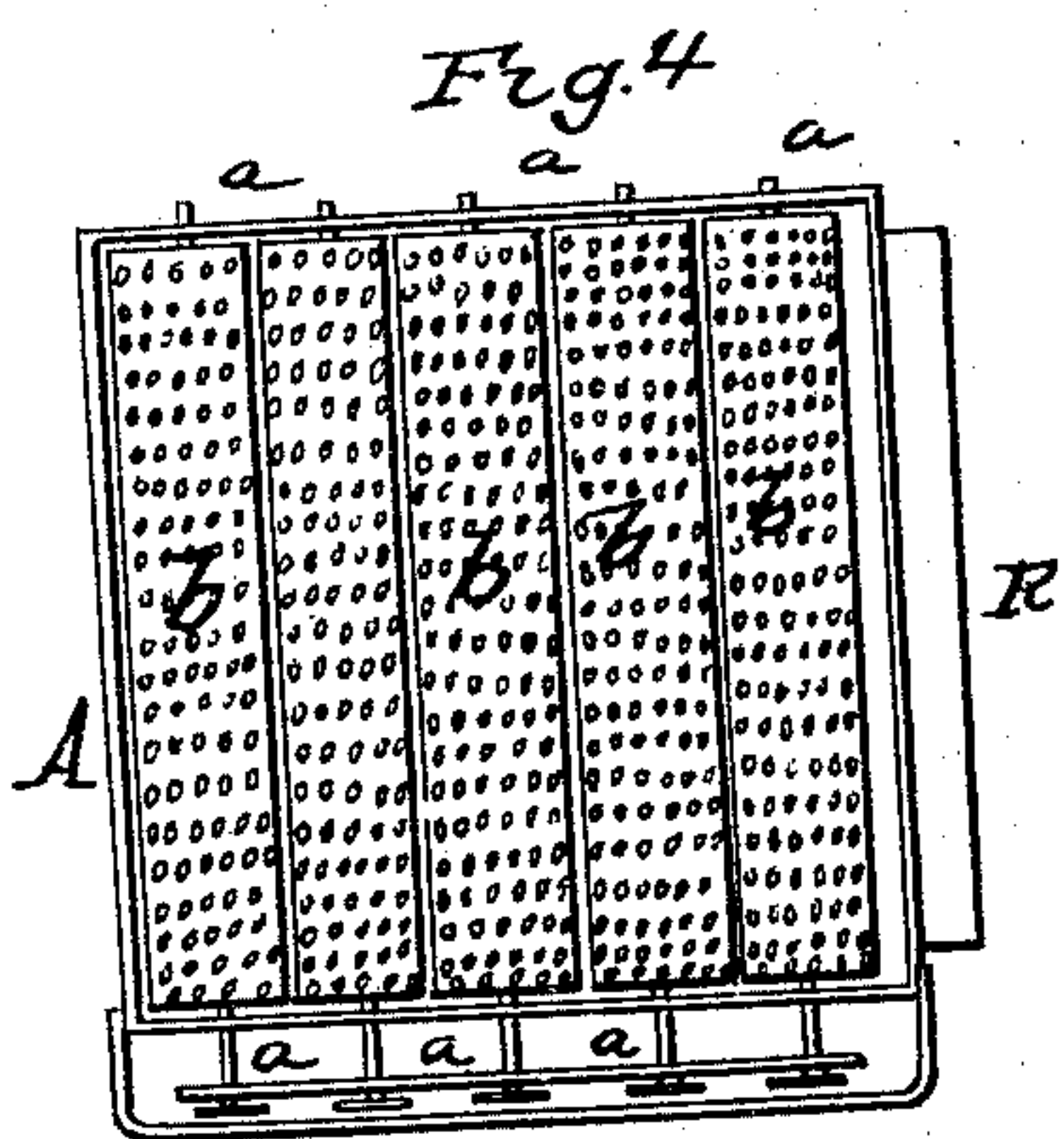
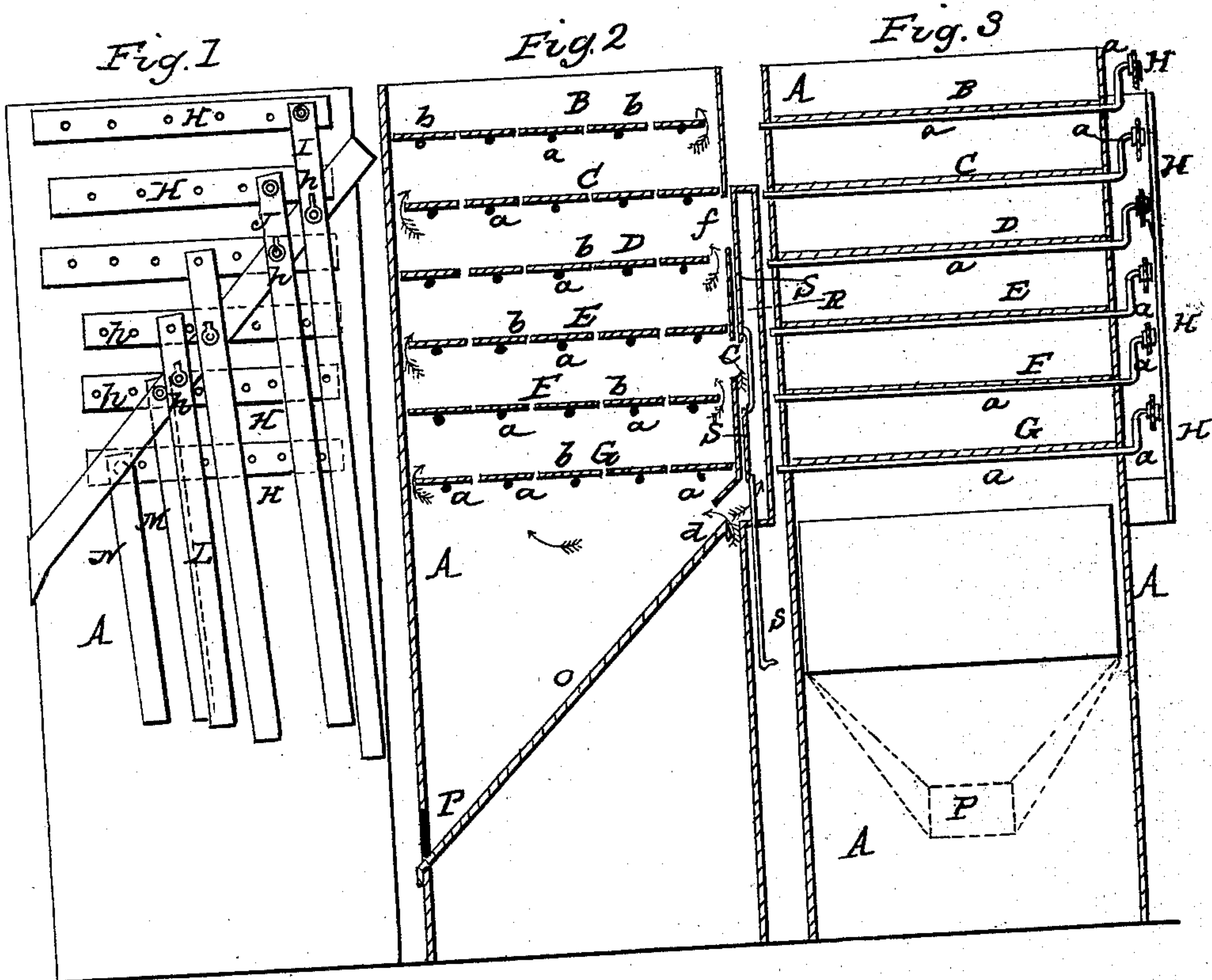


