and taken out at the open sides ready for use.

The advantages of this invention are, besides rapidity and cheapness in the method of preparing the gravel for use, greater thoroughness of operation and saving of fuel.

A in the drawing represents the body of my improved pan. It is supported upon wheels B B, and is constructed as follows:

A horizontal platform, *a*, made of sheet metal or other suitable material, forms the bottom of the pan, and supports in the middle the longitudinal heating-channel *b*.

The top and sides of this channel *b* are formed by a plate shaped in cross-section like an inverted letter U, as shown in fig. 3, the lower part flaring outward,

to guide the gravel upon the outer part of the platform.

*c* is the front end plate or head of the pan, containing the fire-door *d*.

*e* is the rear end plate of the pan.

C C are two horizontal flues, supported, at their ends, in the plates *c e*, and connected, at their rear ends, by a T-shaped pipe, D, with the open rear end of the channel *b*.

The gases of the fire, passing backward in the channel *b*, enter through the piece D the flues C, and pass forward in the same.

From the front ends of the flues C, the gases are, through a forked pipe, E, conducted into the smoke-stack F, which is supported above the front part of the pan, as shown.

The sides of the pan are formed by plates *f f*, that are nearly vertical, their lower parts being bent inwardly, as shown in fig. 3.

The pipes C, it will be seen, are nearer to the plates *f* than they are to the channel *b*, to have a smaller amount of gravel in this outer part than there is, in the hottest portion of the pan between *b* and C.

The lower ends of the plate *f* do not reach to the platform *a*, but leave a slotted opening, through which the heated dry sand can escape upon the outer part of the platform, whence it is removed for use.

The moist sand is put into the apparatus at the top, and the dry hot sand is removed at the lower part, as specified.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The gravel-pan, containing the heat-channels *b* and C, and composed of the platform *a* and side plates *f*, the latter not reaching down upon the platform, as specified, to operate as set forth.

Witnesses:

HENRY FRANKE.

GEO. W. MABEE,  
ALEX. F. ROBERTS.