J. GECMEN.

Malt Kiln.

Patented Sept. 17, 1867.

No. 68,869.



WITNESSES  
W. E. Mame,  
L. L. Colum

INVENTOR  
Jas. Gecmen



# UNITED STATES PATENT OFFICE.

JOSEPH GECMEN, OF CHICAGO, ILLINOIS.

## IMPROVEMENT IN MALT-KILNS.

Specification forming part of Letters Patent No. 68,869, dated September 17, 1867.

*To all whom it may concern:*

Be it known that I, JOSEPH GECMEN, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Malt-Kilns; and I do hereby declare and make known that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and the letters and figures marked thereon, which form part of this specification.

To enable those skilled in the art to understand how to construct and use my invention, I will proceed to describe the same with particularity, making reference in so doing to the aforesaid drawings, in which—

Figure 1 represents a side exterior view of my invention; Fig. 2, a central vertical section of the same, taken at the line *x* in Fig. 4. Fig. 3 is a similar section, taken at the line *y* in said Fig. 4; and Fig. 4 is a plan or top view of my said invention.

Similar letters of reference in the several figures denote the same parts of my invention.

A represents a suitable inclosing-wall, of any suitable material and any desired form and height, in the upper part of which is arranged a series of floors, marked B C D E F G, said series consisting of any desired number. Each of said floors is composed of a series of perforated strips or sections of perforated sheet metal, marked *b*, each of which sections is supported or pivoted upon the rods *a*, as shown, so as to be susceptible of being tipped or tilted up, and thus discharge the malt upon the same, as desired. Each of the supporting-rods *a* is turned or bent at one end in the form of a crank, and the said rods *a* appertaining to each floor have said cranks attached to a bar, H, so that by moving said bars, or either of them, the corresponding floor will be tilted up by sections or arranged horizontally, as desired.

I J R L M N represent levers respectively attached to said bars H, and pivoted in a suitable support, so that said sections *b* of the floors may be adjusted by operating said levers, or said sections may be operated by any other suitable device.

O represents a chute, upon which the malt precipitated from above passes out at the opening P when properly prepared, the heat for

drying the same passing up into the kiln at the upper end of said chute, as shown, part passing in below all the floors, as seen at *d*, and part, when desired, entering the space R through the passage *c*, whence it may enter the kiln at any point at openings *e f*, said openings, or either of them, being closed, when desired, by means of a slide or slides, S, which may be moved up and down, to open or close said apertures, by means of a rod, *s*, attached thereto.

It will be seen in Fig. 2 that at alternate sides of the kiln the alternate floors have an opening to allow the current of heat to pass up from one space to another, as shown by the arrows.

Having described the construction of my invention, I will now specify the mode of operation: The grain or barley to be dried for malt or other purposes is introduced at the top and precipitated from one floor to the one below until all are covered with the proper amount of grain. When the grain upon the lower floor, G, is sufficiently dried it is precipitated upon the chute O and goes out at P. The grain upon F is then let through upon G, then that upon E upon F, and so on through the entire series, fresh grain being admitted to fill the upper floor. This operation is then repeated as long as desired, and care must be taken in tilting the floors to tilt the grain down in the opposite direction on alternate floors, to prevent its dropping down through the spaces left at one edge to allow the heat to pass up.

Having described the construction and operation of my invention, I will specify what I claim and desire to secure by Letters Patent:

1. I claim constructing the perforated floors in separate sections *b*, arranged and operating substantially in the manner and for the purposes set forth.

2. I claim, in combination with the series of floors in a malt-kiln, the arrangement of the space R, provided with one or more openings, *e f*, substantially in the manner and for the purposes described.

JOS. GECMEN.

Witnesses:

W. E. MARRS,  
L. L. COBURN.